COMMISSION OF THE EUROPEAN COMMUNITIES



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COMMISSION STAFF WORKING DOCUMENT

accompanying the

Proposal for a

COUNCIL REGULATION

establishing a Community control system for ensuring compliance with the rules of the Common Fisheries Policy

IMPACT ASSESSMENT

{COM(2008) 721 final} {SEC(2008) 2761}

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GLOSSARY

ACFA	Advisory Committee on Fisheries and Aquaculture		
CFCA	Community Fishery Control Agency		
CFP	Common Fisheries Policy		
СоА	Court of Auditors		
СОМ	Commission		
DG MARE	Directorate General for Maritime Affairs and Fisheries		
DG SANCO	Directorate General for Health and Consumer Protection		
EC	European Communities		
ECJ	European Court of Justice		
EEZ	Exclusive Economic Zone		
EU	European Union		
EUR	Euro		
ERS	Electronic Reporting System		
FAO	Food and Agriculture Organization		
FMC	Fisheries Monitoring Centre		
GPS	Global Positioning Satellite		
ICCAT	International Commission for the Conservation of Atlantic Tunas		
ICES	International Council for the Exploration of the Sea		
ISG	Inter-service steering group		
IUU	Illegal, Unreported and Unregulated Fishing		
JDP	Joint Deployment Plans		
MCS	Monitoring, Control and Surveillance		
MS	Member State		
NAFO	Northwest Atlantic Fisheries Organization		

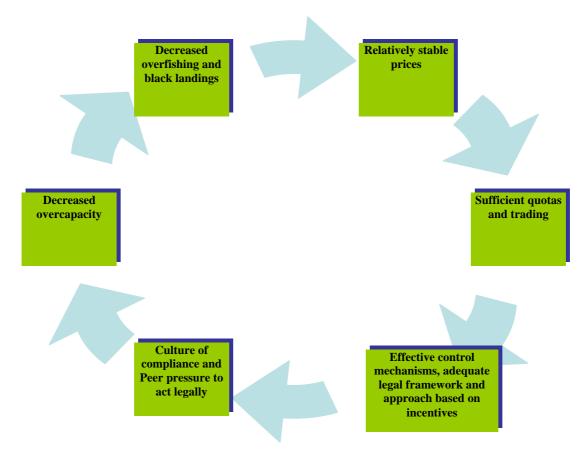
NEAFC	North East Atlantic Fisheries Commission	
NGO	Non-Governmental Organization	
RAC	Regional Advisory Council	
RFMO	Regional Fisheries Management Organization	
SSB	Spawning Stock Biomass	
TAC	Total Allowable Catch	
UN	United Nations	
VMS	Vessel Monitoring System	

FLOWCHARTS

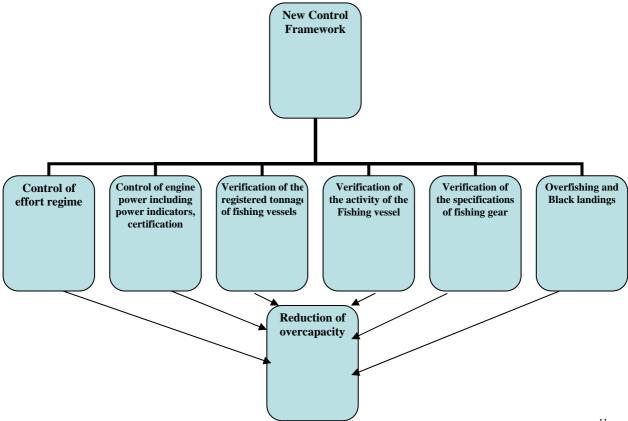
1. SIMPLIFIED FLOWCHART ON THE SHORTCOMINGS OF THE CFP CONTROL REGIME

Drivers for non compliance	Ineffective Control mechanismsInadequate Legal FrameworkCulture of non compliance
Problem identification	Shortcomings in the control system Overcapacity Image: Control system Image: Control system
Consequences	Black landiDamage to fish stocksDecreased prices and poor economic resultsOverfishing and financial incentives to catch more

2. THE NEW CYCLE OF COMPLIANCE



3. RELATIONSHIP BETWEEN AN IMPROVED CONTROL SYSTEM AND REDUCED OVERCAPACITY



Lead DG Maritime Affairs and Fisheries (MARE)

Other involved services: TRADE, SANCO, TAXUD, ENV, JLS, ENTR, AGRI, COMP, EMPL, REGIO, OLAF, ESTAT, CFCA, JRC, TREN, MARKET, Legal Service, Secretariat-General

Commission Legislative and Work Programme 2008 - Priority initiative Agenda Planning no. : 2008/MARE/001

EXECUTIVE SUMMARY

This Impact Assessment report lays the ground for a proposal for the reform of the current Common Fisheries Policy (CFP) control regime. The objective of the Impact Assessment is to analyse the possible consequences of several options to address the current shortcomings in the EU fisheries control regime which should lead to the effective implementation of and the proper compliance with the CFP rules to ensure the sustainable exploitation of living aquatic resources.

A wide consultation involving Member States, the fishing sector, and all interested parties took place. The Commission services made use of external expertise for a case study based on seven stocks, most of which are subject to recovery plans, to support some of the elements relating to the present report.

The CFP control system suffers from substantial failures identified by both the European Commission¹ and the European Court of Auditors $(CoA)^2$. The current system is inefficient, expensive, complex, and its continued failure will have significant consequences for the future of fisheries resources, the fishing industry and the regions dependent on fishing.

The following options emerged from the Impact Assessment analysis:

<u>Option 1:</u> No policy change. Continue current policy and focus on implementation and enforcement of existing framework

Sub-option 1: No policy change, continuation of the current situation

<u>Sub-option 2</u>: Implementation and enforcement of existing framework through implementation regulations

Option 2: Recast of the Control regulation, combined with a Code of conduct

Option 3: Regulatory Instrument, in the form of a new binding Regulation

<u>Option 4</u>: Centralisation of the CFP control policy at EU level, with increased competences for the Commission and the Community Fisheries Control Agency (CFCA)

The Impact Assessment has shown that no significant improvements can be expected under option 1 even though recovery plans might show some positive effects. This situation would not change even if all outstanding implementation regulations were to be adopted.

¹ Report from the Commission to the Council and the European Parliament COM (2007)167 final of 10 April 2007 on the monitoring of Member States' implementation of the Common Fisheries Policy 2003-2005

² Special Report No 7/2007 of the Court of Auditors on the control, inspection and sanction systems relating to the rules on conservation of Community fisheries resources

Option 2 would provide for a simplified legal framework and allow for partial improvements of the control system in some Member States. However, since shortcomings in the current legal provisions could not be amended and since the impact of measures would mainly rely on voluntary improvements by the Member States, this option would neither lead to a global approach on control nor would it create a level playing field for all stakeholders.

A complete reform of the current fisheries control regime under option 3 would not only allow to consolidate the current legislation which is spread in a number of different regulations. It would also allow to develop a harmonised approach to inspection and control covering all aspects from the catch to the plate, to develop a common culture of compliance and to ensure the effective application of CFP rules. This approach would integrate and make full use of modern technologies, in particular by cross-checking relevant data, enabling cost efficient risk analyses to be the basis for targeted control strategies. It would also provide for a proper basis for effort management and a uniform application of CFP rules at Member States level. It would add to the simplification of the present legislation by reducing the number of applicable regulations by up to 36 %. The lower number of regular reports that Member States would have to submit to the Commission has the potential to reduce administrative work by 34 %. A side effect of such a reform would be that science would get more reliable data in a much shorter time frame providing for a better scientific advice leading to better management decisions. The MRAG study³ calculated a possible increase in the biomass of 51 % and a possible gain of €10 billion in the time span 2010 – 2019 as a direct result of such an approach compared to the continuation of the current control regime. Gains would be most substantial for stocks under recovery plans. The case study calculated overall gains of 3,900 jobs in the catch (30 %), proceeding (50 %) and ancillary (19 %) industries. With increasing benefits the costs of control would be likely to fall in relative terms. As the stock situation will improve under a new and comprehensive control reform, the confidence of the public in the CFP would be restored.

³ MRAG Ltd., Oceanic Développement, Poseidon Aquatic Resource Management Ltd, Lamans s.a., Institute of European studies and IFM (2008). 'Impact Assessment of a Proposal to Reform and Modernise the Control System applicable to the Common Fisheries Policy' (MRAG)

SECTION 1: PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

This Impact Assessment report lays the ground for the legislative package to be proposed by the Commission to reform the current control system of the Common Fisheries Policy (CFP). The main objective of the reform will be to implement a sufficiently specified and uniform policy for the control system of Member States fishing activities in order to ensure the effective implementation of the CFP rules. It is therefore indirectly linked to the general objective of the CFP that is the sustainable exploitation of living aquatic resources. Due to its global and integrated approach focussing on all aspects of the CFP, the reform of the control policy should not only result in an improved control capacity and management of fisheries resource, but additionally it should have positive structural impacts to the fishing industry and to the market and thus combat the environmental, as well as the economic and social consequences of non-compliance.

The present report addresses the findings of the European Court of Auditors Special Report No. 7/2007. The Commission is sharing the Court's concerns and intends to address them in the forthcoming reform of the CFP control policy. The Parliament's Committee on Budgetary Control supports the findings of the Court, its recommendations have also been taken into consideration in the report.

The work on this Impact Assessment was given impetus by the setting up of an Inter-Service Steering Group (ISSG) on 11 March 2008 mandated to analyze the overall approach of the initiative and it established working groups on specific items. The following Directorates-General and services contributed to the ISSG: Maritime Affairs and Fisheries, Trade, Health and Consumer Protection, Taxation and Customs Union, Environment, Enterprise and Industry, Employment, Justice, Freedom and Security, Agriculture and Rural Development, Legal Service, the European Anti-Fraud Office, Eurostat, the Joint Research Center Ispra, the Community Fisheries Control Agency and the Secretariat General of the Commission.⁴ The ISSG met on three occasions, and held its last meeting on 21 May, it gave regular inputs on the initiatives taken by DG MARE, including a discussion on the interim version of this report (DG MARE took account of the comments received by the members of the ISSG in the proposed initiative. Bilateral contacts will be maintained to continue as necessary.

The data for the Impact Assessment was collected following a broad and diverse consultation process with:

• <u>The Member States</u>: The issue was discussed in an informal meeting with Fisheries Ministers on 18 February 2008. Member States broadly supported the analysis of the Commission, but had reservations on the harmonisation of sanctions and on the possible increased powers of the Commission. Another meeting with Member States' Directors-General for fisheries had already taken place on 15 January 2008.

• <u>The stakeholders' advisory bodies</u>: A one day seminar was organised on 10 April 2008 with representatives of the Regional Advisory Councils (RAC) and the Advisory Committee

⁴ Moreover, the following Directorates-General were invited but did not participate in the ISSG: Energy and Transport, Competition, Internal Market and Services, Social Affairs and Equal Opportunities, Regional Policy,

for Fisheries and Aquaculture (ACFA) in order to get their views on the envisaged reform of the CFP control policy.

• <u>Technical experts</u>: A meeting with Member States' fisheries control experts took place on 1 February 2008, 22-23 April 2008 and 28 May 2008.

• <u>High Level Group of Independent Stakeholders on Administrative burdens</u>: The reform was presented to the High Level Group in its meeting on 18 September 2008. The chairman of the group expressed that the group appreciated very much the outline given by DG MARE and fully supported the proposed reform given the envisaged decrease of administrative burden for the sector⁵.

A public internet consultation was carried out from February to May 2008 to assess the impact on operators and administrations. The number of 25 contributions were received from a wide range of stake holders including *inter alia* associations from the industrial sector – of fishermen, producers, fisheries control technology stakeholders, NGOs and individuals. Notably three RACs, the Advisory Committee for Fisheries and Aquaculture and one national authority-the UK statutory nature conservation agencies expressed their positions in support of the reform. The geographical range was also a broad one including French, Portuguese, Polish, Spanish, British, Belgian and Dutch parties.

All the contributions received from the interested stakeholders were given equal value and assessment and all are published on the official website of the Commission on Fisheries together with their authors and origin⁶. (The summary of the contributions is contained in annex II of the present report.)

The initiative of the Commission and its main objectives were widely endorsed by the participants in the consultation who contributed with valuable innovative proposals, stressing the need to continue the constructive dialogue between all interested parties. All unanimously agreed on the need to reform the control system, confirming that the 9 objectives set out by the Commission in the consultation paper are the main points of interest in the overall assessment of the reform.

Many of the participants stressed that it is the culture of compliance which should be the main objective of the reform, calling to this end for a bottom-up as opposed to "top-down" approach in the decision-making and implementation process with more active involvement of stakeholders, scientists, NGOs and national administrations, leading to more transparency, and broader support. There were also a number of suggestions for public training initiatives, especially for fishermen.

Notably all stakeholders supported the introduction of harmonized administrative sanctions by the Commission, the simplification and rationalization of the rules and the strengthening of cooperation and assistance. NGOs and public authorities particularly supported the reform as an efficient tool from an environmental sustainable fisheries perspective. All agreed on the need to develop a new approach towards inspection and control on EC level, providing a level playing field, favouring an enhanced cooperation between the Commission, fishery control authorities in Member States and operators from the whole chain of production. They agreed that the Agency should play a more important and constructive role in coordination and training. Advisory bodies proposed the introduction of an efficient intervention system and the use positive incentives regimes. NGOs favoured the introduction of more instruments to

⁵ DRAFT FINAL REPORT, Measurement data and analysis, As specified in the specific contract on Modules 3&4 for the Priority Area Fisheries, of the Framework contract n° ENTR/06/061, EU PROJECT ON BASELINE MEASUREMENT AND REDUCTION OF ADMINISTRATIVE COSTS

⁶ <u>http://ec.europa.eu/fisheries/cfp/governance/consultations/consultation_280208_contributions_en.htm</u>

the Commission for timely intervention whereas the industry was concerned whether it will bare the cost of sanctions and suspension of EC aid or the Member States.

The Commission services made use of external expertise to support some of the elements relating to the present report. A specific contract was concluded (within the framework contract FISH/2006/09 Studies in the field of the CFP and Maritime Affairs-Lot 4: Impact Assessment studies related to the CFP) in force between the Commission and the external consultancy firm MRAG. The specific contract had as a purpose to assess the probable outcomes of policy changes the Commission intends to propose in the area of control. It should identify the likely positive and negative impacts of proposed policy options, enabling informed political decisions to be made about the proposal and identify trade-offs in achieving competing objectives.

SECTION 2: PROBLEM DEFINITION

2.1 BACKGROUND

European fisheries are managed by the Common Fisheries Policy (CFP), established in 1983 with the objective of sustainable exploitation of living aquatic resources⁷. The cornerstone of this policy is the limitation and control of catch volumes by setting total allowable catches (TAC's) and national quotas. The European fisheries control policy is at the heart of the CFP, because its credibility depends on its effective application. The fisheries control policy has already been partly reformed in the context of the reforms of the CFP in 1993 and 2002. Such reforms have therefore looked to resolve two critical issues, being first, the deficiencies in the implementation and enforcement of the CFP which compromised the effectiveness of conservation and management measures, and second, a lack of uniformity which resulted in inequitable implementation of control at Community level.

Despite certain progress in solving these deficiencies, the control system continues to suffer from substantial shortcomings identified by both the European Commission⁸ and the European Court of Auditors (CoA)⁹. The current control system is inefficient, expensive, complex, and it does not produce the desired results. The continued failure of the control policy will have significant consequences for the future of fisheries resources, the fishing industry and the regions dependent on fishing. It is within this context that the Commission is considering a proposal to further and substantially reform the control system underpinning the CFP, and that this initiative is a core priority for the Commission in the field of fisheries in 2008.

2.2 CURRENT ROLES AND STAKEHOLDERS

The Common Fisheries Policy is an exclusive competence of the European Community, which therefore sets the legal framework. The Member States have to apply this legal framework and have to make sure that the fishing industry comprising fishermen, processors and salesmen comply with the rules. Therefore, it is the primary responsibility of the Member States to ensure effective control, inspection and enforcement of the compliance with the CFP

⁷ Council Regulation (EC) No 170/83 of 25 January 1983 establishing a Community system for the conservation and management of the fishery resources

⁸ COM(2007)167 final

⁹ Special Report No 7/2007

rules. In this context, decisions on the development and the organisation of control systems and inspection procedures are to be taken on national level. The Commission's task as the guardian of the treaty is to ensure that Member States fulfil these responsibilities. Therefore the Commission and its inspectors monitor, control and evaluate the application of the CFP rules by the Member States, e.g. by analysis of catch data reported by the Member States or inspections of the national control systems. In the case of shortcomings or failure of individual Member States in the application of the CFP rules the Commission can launch a procedure before the Court of Justice.

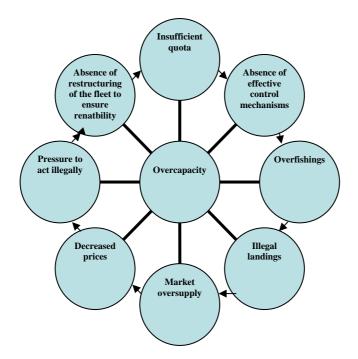
The Community Fishery Control Agency (CFCA), which became operational in 2007, has the task to organise operational coordination and to strengthen the uniformity and effectiveness of enforcement by pooling EU and national means of inspection and control, and to coordinate enforcement activities by the establishment and implementation of Joint Deployment Plans (JDPs), which lay down the basis for joint control and inspection activities of Member States. Moreover, it should enhance cooperation between the Member States by supporting exchanges between, and capacity building within, Member States' inspectorates and should in general assist Member States to fulfil their responsibilities under the rules of the CFP. However, for the time being the mandate of the CFCA is limited to activities concerning inspections at sea.

Commission	Ensure that Member States fulfil their responsibility Monitor, control and evaluate the application of the CFP rules by the Member States	•	Member States	Implement the CFP rules Ensure that the fishing induces complies with the CFP rules	SHC	2.3 CURRENT DRTCOMINGS AND
	CFP control policy is	have appl ntrol	ied, w regim	identified in the way the hich are related either to be as such or to structural	Agency	Organise operational coordination of fisheries control and inspection activities by the Member States and assist them to cooperate so as to comply with the rules of the CFP rules

2.3.1 Obsolete and incoherent approaches on control

Although defined as being global and integrated, the current Community control regime is limited primarily to the control of technical measures concerning catches and neglects the other aspects of the CFP, i.a the transports and markets. The extension of control measures to those areas would certainly contribute to significant overall improvements. New needs have arisen with respect to control, in particular within the framework of fishing effort systems and biologically sensitive fishing zones which are largely dealt with by ad hoc mechanisms on a case by case basis. The major efforts undertaken over the last years to achieve sustainable exploitation and long-term management of stocks simply cannot bear fruit in the absence of an effective control system.

2.3.2 Overcapacity of fishing fleets and links to non compliance



Overcapacity of fishing fleets is a structural problem, which leads to the unprofitability of the fishing industry and therefore creates incentives for non-compliance with CFP rules. For a high number of vessels it is only possible to operate profitably by exhausting quotas and committing overfishing. This leads to a vicious circle of fishing vessels exhausting fish stocks for their economic survival with an increased economic pressure to fish even more over the top the following years whereas the legal fishing possibilities and quota allocations shrink. Despite the serious ecological consequences for the environment this results also in a market oversupply and therefore in a continuous fall of prices for fishery products. The currently insufficient control mechanisms are not able to interrupt this circle effectively.

The reform of the control policy needs to address this issue and create a new cycle of compliance, which in turns would lead to reduced overcapacity. The implementation of adequate control measures would address the problem of overcapacity. On the one hand, effective and reinforced control measures on effort regime will reduce current overfishing which maintains artificially the profitability of the fleet, and therefore creates an incentive for non compliance with the rules. On the other hand, overcapacity would be tackled through the introduction of effective tools to better control the capacity of fishing vessels (through certification of the engine power, definition of an "active vessel"...). It has to be acknowledged however, that overcapacity drivers lie beyond control issues, and will also need to be addressed in the context of the general reform of CFP, and of the emergency package on high fuel prices in the fisheries sector.

The assessment of the balance between fishing capacity and available fishing opportunities is one of the main difficulties that the Commission and Member States are confronted with when trying to achieve a sustainable fishing activity. What is the adequate fleet size is a very difficult question to answer. Moreover, it has proved difficult to demonstrate on a sound and objective basis the existence of overcapacity and the unbalance between capacity and fishing opportunities on an individual Member State basis. However, there is agreement that overall the Community fishing fleet is oversized. Even if a comprehensive 'calculation' of the Community fleet overcapacity has never been carried out due to the fact, that its indicators, such as engine power, are easily manipulated, there are clear indications for some parts of the fleet that fishing capacity is in excess of what would be required to fish in a biologically or economically sustainable way. Certain segments of the fleet can at present only operate if they realise a substantial part of their catches outside the legal system. The particular case of the Mediterranean blue fin tuna fleet demonstrates that the size of the Community fleet targeting this species quantified in terms of theoretical catching capacity is much bigger than the available EU quota. A tuna seiner needs 300 tonnes a year to survive economically. Currently, however, the official quota in some countries only allows 100 t for all vessels licensed in the blue fin tuna fishery. Moreover, in some Member States, many vessels are kept tied up so that their effort allocation (in kilowatts days) may be transferred to other vessels and allow them to work full time. This fact indicates as well that those parts of the fleet are oversized.

Several steps have been taken since the 2002 reform of the Common Fisheries Policy (CFP) to counter this problem. However, overcapacity and excessive fishing effort still remain an issue for many segments of the EU fleet and continue to jeopardise the economic viability of the sector. EU catches have steadily declined since 1993, at an average of 2% per year, leading to constantly declining revenues (-25% since the early nineties). In particular, almost all demersal stocks have declined in recent years and are currently not sustainable. In addition market prices have remained constant or even diminished. With declining revenues and an excessive capital invested (estimated at around 40%), there is a high leverage effect of changes in operating costs, which has squeezed the industry margins for several years. The absence of a sufficient return on capital has delayed modernisation and further weakened competitiveness of the fisheries sector.

In the reform of the CFP in 2002, the concept of capacity reductions has been replaced by the mechanism of reference ceilings which are expressed in capacity units and constitute maximum levels which national fleets may not exceed. As a result of the CFP reform, Member States are exclusively responsible for adjusting the size of their fleets to the fishing opportunities made available to them by the Council, expressed either in the form of quotas or fishing effort allocations. No capacity reductions are decided and imposed at Community level. This system does not oblige Member States to reduce the overcapacity of their fleets, but leave them the choice to instead limit the fishing efforts for each vessel. The current fishing capacity management system does not establish a concrete and measurable obligation to reduce excess capacity, but only to 'adjust' the size of the fleet. However, the current approach of giving the responsibility for managing capacity to the Member States and focusing Community action on fishing effort limitation has turned out to be unlikely to resolve the problem and did not lead to a reduction of overcapacities. The CFP has so far failed to deliver a balance between fleet size and fishing resources. During the past 16 years the capacity of the Community fishing fleet has been decreasing at an average yearly rate of barely 2%. A 2% decrease would not even compensate for the effect of technological progress which is evaluated to be higher that that. If technological progress is assumed to be of 3%, as argued by some studies, the effective capacity of the fishing fleet may in fact have increased.

Even if the issue is quite technical in nature, it is as well highly politically sensitive. The reason for this is that overcapacity is one of the great — if not "the" — malady of the CFP, and Member States are reluctant in addressing this proactively in their fleet management and/or structural fund use. Given the fact that Member States respect their basic legal requirements as regards the entry exit regime for fishing efforts, the margin of manoeuvre for the Commission to press individual Member States to allocate more funds in this respect is very limited for the time being.

In its Communication on tackling the economic consequences of high fuel prices in the fisheries sector the Commission now proposes an emergency package to address both the immediate situation of economic and social hardship and to make a lasting contribution to tackling systemic overcapacity. This response must be EU-wide and co-ordinated in order to avoid distorting competition between Member States or fleets. The package consists mainly of measures based on temporary derogations from rules under the European Fisheries Fund, to support a faster adaptation of the Community fleet to the present situation and to provide temporary relief in order to cushion economic and social consequences in the transitional phase. It will give Member States the possibility to develop Fleet Adaptation Schemes for the fleets that are most dependent on fuel and most significantly affected by the situation of overcapacity.

Such measures together with a coherent and effective approach on control will finally cut the vicious circle of poor economic profitability and over-exploitation of stocks the EU fisheries sector has long suffered from and will lead to the necessary restructuring of the sector.

2.3.3 Increased competition for marine space

The competition of the various actors at sea for available space is sharpening considerably. Extraction of raw materials, sea routes, large windmill parks, marine protected areas under the habitat directive, the military, the leisure industry and fisheries compete for marine space. As a consequence of utilisations by other actors it is likely that fishing areas will become smaller. Given the persisting overcapacity of the fishing industry and its poor economic performance it is likely that pressure and excessive fishing efforts still will increase. It is essential to develop a comprehensive and sustainable management of marine space and to find an acceptable compromise among the various users. To this end an ecosystem based approach to fisheries management would need to be established.

2.3.4 Findings and recommendations of the Court of Auditors on the current control system

On numerous occasions, the Commission has raised serious concerns about the severe problems and obstacles in the application of the CFP control system¹⁰. The European Parliament supported this view in a resolution of 2007 on Illegal, Unreported and Unregulated fishing¹¹. Along this line, the recent audit performed by the CoA¹² aimed to assess whether the Commission and the Member States are taking the necessary steps for an effective system of control, inspection and sanctions for the conservation of fisheries resources. According to the findings of the Court the current situation is i.a characterized by an inadequate regulatory framework and insufficient procedures for the exhaustive collection of data and for the

¹⁰ COM(2007)167 final

¹¹ Paragraph 8 of the European Parliament resolution on the implementation of the EU action plan against illegal, unreported and unregulated fishing, adopted on 15 February 2007 (2006/2225(INI)), where the EP "*reiterates its conviction that a crucial and obvious first step for the European Union to take is, first, to fully implement the existing provisions of the CFP and other relevant Community legislation in an effective, fair and rigorous manner, in order to reduce unreported and illegal fishing by Community vessels and in Community waters.*"

¹² Special Report No 7/2007

detection of inconsistencies. Moreover, the national inspection systems are inadequate to prevent and to detect infringements and their divergences do not ensure adequate inspection pressure nor optimise inspection activities.

The Commission under the current conditions and due to its limited competences is not able to identify errors and anomalies in the data forwarded by Member States nor to evaluate national control systems and to form an opinion as to their overall effectiveness. In order to carry out its task of controlling the Member States in their application of the CFP rules the Commission is dependent on complete and reliable data. However, the current noncompliance and shortcomings in the reporting systems and the collection of data prevent the proper application of the system. This should significantly improve with the use of modern technologies and the implementation of systematic data cross checking procedures.

Moreover, legal tools to react to infringements of Community legislation are limited. The CoA concluded that if this situation continues, it will lead to grave consequences not only for the natural resource, but also for the future of the fishing industry and the areas associated with it. It recommended that:

- the systems for collecting, validating and monitoring catch data should be improved, Member States should define the minimum characteristics of inspections and ensure that inspectors have access to all useful information. They should ensure that inspections are supervised and recorded in centralised databases;
- control strategies are based on risk analysis and evaluated with the help of relevant objectives and higher consideration is given to verifiability of management measures;
- powers of Commission inspectors are strengthened and the mandate of the CFCA is broadened, more responsive instruments against Member States are introduced, and sanctions have a deterrent effect and are harmonised;
- the problem of overcapacity should be addressed.

The problems arising from non-compliance, the consequent damage to fish stocks and the lack of economic and social stability have been recognised by the Member States, both at government level and within the fishing sector itself¹³. They broadly favour a reform of the current system. The Commission shares the majority of the CoA's findings and intends to launch an ambitious reform of the EU policy for fisheries control which should address all the identified failures.

2.4. DRIVERS FOR NON-COMPLIANCE

A number of drivers for non-compliance with the CFP rules have been identified, which all contribute to the failure of the system, as they all have an impact on overcapacity and on the efficiency of the control regime. It is difficult to isolate one factor, as they all form part of a vicious circle which leads to the current situation.

2.4.1 An inadequate legal framework

¹³ COM(2007)167 final

The basis for the control policy and the roles of the Commission and the Member States are defined in Council Regulation (EEC) 2847/93 (the 'Control Regulation'¹⁴), and Chapter V of Council Regulation (EC) No 2371/2002 (the 'Basic Regulation'¹⁵). The complexity caused by the number of amendments to the Control Regulation is further exacerbated by the fact that the Control Regulation is only one of the elements of the control framework. A range of control provisions are contained in 27 separate regulations¹⁶. However, only 4 of originally foreseen 20 implementation regulations were adopted, as a result of a combination of factors, such as a lack of political will, the obsolescence of specific provisions, etc. This complexity and incoherence of the legal framework leads to a lack of clarity and legal certainty which makes it difficult for Member States and the fishing industry to accept the concept, to comply with the rules and therefore gives no incentive to not excess fishing efforts.

2.4.2 Existing culture of non-compliance

The CFP suffers from a culture of non-compliance in the sector. Beside the difficult and complex legal framework and the existing overcapacity of the fleet, the lack of compliance is essentially driven by the fact that the risk of detection of an infringement is rather low due to severe shortcomings in the national control systems¹⁷. A number of Member States have only limited dedicated fisheries control services, and the current deployment of inspectors in some Member States is inadequate. Moreover, some Member States do not apply sufficient inspection effort on vessels under 10 m, fail to operate a full time inspection and do not dedicate enough resources at the stage of landing or marketing of the catch. In the absence of a common methodology at EC level, Member States have developed their own systems of control and inspection, frequency and intensity of control and inspections differ strongly from one Member State to the other and fishermen have to face various procedures and practices. It has resulted in a variety of procedures and practices, introducing uncertainty, and lack of credibility of inspection reports, therefore making the systematic follow up of infringements in judicial proceedings more difficult. This diversity, as highlighted by the Court of Auditors, gives operators the opportunity to criticise practices which they consider discriminatory, thereby making them less inclined to comply with the rules.

Moreover, even in the case of detection of an infringement, there is no guarantee that appropriate sanctions are imposed. Sanctions for infringements of CFP rules are not sufficiently deterrent and therefore the system in place is one more factor which encourages non-compliance with the CFP rules and overfishing. Overall, the total amount paid in fines by the fisheries industry in 2006 came to O,2 million, constituting only 0.04 % of the number of active fishing vessels. The Commission has observed the significant disparities of the sanctions imposed by the different Member States for the same type of serious infringements: for example, the average fine for fishing without holding a fishing licence ranged from O3 to

¹⁴ Council Regulation (EEC) No 2847/1993 of 12 October 1993 establishing a control system applicable to the common fisheries policy, (OJ L 261, 20.10.1993)

¹⁵ Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy(OJ L 358, 31.12.2002, p 59-80)

¹⁶ See annex III to this report

¹⁷ The elements of the current control mechanisms and the current control situation in the Member States are described in annex IV

€24,328 in 2006¹⁸. The average fine imposed across the EU in the proceedings that ended with a penalty in 2006 amounts to €1 548. The average fine is less than half the average fine imposed in 2003 (€4 664) and less than the average fine imposed in 2004 (€2 272).

According to Member States' responses to the questionnaire on sanctions sent by the Commission in April 2008, even though the suspension of licences exists as a possible measure in their legislation, in most cases it is hardly used in practice, as it is the fines which are most commonly imposed. The levels of those sanctions are largely divergent and notably in the majority of Member States they do not take into account the economic benefit from the infringement.

The existing culture of non compliance also links to the perceived poor legitimacy of the CFP rules. There is no equal treatment of stakeholders among the EU, which certainly is an obstacle to fair competition. Poor legitimacy also comes from the fact that it is felt decisions are taken only following a top down approach, without effective consultation of the interested parties. There is a demand from the sector for a more bottom up approach, in a revised system where the Commission would only intervene where needed, on the basis of control strategies agreed with the Member States, which target high risk activities, and reduce the number of unnecessary reporting obligation and move away from the existing system of centralised micro decisions.

The Commission is already undertaking short term actions, in particular in areas such as the standardisation and harmonisation of control and development of inspection methods and full implementation of the Vessel Monitoring System (VMS) in conformity with Community rules. However, these measures would not be sufficient to address the problems in a long-term perspective.

2.4.3 Ineffective control mechanisms

As guardian of the Treaty, the Commission not only verifies and evaluates that Member States do meet their responsibility for the application of the CFP rules, it also works in partnership with them, by facilitating coordination and cooperation. The Community assistance to "control and enforcement" activity of Member States is limited to 45 million if only the appropriations directly allocated¹⁹ to it are considered. However, taking into account all the activities designed to deal, albeit only partially, with the consequences of the serious shortcomings of the resource management policy, the financial issues for the Community are far more substantial, especially the structural assistance for fisheries (437 million) and the international fisheries agreements (456 million). As it stands, it is difficult for the Commission to get Member States to respect their obligations. As explained above, structural overcapacity creates an incitement to non-compliance, and prevents the effective application of the control mechanisms. The only way to achieve effective controls would be to set up inspection resources and pressure of controls. These control tools so far, have proven inadequate to ensure the respect of CFP rules.

¹⁸ Communication from the Commission to the Council and the European Parliament - Reports from Member States on behaviours which seriously infringed the rules of the Common Fisheries Policy in 2006, COM/2008/xxx, forthcoming

¹⁹ All figures relating to appropriations are 2007 payment appropriations

2.4.3.1 Commission inspections

The verification of Member States' implementation of the CFP rules is carried out by monitoring via inspections of Member States activities and evaluation of Member States inspection reports. A team of 24 Commission inspectors, whose powers are limited in scope²⁰can request access to databases and documentation held by the national authorities, but they cannot carry out their own checks on private entities against the will of the inspected party. They have the right to conduct checks in Member States without prior notice, but need to be accompanied by inspectors of the Member States who are ultimately responsible for the inspections of the sector. Thus the inspection competence never equals those of the national authorities. In addition, even if evidences gathered by Commission inspectors can be used for prosecution, Member States are not obliged to act against individuals on the basis of the findings of the Commission inspectors' reports²¹.

2.4.3.2 The role of the Commission for the management of quotas

Closure of fisheries

The management of quotas in general is the responsibility of the Member States. This refers particularly to the closure of a fishery after the exhaustion of the relevant quota. The Commission is generally limited to the supervision of the management by Member States. It has the legal authority to close a fishery either following the notification of the Member State or on its own initiative²². The normal practice is to close a fishery on the basis of the figures of the relevant Member State. However, this mechanism relies on proper enforcement of Community rules by the Member States, coupled with an efficient monitoring of current catches against quota available. According to the report of the CoA, none of the Member States showed total compliance with the regulations. This fact is known and documented by the Commission who has started more than 50 infringement procedures to Member States for quota overshooting. Regarding the closure of the fishery on the Commission's own initiative, so far, this possibility has been used only twice by the Commission a) to close the Mediterranean bluefin tuna fishery for all Member States (Regulation (EC) No 1073/2007 and b) to close the cod fishery for vessels flying the flag of Poland in some areas of the Baltic (Regulation (EC) No 804/2007). The effectiveness of such a measure is hampered by the fact that the Commission has to collect serious evidence first. This procedure is very time consuming and it can take the Commission up to three months to react during which the overfishing goes on.

Deduction of quotas

The Commission has the capacity to address overfishing in a more routine manner by deducting overfished quantities from the relevant Member State's quota the following year on the basis of a gradual penalizing factor²³. This factor has without doubt a disciplinary effect. However, its consequences are only felt well after the overfishing has occurred. Moreover, if cases of gross overfishing involve a political discussion on high level, the tool is of limited use since decisions are influenced by other criteria. To make quota reduction a stronger tool

²⁰ Articles 29 and 30 of Council Regulation (EC) No 2847/93

²¹ Article 27 paragraph 2 fourth subparagraph of Council Regulation (EC) No 2371/2002

 ²² Article 21 of Council Regulation (EC) No 2847/1993, and Article 26, paragraph 4 of Council Regulation (EC) No 2371/2002

²³ Article 23 paragraph 4 of Council Regulation (EC) No 2371/2002, and Article 23 of Council Regulation (EEC) No 2847/93

the Commission should have an increased mandate to deduce quotas as a normal act of administration and to take the solutions away from the political discussion.

2.4.3.3 Emergency and preventive measures

The Commission can take emergency measures²⁴ if there is evidence of a serious threat to the conservation of resources or the marine eco-system resulting from fishing activities, and preventive measures²⁵ where there is a risk that fishing activities pose a serious threat to the conservation of resources. However, due to the difficulty to gather evidence and to observe the principle of proportionality, these measures have proved very difficult to implement in practice.

2.4.3.4 The infringement procedure against Member States

In case of non-compliance that cannot be corrected through other means, the Commission can refer the case to the Court of Justice under the general procedure for failure to fulfil an obligation. So far, there have been only three cases whereby Member States have been sanctioned to pay a fine. In one instance the judgment²⁶ was delivered in 2005 for noncompliance with a 1991 judgment concerning a case in which the first infringement had been recorded in 1984, 21 years earlier. The infringement procedures culminating in a financial sanction could have a deterrent effect for Member States. However, the procedure is long and cumbersome, and is not suitable to the urgency of the measures required to protect the fisheries resources.

Furthermore, except for compliance with fishing fleet register²⁷, the Commission is not in a position to link financial aid to a satisfactory implementation of control rules as it is already possible in the agricultural sector. Up to now there is no similar legal base for fisheries.

SECTION 3: OBJECTIVES²⁸

3.1 **GENERAL OBJECTIVE**

The general objective is to implement a sufficiently specified and uniform policy for the control system of Member States fishing activities in order to ensure the effective implementation of the CFP rules. It is therefore linked to the general objective of the CFP that is the sustainable exploitation of living aquatic resources, and will have an impact on the reduction of overcapacity. Due to its global and integrated approach focussing on all aspects of the CFP the reform of the control policy should not only result in an improved control capacity and management of fisheries resource, but additionally should have positive structural impacts on the fishing industry and on the market and thus combat the environmental, as well as the economic and social consequences of non-compliance. Profitability would be addressed: natural restructuring of the fishing sector would be enhanced, since operations whose profitability are based on the exhaustion of fishing efforts would become obsolete. This approach should be based on simplification, standardisation, increased cost effectiveness and reduction of administrative burden.

²⁴ Article 7 of Council Regulation (EC) No 2371/2002

²⁵ Article 26 paragraph 3 of Council Regulation (EC) No 2371/2002

²⁶Judgment of the European Court of Justice of 12 July 2005 in Case C-304/02: Commission of the European Communities v French Republic; action for failure to fulfil obligations under Article 228 EC; sentenced to pay a lump sum of 20 million euro and a penalty payment of 57.8 million euro for each period of six months (judgment given on 12 July 2005); France paid the lump sum and one penalty payment ²⁷ Article 16 of Council Regulation (EC) No 2371/2002

²⁸ For a list of core indicators of progress towards meeting the objectives, see section 7 of the report

More generally, the objective will contribute to the Sustainable Development Strategy agreed by the European Council in June 2006 via its focus on the protection of natural resources. It is also in line with the objectives set out at the World Summit on Sustainable Development in 2002 regarding fisheries management²⁹ and the principle of striving for better ocean governance guiding the current reflections on a future Maritime Policy for the Community. Moreover, the overall objective of the control reform respects the Commission's identification of the four main areas where there is currently space for improvement in the application of Community Law³⁰.

The reform is intended to enter into force in 2010. However, the most significant impact are expected on a medium to long term bases within a period of 5 - 10 years. First, Member States and the industry would need some time to implement the new system and to meet its full requests. Only afterwards the ecosystem can respond on the new and better conditions, which will be measureable by the increase of biomass and by the increase of market prices for fish.

3.2 SPECIFIC OBJECTIVES

3.2.1 A new, common approach to control and inspection

The implementation of harmonised inspection procedures and improved standards should ensure uniformity in the implementation of control policy at Member States' level, while respecting and considering diversity and the specific characteristics of different fleets.

The operational objectives would include:

- Ability to carry out standardised, coordinated inspection actions and procedures at all stages of the chain, and develop comprehensive traceability systems;
- Ability to use modern technologies; and carry out effective and systematic cross checking of all relevant data and;
- Ability to use information identifying risks and rationalising control.

3.2.2 A culture of compliance

The objective is to influence the behaviours of all those stakeholders involved in the full cycle of fishing activities (capture, processing, distribution and marketing), so that compliance with the policies and regulations of the CFP is achieved through not only monitoring and control activities, but as a result of an overall culture of compliance where all parts of the industry are invested in compliant activities, and legitimacy of CFP rules are restored. Moreover, significant improvements of the legal framework should lead to the reduction of administrative burdens both for the industry and the administrations.

The operational objectives would include

- Simplification and rationalisation of the legal framework;
- Ability to introduce of deterrent and harmonised sanctions;

²⁹Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August - 4 September 2002 (United Nations publication)

³⁰ See COM(2007)502 final of 5.9.2007 "A Europe of results - applying Community Law":

⁻ prevention: increased attention to implementation throughout the policy cycle

⁻ efficient and effective response: improved information exchange and problem solving

⁻ improved working methods: prioritisation and acceleration in infringement management

⁻enhanced dialogue and transparency: between the European institutions and improving information to the public

• Ensure improved cooperation between Member States and with the Commission (including the adaption of the mandate of the CFCA) and;

• Develop greater interaction with the sector and the stakeholders.

3.2.3 Effective application of CFP rules

The operational objective would be to strengthen the management competences and the capacity of the Commission to intervene proportionately to the level of non compliance by the Member States. Responsibilities of the Commission and Member States will have to be clearly defined in order to avoid substitution and to ensure that the Commission adheres to its core activity of controlling and verifying implementation of the rules of the CFP by Member States. It is important to stress that at no stage it is intended to change the current sharing of responsibilities between the Commission and the Member States and the fact that the Member States are – and should remain – responsible for control and enforcement, but the current system of micro decisions should be progressively replaced by a macro management based approach.

SECTION 4: POLICY OPTIONS

4.1 OPTION 1: NO POLICY CHANGE. CONTINUE CURRENT POLICY AND FOCUS ON IMPLEMENTATION AND ENFORCEMENT OF EXISTING FRAMEWORK

4.1.1 Sub-option 1: No policy change, continuation of the current situation

Approach and assumptions

The main assumption for this sub-option is that current control policy is sufficient to deliver compliant behaviour in support of the objectives of the CFP, and that the core issue is poor implementation of the existing regulatory requirements by Member States. On numerous occasions, the Commission has raised serious concerns as to the lack of sufficient measures by Member States for this purpose³¹. In order to address the current shortcomings of the existing system, the emphasis could be put on a better implementation of the already existing legislation.

4.1.2 Sub-option 2: Implementation and enforcement of existing framework through implementation regulations

Approach and assumptions

The main assumption for this sub-option, as an alternative to the simple continuation of the current situation, is that emphasis could be put on the adoption of outstanding legislation. At the time of adoption of the control regulation around 20 implementation regulations were foreseen to provide for a full set of technical rules as a basis for a comprehensive control regime. Of these only four implementation regulations were adopted. This clearly prevented the initial control regulation from reaching its full effect.

4.1.3 Specific expected impacts, allocation of roles, and content of the option

³¹ COM(2007)167 final

4.1.3.1 Specific expected impacts

The expected specific impact of option 1, through the completion of the existing legal framework and the adoption of outstanding legislation might partly address some of the failures. One has to bear in mind however, that, on the one hand, given that many implementation regulations are still outstanding, their adoption would take a lot of time. On the other hand, with all the outstanding regulations being adopted, the legislative framework would become even more complex and more dispersed.

4.1.3.2 Allocation of roles

The current allocation of roles between the Member States, the Commission and the CFCA - as described in section 2, point 2 - would be kept without changes.

	Member States	Commission	Community Fishing Control Agency
Roles	Implement the CFP rules	Control the implementation of the CFP rules by the Member States	Organise operational coordination of fisheries control and inspection activities by the Member States
Responsibilities	-Responsibleforcollecting, validating andcompiling catch data, andforwarding it to theCommission-Responsiblefor theestablishment of its owninspection procedures	 -Responsible for monitoring all data received, identifying errors and misstatements in the data forwarded by the Member States and for taking timely decisions necessary to protect the resource -Provides transparency and facilitates international cooperation. -Limited capacity to act: Infringement procedures, and rarely used Specific procedures to close fisheries 	-Joint Deployment Plans (JDPs) -Activities limited to inspections at Sea -Training

Based on these assumptions, Option 1 could develop as follow:

4.1.3.3 Content of the option

4.1.3.3.1 A new, common approach to control and inspection

The Commission³² should prioritise the use of existing means of inspection and surveillance in selected fisheries or stocks, it should review periodically the effectiveness of inspection and surveillance activities in co-operation with national control experts.

It should follow up more systematically the reports it produces itself or reports sent by Member States.

Member States have not taken all actions foreseen in the basic regulation such as e.g. setting up a single authority for the collection and verification of data. The lack of action of Member States in this respect could be challenged on the basis of Article 226 EC Treaty (and if necessary followed up through a '228-procedure'). Moreover, in the area of control and reporting, the Commission should be less lenient against none or late reporting.

4.1.3.3.2 A culture of compliance

³² Communication from the Commission to the Council and the European Parliament - Towards uniform and effective implementation of the Common Fisheries Policy COM(2003)0130 final

The development of a culture of compliance among fishing operators with regard to the implementation of measures affecting their activities can be attained through better regulation and good governance in the CFP decision-making process. In that respect, the current system of microdecision and poor legitimacy might be addressed through greater involvement of the advisory bodies set up in 2002. Without necessarily extending their mandate, the regular interaction between the Commission and these bodies has already allowed for an improved dialogue and a better understanding of the rules.

4.1.3.3.3 Effective application of CFP rules

To ensure that the CFP rules are effectively applied, a number of existing competences of the Commission could be more frequently used. As to the closure of fisheries on Commission's initiative³³, this has only been used twice in 2007 with regards to the Baltic cod and to the Bluefin Tuna fishery. As far as procedure under Article 228 is concerned, the successful action by the Commission against France created an immediate incentive for France to comply with Community law following first judgment. Article 228 regarding enforcement should be used fully beyond this case.

4.2 **OPTION 2: RECAST OF THE CONTROL REGULATION, COMBINED WITH A CODE OF** CONDUCT

4.2.1 Approach and assumptions

The second policy option considers the implementation of the reform elements through a consolidation of the currently fragmented control regulation in combination with a steering instrument, such as a 'Code of Conduct' or 'Best Practice Guidance'. It is based on the assumption that non compliance with the CFP rules is a result of a complex control regime, and poor legitimacy of the CFP rules among the sector and the Member States. Following the adoption of Regulation (EC) No 2371/2002, and in line with recital 19 of that Regulation, this option would lead to a new Council Control Regulation, based on Chapter V of Regulation (EC) No 2371/2002. The aim would be to summarise into only one regulation all current provisions governing control, inspection and enforcement that are at the moment scattered in different regulations³⁴. This would both consolidate and simplify the existing rules for control, implementation and enforcement, but at the same time would not change or add any new legal requirement, nor would it introduce any new instrument to the better enforcement of the current control framework.

4.2.2 Specific expected impacts, allocation of roles, and content of the option

4.2.2.1 Specific expected impacts

Regarding the specific expected impact of this option, it can be reasonably expected that this will lead to a rationalisation of the existing rules and therefore be a contribution to the simplification of Community law. However, there is no guarantee that this will lead to a better implementation of the recast legal framework by Member States. In particular, the inadequate

³³ Article 26, paragraph 4 of Council Regulation (EC) No 2371/2002 provides that in the event of a Member State's quota, allocation or available share being deemed to be exhausted, the Commission may, on the basis of the information available, immediately stop fishing activities ³⁴ as currently laid down in Council Regulation (EC) No 2847/93 and its implementing regulations

possibilities for the Commission to make Member States correct their shortcomings would persist. Given the persisting overcapacity and the poor economic performance that create strong incentives for the industry not to comply with the rules and the limited resources of Member States in monitoring fisheries it can be expected that the current shortcomings of the CFP control system will remain.

4.2.2.2 Allocation of roles

The fundamental allocation of tasks between the Member States, the Commission and the CFCA – as described in section 2, point 2 - would not be altered either under Option 2, despite some adaptations. The combination of the recast with steering instruments would provide a new mechanism for simplifying and improving the implementation of the CFP rules through clearer provisions and detailed advice from the Commission to the Member States that deliver greater clarity on the requirements. An additional responsibility thus for the Commission would be to elaborate and provide guidelines for the implementation of the CFP rules, whereas for the Member States there would be no additional obligations, since those guidelines would not be legally binding.

	Member States	Commission	Community Fishing
			Control Agency
	Implement the CFP	Control the implementation of the CFP rules by the	Organise operational
	rules	Member States	coordination of
S			fisheries control and
Roles			inspection activities by
R			the Member States
		Micromanagement	
	-Responsible for	-Responsible for monitoring all data received, identifying	-Joint Deployment
	collecting,	errors and misstatements in the data forwarded by the	Plans (JDPs)
	validating and	Member States and for taking timely decisions necessary	-Activities limited to
	compiling catch	to protect the resource	inspections at Sea
	data, and	-Provides transparency and facilitates international co-	- Training
	forwarding it to the	operation.	
ies	Commission	-Limited capacity to act: Infringement procedures, and	
ilii	-Responsible for	rarely used Specific procedures to close fisheries	
sib	the establishment	-Develop understanding of the CFP rules through clearer	
uo	of its own	provisions and detailed advice to Member States that	
Responsibilities	inspection	deliver greater clarity on the requirements, on a voluntary	
R	procedures	basis	

Based on these assumptions, Option 2 could develop as follow:

4.2.2.3. Content of the option

4.2.2.3.1 A new, common approach to control and inspection

The development of a more adequate approach as regards inspection would be achieved through a simpler legal framework and a steering instrument. For example, as it was already foreseen in the Communication "Towards uniform and effective implementation of the Common Fisheries Policy", ³⁵ a code of conduct for inspection clarifying the duties of

³⁵ COM(2003)0130 final

inspectors and the procedures to be followed by both masters and inspectors during inspections at sea could contribute in particular to more uniformity at Community level.

In the same line, the requirement for Member States to establish a validation system comprising cross checks and verification of certain data collected under the CFP already exists, but it is clear that the implementation of such a system varies across Member States, and that significant broadening of the checks conducted is possible.

4.2.2.3.2 A culture of compliance

This option also links in quite closely with the objective to develop a culture of compliance, which can be best achieved through a simplified and clear legal framework in combination with strong partnership between all stakeholders in the management of aquatic resources³⁶. Increasingly, those having the responsibility for managing natural resources look to achieve objectives through empowering stakeholders in collaborative processes and implementing policy change through cooperative means. In practice, working with the Member States through steering action, preparing guidelines etc. and publicising the apparent discrepancies relating to the issue of sanctions may be the most realistic option.

4.2.2.3.3 Effective application of CFP rules

Moreover, to ensure that the CFP rules are effectively applied, non regulatory instruments could be developed that promote the implementation of measures that are currently not required by the existing regulations comprising the CFP (and therefore would not be added in a consolidated recast text). For example, through the expert group on control, Member States and the Commission could agree on a specific procedure for closing fisheries: as soon as Commission's inspectorate casts doubts on the reliability of catch data against quota available, the Member States would commit themselves to immediately close the fishery on a provisional basis.

4.3 OPTION 3: REGULATORY INSTRUMENT, IN THE FORM OF A NEW BINDING REGULATION

4.3.1 Approach and assumptions

The third option presented for assessment is the implementation of the reform package through a regulatory text that is binding at Community level. This approach is founded on the establishment of an EU level playing field, a demand supported to a large extent by the Member States and the sector itself, which would ensure a uniform application of the CFP rules across the EU and a non discriminatory treatment of all fishermen.

4.3.2 Specific expected impacts, allocation of roles, and content of the option

4.3.2.1. Specific expected impacts

The regulatory instrument would meet the objectives of a truly global and integrated control policy as it would encompass all control issues, from the net to the plate. The implementation of adequate control measures would also address the problem of overcapacity. On the one

³⁶ Presentation by Mary McAllan (Scottish Government – Marine Directorate Sea Fisheries Management) to the North Sea Regional Advisory Council (RAC)

hand, effective and reinforced control measures on effort regime will reduce current overfishing which maintains artificially the profitability of the fleet, and therefore creates an incentive for non compliance with the rules. On the other hand, overcapacity would be tackled through the introduction of effective tools to better control the capacity of fishing vessels (through certification of the engine power, definition of an "active vessel...).

4.3.2.2 Allocation of roles

The new system would ensure a clearer allocation of roles between the Commission, the Member States and the CFCA. In first instance the general division of responsibilities, where the Member States are responsible for the implementation of the CFP rules, the Commission evaluates and controls the proper implementation by the Member States and the CFCA provides means for operational coordination and cooperation among Member States, would not change. However, as further elaborated below, the management competences and capacities of the Commission would be strengthened and it would be given more possibilities to act in case of failure of Member States. The mandate of the CFCA would be extended to other inspection activities than at sea, and it would be given proper inspection powers and the responsibility for the coordination of crisis situations. For the Member States there would be new obligations related to the harmonised inspection procedures, such as cross checking of data, risk analysis or increased exchange of information with other Member States.

	Member States	Commission	Community Fishing		
			Control Agency		
	Implement the CFP rules	Control and evaluate the implementation of the CFP rules	Organise operational		
		by the Member States	coordination of fisheries		
S			control and inspection		
Roles			activities by the Member		
R			States		
		Macromanagement			
	-Responsible for collecting,	-Responsible for evaluating errors and misstatements in	-Joint Deployment Plans		
	validating and compiling	the data made available by the Member States and for	(JDPs)		
	catch data, and making it	taking timely decisions necessary to protect the resource	-Extension of the mandate		
	available to the Commission	on the basis on the basis of risk management	of the agency to cover all		
	via secured websites	-Provides transparency and facilitates international co-	inspection activities		
	-Responsible for the	operation	(including ports, transport		
	implementation of	-Reinforced capacity to act: Infringement procedures,	and markets)		
	inspection procedures on the	more frequent use of specific procedures to close	-Extensive investigation		
	basis of a risk analysis	fisheries, auditing function, effective measures against	(where appropriate) and		
tie	-Increased cooperation	member States (cross compliance), increased powers for	inspection powers		
ili	between Member States	the Commission inspectors, emergency measures	-Management and		
sit	-Effective sanctions against	- Develop understanding of the CFP rules through	coordination of crisis		
Responsibilities	individuals	clearer provisions and detailed advice to Member States	situations		
esp		that deliver greater clarity on the requirements, on the			
R		basis of control standards and inspection procedures			

To this end, this new legislative framework could address the three objectives as follow:

4.3.2.3 Content of the option

4.3.2.3.1 A new, common approach to control and inspection

Although the level of compliance by fishing vessels with technical measures should not be ignored, and in that respect inspection at sea would not be abandoned, greater attention needs to be turned towards the comprehensive monitoring of catches. The establishment of an EU level playing field for control and inspection would take into account the differences across the segments of the fleet.

Standardised and coordinated inspection actions and procedures at sea and on land

Minimum requirements for inspection at sea and on land would be set up, as well as for transport and market. The concept of inspection should be defined in the proposed Regulation, as well as the procedure to be followed during an inspection, the procedure in case an infringement is detected, and the follow up to the infringement. To be effective each inspection, depending on its nature, must have certain features. Centralised recording of all inspection reports in a computerised database would be envisaged essential. Standard observers' scheme would be developed, as well as surveillance procedures. In this context, the role of the Member States would be enhanced since they would have to amend and improve their national inspection procedures accordingly.

The Commission also sees the need to establish general standards of control in the following fields:

-Recovery plans and Multi-annual management plans: Each one of these plans has associated control measures that differ from plan to plan as a result of different negotiation contexts when the measures were discussed at Council level.

-Discards: For the time being there is no specific legislation on the subject, but a reflection has been launched to draft legislation aiming to define measures concerning a progressive reduction of discards.

-Real time closures of fisheries: A permanent mechanism of real time closures of fisheries, under the responsibility of the Member States, could be introduced. For the time being there is no specific legislation on the subject, but a reflection has started on an appropriate procedure providing for the requirements to allow Member States to close temporarily certain areas for the protection of the stocks, and the conditions under which those closures have to be lifted again. This measure again would force Member States to stronger carry out their responsibilities and thus enhance their active role in the implementation of the CFP rules.

The extension of control beyond marine activities and land inspections to full traceability would be introduced. Consumers are increasingly aware of the need to contribute to sustainability. A comprehensive labelling system (indicating the origin of the fish, name of the vessel, minimum landing size...) is needed, with sanctions linked to it if the seller does not respect its obligations (withdrawal of accreditation). Best practices in Member States could be used to develop the system. The current provisions on the control of the market³⁷ do not fully reflect measures adopted in the Common Organisation of the Markets Regulation³⁸. The new regulatory instrument could take into account the requirements for Consumer information and traceability provisions³⁹, and the obligation for producer organisations to draft and implement operational programmes every fishing year (this obligation is already part of the CFP legislation).

Modern technologies and efficient data cross-checking systems

³⁷ Title VI of Council Regulation (EC) No 2847/93

³⁸ Council Regulation (EC) No 104/2000

³⁹ Commission Regulation (EC) No 2065/2001

Modern technologies generate data that have a value in their own right such as Vessel Monitoring Systems (VMS), Electronic Reporting Systems (ERS), and Vessel Detection Systems (VDS) as they provide additional tools for the monitoring, control and surveillance of fishing activities. Accordingly, systematically applying automated data validation procedures by using such modern technologies complimentary to conventional monitoring tools, such as catch registration systems, can focus the limited resources of Member States for targeting certain vessels for control purposes.

The Commission proposes the introduction of minimum requirements for the automated and systematic validation of data collected by Member States. There should be basic quality control procedures in such a system that establishes the compliance with for instance, the VMS regulation, the Logbook regulation, the Control regulation etc. Amongst many others, the following checks or validations could still be included: Declared catch area against VMS data, possible fishing activity in closed fishing areas, movements of vessels over effort zones, designated ports and landing ports against VMS data, pre-notifications against VMS data and catch documents etc.

Computer based technologies will make it possible to easily set up a data base containing all inspection reports and infringements to allow a global assessment of inspection activities and adjust control strategies, if need be. i.a. France is already running such a system with very good results allowing its inspectors to access all relevant information in real time. In addition, Member States would have the obligation to enter electronically all the relevant data allowing a monitoring of the fishing activities in nearly real time, and provide remote access to the Commission. This would reduce the number of reporting obligations for the Member States, and reduce the current system of micro decision by the Commission.

An automated data system also facilitates the exchange of information between Member States and between Member States and the Commission. The Commission will be in a possibility to cross-check such information easily with Eurostat data.

Adequate strategic programming, tactical targeting and sampling strategy

Member States would be required to carry out a risk analysis leading to a formal strategy document that identifies inspection priorities (with benchmarks) and could be used as the basis for a rational allocation of resources, particularly as regards the cost/benefit aspect of inspections. Member States would be obliged to set up sampling procedures for specific fisheries like those where the national quota is likely to be fully used, stocks under recovery plans and stocks of a high commercial value that are likely to be subject to illegal activities. Member States would have to provide a detailed description on the strategies followed and the statistical estimates used making it possible to appreciate the levels of precision and relationship between the cost and precision.

Specific measures to address overcapacity

It is essential to guarantee the quality of the fishing capacity indicators (Vessel tonnage and engine $power^{40}$). While the quality of the tonnage indicator is considered satisfactory, the

⁴⁰ Under the EU legislation the Member States are required to record the vessel tonnage using the Gross Tonnage (GT) under the London Convention (1969) as opposed to the previously used Gross Register Tonnage (GRT) under the Oslo Convention (1946). This change in recording tonnage has taken place over a number of years throughout the 1990's and at varying rates in the different countries. Given that the GT of a vessel is generally significantly greater than the GRT, great care has to be taken in comparing the tonnages of the various fleets at different times. By the end of 2003 the recording of the tonnage by GT was largely completed.

under-declaration of engine power is a major problem⁴¹. Tackling excessive engine power requires both a new engine power certification system and re-enforced control measures allowing Member States to detect and sanction those vessels which operate with an engine power higher than the one authorised according to their fishing licence.

Measures for the control of recreational fishing

The proposed initiative would envisage introducing proportionate control measures for recreational fishing, to be carried out by the Member States, as this activity has an increasing influence on fish stocks and marine environment. For that purpose, it would be envisaged to limit the use of allowed fishing gears, and submit recreational fishermen to prior registration.

4.3.2.3.2 A culture of compliance

Simplification of the rules

The proposed Regulation will bring together the control standards for all the rules of the CFP with a global approach based on simplification and covering all aspects from the capture through to the market. This proposal should put the principles in place while leaving the task of defining the details to implementing regulations.

Greater interaction with the stakeholders

The present system of centralised micro decisions and micro management on Commission level has poor legitimacy among stakeholders. The Commission wants to move to a macro management approach, where it would mainly act as an auditor of the control system, and intervene only where needed, on the basis of control strategies agreed with the Member States, which target high risk activities, and reduce the number of unnecessary reporting obligation.

In this context, it would be important to increase the interaction with stakeholders. Since their creation, the Regional Advisory Councils (RACs) have developed into an important forum for interaction between stakeholders and the Commission. In line with the contributions received during the online consultation, the regulatory instrument could foresee:

- Public training initiatives, especially for fishermen and inspectors, in continuation with community financial assistance for improving the involvement of the fisheries sector⁴².
- Development of a culture of compliance with the law and foresee positive incentives, as provided for example in the current TACs and quotas Council Regulation (EC) No 40/2008.

Introduction of a system of deterrent sanctions

Sanction regime

The driving principle should be that there will not be an economic benefit resulting from the infringement and the dissuasive effect of the sanction should be guaranteed. The European Court of Justice (ECJ) stressed that the European Community does not have the necessary competence to legislate as to the type and level of sanctions imposed on the basis of criminal law⁴³. The Commission has the competence to create or harmonise administrative sanctions insofar as they are necessary and proportionate for ensuring the effective application of its

⁴¹ Communication from the Commission to the Council and the European Parliament on improving fishing capacity and effort indicators under the common fisheries policy COM(2007)39 final

⁴² Commission Regulation No 861/2006

⁴³ C-440/05, ECJ Judgment of 23 October 2007, C-176/03, ECJ Judgment of 13 September 2005

rules and policies. It will be then up to the Member States to decide whether they apply these sanctions within a criminal system or not. The Community could envisage a system to approximate the levels of fines that Member States must impose in respect of serious infringements to CFP rules.

Penalty point system

Another option would be to consider the idea of using administrative means to restrict or even end access to fisheries by those who have repeatedly breached CFP rules. Given that livelihoods are involved and the possible social and economic impacts of denying access to fisheries it is clear that a graduated or proportionate approach would be called for. One option could be the introduction of a penalty points scheme, whereby each permit holder starts off with an equal number of 'points' some of which are then lost each time there is an infringement leading ultimately to the loss of the permit either for a defined period or indefinitely.

Definition of serious infringements

The regulatory instrument could provide for the definition of serious infringements⁴⁴ taking into account the gravity of the infringement in question which is to be determined by the competent authority, taking into account the criteria such as the damage done, the extent of the infringement, its value or repetition. It would be necessary to extend this list of serious infringements to other elements of the chain, such as the buyers, and sellers.

Enforcement measures and accompanying sanctions

The new system could be accompanied by a regime of immediate enforcement measures, applying to persons found in *flagrante delicto* while committing serious infringements, and designed to prevent the continuation of those infringements. Those measures would include the immediate cessation of fishing activities, the rerouting to port of the vessel...In addition, the Community could encourage the adoption by Member States of accompanying sanctions to fines (such as the confiscation of catches or gear, suspension or withdrawal of fishing licences, etc) as they often constitute more deterrent penalties than "traditional" financial penalties.

Reinforce Administrative cooperation and mutual assistance and extension of the mandate of the CFCA

In the light of a targeted and effective control system there is a clear need for an integrated approach on administrative cooperation and mutual assistance, to be expanded to all stages of the chain, including the set up of a mutual assistance system between the Member States for a regular and standardized exchange of control related information, and with the Commission and the CFCA. In this context would be necessary to amend the mandate of the CFCA in order to allow its proper involvement in the operational cooperation of control and enforcement measures at all stages. Contrary to what its name might suggest, the CFCA today has no powers of its own in relation to control and enforcement of CFP rules. Option 3 would envisage the reinforcement of the mandate of the CFCA and to involve it more actively in the control and inspection procedures. In this respect, a number of elements need to be further elaborated, such as:

⁴⁴ In this context, the regulatory instrument could get inspiration from existing practices in Regional Fisheries organisation (notably North-West Atlantic Fisheries Organisation (NAFO), and North-East Atlantic Fisheries Commission (NEAFC)

- The extension of the mandate of the CFCA to establish Joint Development Plans as well for territorial waters. It would be important that under the new Control Regulation subject to agreement of the costal Member States access to territorial waters would be provided in the framework of Joint Deployment Plans and that any approval procedure for entering territorial waters for patrol ships or patrol planes would be simple;
- Coordination and enforcement of control and inspection at all stages of the chain, not only at sea would be necessary. Therefore, initiatives on land, during transport, processing or marketing should also be part of the mandate. In this context the new Control Regulation should establish the power for the CFCA to trace back the origin of fish and fisheries products and to organise cooperation of audit inquiries on land;
- The CFCA in future should assist the Commission in monitoring the implementation of the CFP rules and the proper application of the new CFP control system by the Member States. For this purpose, the Agency officials could be granted own investigation powers, to allow inspections and audits of national control systems and the cooperation between Member States ;
- In order to contribute to the harmonisation and improvement of inspection standards, the CFCA should elaborate and issue manuals and guidance material reflecting best practices in the field and provide training for national inspectors. It should, moreover, conduct risk analysis on the basis of catch data provided by the Member States and provides the Commission with technical and administrative support.
- It could be considered to extend the mandate of Community inspectors, without prior notice, to all public or private bodies having received from the State some kind of delegation of power in the national fisheries management scheme. This could include inter alia producer organisations, auction centres, or wholesale markets. The option could include the obligation to Member States to have these organisations audited by independent third parties and have the Commission's inspectors allowed to conduct their own checks independently from national authorities on the basis of these audit reports;
- The CFCA, following existing provision, notably for the European Food Safety Authority, could set up an emergency unit where a serious risk to the CFP has been identified, which should be responsible for the collection and evaluation of relevant information and the elaboration of options to prevent or eliminate the risk.

4.3.2.3.3 Effective application of CFP rules

Strengthen the capacity of the Commission to intervene proportionately to the level of non compliance by the Member States

Redefine the powers of Commission inspectors

Commission inspectors should be given the same powers as national inspectors, and should be ale to by their own means, to initiate and carry out inquiries, verifications and inspections in the Member States. Commission inspectors should be able to have access to fishing vessels, transport vehicles as well as to the premises of businesses and other bodies with activities relating to the CFP. When there is reason to believe that irregularities occur in the application of the CFP rules, the Commission should be able to carry out independent inspections. In line with the development of a micromanagement approach, the Commission should also be able to carry out audits of the monitoring, control and surveillance systems of Member States.

Action plan for Member States to improve their implementation

A legal obligation could be created obliging Member States to correct their system and/or behaviour at the request of the Commission after shortcomings have been found in an inspection mission. This could be set up in an action plan, as it is the case for example in the field of Consumer protection.⁴⁵ Inspection reports could be published with responses from the Member States like SANCO reports, bearing in mind confidentiality related issues. The non-respect of such an obligation could be linked to an authorisation for the Commission to suspend financial aid, or to deduct quotas in the following year.

Strengthen the management capacity of the Commission

Capacity for the Commission to rectify catch figures of Member States

The Commission lacks the legal capacity to rectify any figure transmitted officially by a Member State. The rectification of these figures could technically be done either on the basis of findings of Commission inspectors in the relevant Member States and the analysis of other relevant figures. The Commission could be allowed to close a fishery on the basis of these corrected figures.

Closing a fishery on the Commission initiative

A policy option would be to reverse the burden of proof on Member States and apply fully the precautionary principle as defined in Article 3 of Council Regulation 2371/2002: when there are strong indications that fishing conditions are not sustainable, the Commission should be able to decide on provisional closure of fisheries and reopen it only when the Member State(s) concerned can provide the Commission with evidences that the fishery can be safely exploited.

More flexibility for the Commission to proceed to deductions of quotas

It is important that the deduction of quotas is set at a more deterrent level to ensure it has a strong impact on the Member State concerned. The Commission could be given more capacity to deduct quotas in future years either by increasing the penalizing factor in the case of a heavy overexploitation or by making the deduction procedure easier or both. The Commission could also be allowed to deduct quotas systematically in the event a Member State fails to meet its control obligations. A multiplying factor should then apply in case of repeated failure.

Financial sanctions in case of bad management

Member States enjoy financial aid from the Commission in two ways. On the one hand they receive structural assistance for the fisheries sector. On the other hand the Community contributes to their control expenses under certain circumstances. In case of a poor management, these forms of financial assistance could be withheld partly or wholly depending on the gravity of the case. A similar concept exists in agriculture.

⁴⁵ Regulation (EC) No 2006/2004 of the European Parliament and of the Council of 27 October 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (the Regulation on consumer protection cooperation) (OJ L 364, 9.12.2004, p. 1–11)

4.4 OPTION 4: CENTRALISATION OF THE CFP CONTROL POLICY AT EU LEVEL, WITH INCREASED COMPETENCES FOR THE COMMISSION AND THE CFCA

As a lot of shortcomings for the current control policy are to be found in the poor implementation record of the Member States, it could be envisaged to modify the overall allocation of responsibilities between the Member States and the Commission (and the Agency), and give overall implementation powers to the Commission, through a dramatic increase of the powers of the Agency, compiling all current responsibilities for control and enforcement of the Member States . The CFP is one of the few exclusive competences of the EU, but one where the multiple national approaches have resulted in varying procedures and practices. This diversity gives operators the opportunity to criticise practices which they consider discriminatory and to question the relevance of the CFP, thereby making them less inclined to observe the rules.

It is therefore proposed that the Commission, and the Agency, pool the inspection means of the Member States, and develop universally accepted standards, with a long term perspective of setting up some kind of European Coastal Guards system. As such, this would ensure a uniform application of the CFP rules and a non discriminatory treatment to all fishermen across the EU. The Commission would be endorsed with police and enforcement powers, which would also facilitate the collect of information pertaining to possible infringements, and therefore reinforce the overall efficiency of the system. This would include a fundamental increase in terms of human resources at the level of the Commission and the Agency and a massive financial investment.

This option has to be discarded at an early stage however, for the following reasons:

- First, the reallocation of tasks between the Commission and the Member States would exceed what the Treaty provides for. The Commission would itself implement and enforce the rules it lays down. That would also imply that the Commission exercises jurisdiction over the Community fishing vessels. Until now, such power remains the competence of the Member States, and as long as they have not agreed to transfer this authority to the Commission, it will be impossible for the Commission to act.
- Second, politically, it is hardly realistic to conceive that Member States would accept to suddenly give up such powers to a supranational body.
- Third, such an option would involve a dramatic increase in costs for the Commission (staff and operational deployment), one that it is impossible to afford for the moment.
- Fourth, it would go against the principles of proportionality and subsidiarity, as this would be another example of a top down approach, while more bottom up perspectives are needed, and required by the Sector, the Member States, and acknowledged by the Commission itself.

From the analysis above, it appears that only Options 1, 2 and 3 can be considered as realistic options to address the shortcomings of the control policy. All options take it that the fundamental allocation between the tasks of the Commission and the Member States remain unaffected, i.e. that the Commission would initiate the appropriate legislative framework and monitor the proper application of Community law while it would be the responsibility of Member States to apply these rules to their nationals and their territory. The Community Fisheries Control Agency would continue to coordinate, with additional powers, activities of Member States in all options but to a much lower degree in options 1 and 2.

SECTION 5: ANALYSIS OF IMPACTS

The different actors which might be affected by the future policy of the Community are the following:

The Community fishing sector: It has to face dwindling fishing opportunities and ever stricter rules for a couple of years. For a number of stocks TACs are complemented by effort regimes supposed to reduce the fishing pressure on specific stocks that are subject to recovery plans. Combined with factors such as fuel prices this has made parts of the fishing industry more vulnerable. The Community fishing sector is composed of around 70,000 (small and medium sized enterprises (SMEs) with a total of up to 90,000 vessels and a workforce on board those vessels around 210,000 persons with an overall turnover estimated at amounting to around R,8 billion.

The Community processing industry: Due to a lack of sufficient supplies from its own fishing sector, the Community processing industry relies heavily on the supply of imported products for raw materials and semi-processed products⁴⁶. The 6,000 companies in the business employ some 150,000 workers with a turnover of ≤ 18 billion. However, this industry is partly characterised by a high degree of internationalisation as a number of important firms have invested in third countries and delocalized part of their production with a view to reducing labour costs and benefiting from preferential tariffs.

The authorities of Member States in charge of control of fishing activities: The scarcity of fishing opportunities and the increase in rules that have to be enforced has put an ever increasing strain on the control authorities. The measures proposed would have a direct bearing on these authorities as they will be in charge of implementing them with respect to the industry.

The fishing sector of third countries would be affected during its fishing activities in Community waters as it would normally be subject to the same control regime as Community fishing vessels in Community waters.

5.1 OPTION 1: NO POLICY CHANGE. CONTINUE CURRENT POLICY AND FOCUS ON IMPLEMENTATION AND ENFORCEMENT OF EXISTING FRAMEWORK

5.1.1 Option 1: General impact

The current situation is characterized by a constant degradation of fish stocks. Despite substantial efforts, there are no significant signs of stock recovery or reductions in overfishing since 2003. Fisheries management in the European Union is not working as it should and the objective of achieving long-term sustainability is not being reached. This situation is due partly to management decisions that do not follow scientific advice and pursue rather short term interests. To a large extent, however, also poor implementation of existing technical rules and established TACs/quotas play an important part.

Some progress has been observed though. In particular the introduction of recovery plans for specific stocks that are in particularly serious conditions with specific control targets and the start of the work of the Community Fisheries Control Agency setting up joint deployment plans that pool control means of relevant Member States and target in particular stocks under recovery plans have led to a certain improvement, even though sometimes favoured by natural conditions as in the case of North Sea cod.

⁴⁶ See also annex I, table 3

In the MRAG study⁴⁷ it was calculated that even under current conditions, with an enhanced control in the framework of recovery plans, the stock situation is likely to improve in most cases for North Sea hake, Baltic cod, North Sea plaice and sole, Northern and Southern hake, Western mackerel and Mediterranean hake. However results would be much more encouraging under option 3 (see table 4 and 5 in annex 1). Overall, according to this case study option 3 is likely to produce a $51\%^{48}$ increase in the biomass of the modelled stocks, and option 2 a $22\%^{49}$ increase. In view of this outcome the case study projects a certain increase in employment as illustrated in table 6 of annex 1.

Option 1 would only bring little or no gain after 2012 and maximal gain would be attained in option 3. However, when referring to this study it should be kept in mind that it is only a calculation model with all the uncertainties that goes with it. It refers to specific stocks under recovery plans and it is based on certain fixed assumptions that are supposed not to change in the time span under investigation. As the current conditions are likely to aggravate, as for instance fuel prices, fishermen are likely to take advantage of the weaknesses of the system to improve their economic performance. The improvements might therefore be less than projected under present conditions.

The continuation of the current policy can be looked at from two different perspectives:

5.1.1.1 Sub-option 1: No policy change, continuation of the current situation

The continuation of the current situation does not necessarily mean that the content and scope of the framework will remain static. This approach is better categorised as a 'business as usual' approach with additional layers of rules being added in an uncoordinated manner to the existing web of complexity in response to isolated political demands or emergency situations in the fishery.

With respect to the three main objectives defined in section 3 the consequences of this suboption would be as follows:

5.1.1.1.1 A new, common approach to control and inspection

The fundamental problem would persist, the complexities of the regulatory and administrative environment of the control regime in place would further the current deficiencies. Member States would continue to make only limited use of modern technologies leaving the perception that they are not cost efficient instruments. In particular cross-checks of data would continue to be used only in a handful of Member States, preventing the capacity of the EU to analyse fisheries that are particularly subject to irregularities.

5.1.1.1.2 A culture of compliance

The current situation that has led to a certain culture where non-compliance of CFP rules is widespread would continue. This situation is characterized by the fact that ICES bases its assessments to an important extent not only on reported catches but on unreported catches, too. Quota management on the basis of unreliable catch reporting systems would remain questionable and science would continue to be deprived of reliable data. The vicious circle of poor data not allowing reliable scientific advice leading to unsustainable management

⁴⁷ MRAG Ltd., Oceanic Développement, Poseidon Aquatic Resource Management Ltd, Lamans s.a., Institute of European studies and IFM (2008). 'Impact Assessment of a Proposal to Reform and Modernise the Control System applicable to the Common Fisheries Policy' (MRAG)

⁴⁸ MRAG p. 133

⁴⁹ MRAG p. 133

decisions resulting in an over-exploitation of the stocks would continue. Apart from possibly a couple of recovery stocks that are subject to specific conditions, the downward trend of quotas would generally continue. Even for recovery stocks an improvement would not be ensured as the volume of black landings is likely to be greater in stocks which are of high value and reduced TAC, a situation that specifically characterizes a recovery plan. As a consequence the supply for the processing industry would generally not improve and the consumer would lose even more confidence in fish as a sustainable food resource.

5.1.1.1.3 Effective application of CFP rules

Under this sub-option the effective application of CFP rules would not be ensured either. The capacities of the Commission and its inspectors would remain limited. This incapacity of the Commission would continue to be matched by a continuous lack of severity of national legal systems in case of infringements and an unsatisfactory follow-up for legal or procedural reasons and incomplete information about sanctions and previous non-compliance. The wide variations in the level and types of sanctions applicable by the Member States in respect of infringements tend to undermine particularly the notion of a level playing field even though different living standards in the Member States and the details of the individual case explain for a part the considerable differences in the sanctions. As far as overfishing by Member States is concerned the only risk for them would be a reduction of their relevant quotas the following year as infringement procedures before the Court of Justice for breach of Community law remain unlikely. The Commission would close fisheries against the will of the relevant Member States only in exceptional circumstances.

The weakness of the current legal framework would be exacerbated by the fact that with diminishing fishing possibilities the economic pressure for fishermen to still fish enough by whatever means to achieve at least the break even point would increase. As the CFP is relying more and more on effort regimes as a supplementary management tool to address the problem of overcapacity, the temptation for fishermen to manipulate illegally engine power with a view to deploy a higher effort in the limited time available will grow. This will risk to undermine all effort regimes and therefore threatens the very basis on which the CFP is likely to be based to a substantial extent in the future.

It has therefore to be concluded that under this option the control system would continue to suffer from the shortcomings identified in the report of the Court of Auditors. The control system would remain inefficient, expensive and complex.

5.1.1.2 Sub-option 2: Implementation and enforcement of existing framework through implementation regulations

A possible improvement of the current situation could be achieved by adopting all implementation regulations that were originally foreseen in the Control Regulation⁵⁰ and in the Basic Regulation⁵¹.

5.1.1.2.1 A new, common approach to control and inspection

However, even the adoption of all implementation regulations would not allow to develop a new approach to control and inspection. Additional provisions would rather aggravate the fragmentation of the current rules even further and lead to an even more complex legal

 $^{^{50}}$ Council Regulation (EEC) N° 2847/93

⁵¹ Chapter V of Council Regulation (EC) N° 2371/2002

framework. Besides that, the rules would not be up to date as they would concentrate too much on activities at sea and would not comprise the whole chain from net to plate. Although the Treaty obliges Member States to cooperate and support Commission inspectors in their work, it could happen that authorities try to hide some evidence or mislead Commission inspectors. In particular the often unsatisfactory follow-up to reports of Commission inspectors in which shortcomings have been illustrated demonstrates that the general obligation to cooperate is insufficient to ensure the full application of CFP rules.

5.1.1.2.2 A culture of compliance

Furthermore such an approach would not allow to develop a culture of compliance even though efficiency would be partly enhanced. For example article 19, paragraph 1 of Council Regulation (EEC) n° 2847/93 provides that Member States shall establish a validation system comprising in particular cross-checks and verification of data. Currently such cross-checks are not undertaken in some Member States while others undertake them but perceive them rather as a cumbersome administrative requirement. Even in those Member States where this technology is already used more widely, in a considerable number of cases large irregularities have been detected in terms of the inconsistencies between sales notes, landing declarations and log sheets that were not identified in the cross-checking process. Notwithstanding this, it could be expected that some improvements are achieved when more pressure is put on Member States to finally introduce what they signed up to many years ago.

5.1.1.2.3 Effective application of CFP rules

The legal instruments at the disposal of the Commission to oblige Member States to actually implement Community rules would remain weak and of a limited scope in practice as a procedure before the Court of Justice is lengthy and cumbersome and emergency and preventive measures would either be unsuitable or subject to political considerations. Furthermore in the field of the control of engine power the current control framework does not foresee any implementation regulation to better ensure compliance with engine power limitations. It would therefore be impossible to address the manipulation of engine power on the basis of the current legal framework even if all outstanding implementation regulations were to be adopted.

This sub-option is unlikely to improve the current situation substantially as compared to a situation where no action is undertaken at all.

As sub-options 1 and 2 lead to similar failures with regards to the objectives to be attained, the environmental and socio-economic impacts of these two sub-options will be considered together, as they would be more or less identical.

5.1.2 Option 1: Link to the problem of overcapacity

Option 1 would not systematically address the problem of overcapacity. The logical consequence will be that more and more fisheries will be subject to fishing effort regimes with a view to keep fishing pressure in acceptable limits. As the overcapacity in the Community fleet will persist it would result in poor economic performance for some important fishing fleets. This situation has recently aggravated with the sharp increase of fuel prices. Recent economic projections show that such fuel prices and the low productivity levels will, with a few exceptions, render EU fleets unprofitable. With increasing demands of fuels this trend is very unlikely to be reversed. With higher operating costs, break even revenues become higher, hence incentives to fish over the top would rise.

The changing framework conditions will affect some segments of the fleet more than others. The sharp increase of the fuel prices is already causing a certain restructuring of the beamtrawl fleets in some Member States as part of these fleets have became economically unviable even under current conditions of high fuel prices. However, that restructuring will be unable to bring the capacity in line with available fishing opportunities.

5.1.3 Option 1: Environmental impact

As the current situation favours over-exploitation of the resources option 1 is likely to have negative environmental impacts. Given that abundant fish stocks basically reflect a healthy environment, the continuation of the current situation would not allow the full replenishment of the stocks anytime soon. On the contrary, under current conditions fishing over the top of what has legally been decided or what the stocks are capable to bear are likely to remain a common feature of the Common Fisheries Policy. Such increased pressure to fish outside legal limits would take a particular heavy toll on the ecosystem as TACs are calculated in a way to allow to only extract quantities that do not threaten the state of the stock in question. Extra outtakes by illegal catches undermine that capacity and may even have consequences for other species that interlink with the stock that is targeted in IUU activities and affect the ecosystem even more.

Biological changes due to overfishing may be irreversible so that the fish stocks of the marine ecosystems could not recover and regain past productivity even if fishing is reduced to sustainable levels. As fisheries are usually targeting the biggest specimens, the average size of individuals would also decrease. When average individual size and stock size are reduced beyond safe biological limits, the rate of reproduction would slow down thereby decreasing the capacity for replenishment and natural recovery. Below a certain level this capacity is lost and the stock collapses commercially. There are even cases where a high fishing pressure induces more fundamental and long term changes such as genetic changes in fish populations or changes in marine food web.

Another effect of overfishing would be the loss of the scientific basis for management decisions. The quality of data, which is an important basis for scientific advice, tends to be poorest when quality is most needed – when stocks are overfished. The uncertainty of scientific assessments would therefore be higher the lower a stock is. Increasing uncertainty in the scientific advice deteriorates the basis for development of management proposals and the monitoring of their success.

The continuation of the current situation, even with all implementation regulations adopted and a stronger emphasis on their implementation, would not guarantee that situations as described in the preceding paragraph would not come about. The fishing sector and the political actors responsible for the CFP would thus be likely to continue to be blamed for its negative impact on the environment. This impact might even be exacerbated by the fact that due to the high fuel prices fishermen tend to fish closer to the coast thereby putting in some areas a high strain on the affected ecosystem.

5.1.4 Option 1: Economic impact

As fishing stocks are likely to be fished outside safe biological limits or more generally below their full biological potential they would only produce low profitability. Total catch volumes would be lower and the smaller individual fish would be less valuable than when a stock would be fished within sustainable limits. In addition to the loss of potential income, costs would increase as higher fishing effort would be necessary to catch volumes big enough to create revenue.

The lower capacity of the stock to compensate natural variations in recruitment would often increase the need for large annual variations in the TAC to keep the stock in stable conditions. This would reduce the economic stability of the sector and as a result there would be poor acceptance of the measures by the sector and Member States.

Some vessels are able to respond to reduced fishing possibilities and to move to other areas provided they have quotas in these areas. Other cannot, either because they do not have fishing possibilities in other areas or are simple too small to move on. Other fisheries are less concerned by the changing framework conditions, especially those using passive gear even though higher prices will be an issue for them as well. The situation may also vary subject to the species concerned as some species tend to recover faster than others.

As a result of illegal landings there would be a continued loss of earnings (reduced catches, low prices as the size of the fish is smaller, continually reducing profits) and an increased pressure to commit fisheries fraud. This increased economic pressure which can be considered a vicious circle by which operators are forced, in view of ever more shrinking fishing possibilities, to exploit fish stock more than they can sustain and thereby reducing the basis for fishing in future years, would force more people out of business at a high environmental cost. In view of the dwindled stocks even the remaining job opportunities would not be certain. This would not only affect the fishing industry but also people in the processing industry as the ever increasing pressure on the stocks will lead to ever more reduced stocks which affects the raw material basis for the processing industry. This could only partly be compensated by imports.

5.1.5 Option 1: Social impacts

As a consequence of falling wages and low returns on capitals more fishermen would leave the industry, thereby increasing unemployment in coastal areas that often have to face less working opportunities than other areas. Lower levels of fish landed would result in lower throughputs into fish factories and thereby affecting employment in some processing industries even though some processing companies receive already their raw materials from outside the EU.

As the profits of the fishing industry would shrink the ancillary support industries would be affected as well. In some cases this could lead to the collapse of the local ancillary support industry which in turn could force the fishermen of an affected place to move to another place. The collapse of part or the whole ancillary support industry could result in higher costs for obtaining business related services. There would be some knock-on-effects in the affected communities, too, in terms of falling tax revenues and increase of income support for laid-off people that do not find replacement work.

The results might be more mitigated as far as fisheries under recovery plans are concerned if there are some improvements of these recovery stocks under the assumptions of the case study referred to above. These improvements would be, however, far less substantial than under a new regime. As the economic parameters such as fuel prices, which are difficult to predict and therefore are not included in the case study, are likely to add further strain to the industry, the economic performance of these fisheries under current conditions might not be as good as projected in the case study. It is therefore to be expected that these fisheries continue under the present regime to be tempted to improve their economic performance by unreported catches. With the applicable rules becoming ever more complex, national fisheries administrations would have to face steadily increasing administrative costs including increased costs for understanding and interpreting the relevant rules as well as the necessary training to inspectors and managers. More complicated rules would increase the risk that prosecutions in Member States where fisheries sanctions are applied on the basis of criminal law are either not mounted at all or that they will be thrown out by the courts. The continuation of the current situation would create an equivalent increased burden on the CFCA.

Political confidence both of the fishing sector and of the public at large in the management regime would continuously suffer and might lead to put into doubt the credibility of the CFP as such. The idea of a level playing field would remain an abstract concept due to divergent national interpretation of national rules. Even though providing for clearer rules in some areas, they would not fully address the inadequate regulatory framework criticized by the Court of Auditors in its report nor would they provide the Commission with the legal tools to see to their practical implementation.

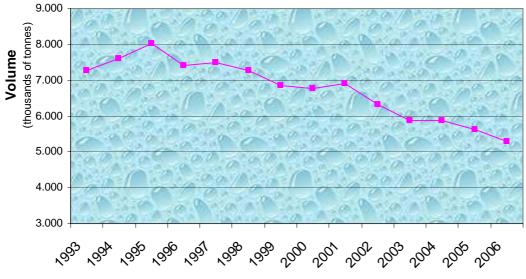
5.1.6 Option 1:Cost/benefit ratio

Total employment in 2005 in the fisheries sector of the EU-27 amounted to about 407,000 persons, which represents 0.2% of total EU employment. The catching sector offered employment to 187,000 people (46% of total fisheries sector employment), fish processing 138,000 (34%) and aquaculture 63,000 (16%). Employment in ancillary activities is estimated at 18,000 jobs (4%).

There are no resource rents estimates for the EU fisheries. However, it is a fact that the industry as a whole does not today generate taxable resource rents. The resource rent is dispatched through a fishing fleet far too large to the current resource base. So from a social welfare perspective the CFP has failed in two ways: the public pays for resource management and does not get any quantifiable benefit from the private use of a public resource.

The EU market for fishery products, i.e. captures plus aquaculture production, shows a structural imbalance between supply and demand. This feature has been widening in the last years against a background of a decline in catches of 22% between 1993 and 2005 and increase of world catches by 8%. At the same time the consumption rose by 9% reaching 24.6 kg/person in 2001. In 2005 the EU-27 production of fishery products (capture fisheries and aquaculture production) was about 4% of the world total, when it was 7% in 1996. Some fisheries have managed better than others, but the overall picture is falling revenues and net profit with excessive capital invested in many fleets. Margins remain low in many fisheries, partly because of continuing declining volumes and also due to the negative economic impact of increased fuel price.

Trend in the EU-25 catches (1993-2006):



Source: Eurostat

Trends can be evaluated only for EU-15 Member States, as historical data are not available for the newer MS. In the EU-15 the total employment decreased by 23% between 1997 and 2005, primarily due to a decrease in the catching sub-sector (-31%). Employment in processing is more or less stable.⁵²

Fisheries sub-sector	1996-8	2005	change
Fishing	241.3	167.5	-31%
Processing	101.8	100.7	-1%
aquaculture	61.4	45.3	-26%
Total	404.5	313.5	-22%

Trends in employment in the EU-15 (1000 persons)

Employment in the total fisheries sector of the EU-15 decreased from 404,000 persons in 1997 to 313,000 persons in 2005, i.e. by 23%, in the catching sector from about 240,000 in 1997 to 167,000 in 2005.

With the current situation this downward trend is likely to continue with an average decline of catches of 2% per year. Even though the processing industry is generally not affected to the same extent, it is to be expected that imports will not be able to make up for the shortfalls of the EU catching sector forever.

There would be no additional costs for the fishing sector. In particular fishermen who earn a substantial part of their income from illegal activities would not lose this source of income. However, the ineffective use of control means would continue. In particular the administrative burden for control authorities is likely to increase in the long run with ever new layer of rules being added. This situation would not allow to decrease significantly control costs while still maintaining the same quality of control. However, the MRAG study, under the assumption that the recovery plans to which most of the seven stocks on which the study is based will have positive effects, calculated a possible reduction of land control costs in connection with

⁵² Source Regional Dependency on Fisheries – European Parliament Project nº IP/B/PECH/ST/IC/2006-198

these seven stocks from 125 million \in to 106.5 million \in from the year 2010 to 2019 and an average reduction of marine inspection costs from 69.5 million \in to 44.9 million \in from 2008 to 2017. In this regard, though, there is a likelihood that other stocks due to current poor enforcement will need extra control efforts in the future and thwart any such cost savings.

5.2 OPTION 2: RECAST OF THE CONTROL REGULATION, COMBINED WITH A CODE OF CONDUCT

5.2.1 Option 2: General impact

The development of an approach that considers the implementation of the reform elements through a consolidated legal framework in combination with a steering instrument, such as a 'Code of Conduct' or 'Best Practice Guidance' could contribute to a certain extent to the improvement of the current control system. As this approach would build on initiatives developed by Member States over the years, coordination of inspection and surveillance activities by national authorities at Community level would be improved, based on the adoption of inspection and surveillance strategies by the Commission, and the pooling of national means of inspections for joint deployment. It would result in better value for money, as national means of inspection would be used as rationally and as effectively as possible. Some fisheries might recover as a result of unilateral action of a segment of the fleet or of groups of fleet segments, but overall, this approach does not change the content of the current provisions or add any new legal instruments and relies too heavily on a voluntary implementation by the Member States. Even in the context of a recast of the existing provisions, Member States would still need a new legal framework that provides for mandatory and new tools for en effective application of the CFP rules. In that respect, a combination of consolidation and steering measures would be insufficient.

5.2.1.1 A new, common approach to control and inspection

In the absence of new requirements pertaining to harmonised inspection procedures, Member States would continue to apply their own inspection methodology. Community guidance on the use of modern technologies, including recommendations to ensure the use of tamper proof satellite tracking devices and on extending the coverage of regulation pertaining to the provision of VMS and logbook data electronically and in real time has the potential to improve the control of activities. However, this potential is not likely to be used fully in all Member States. Regarding the voluntary implementation of cross-checking of data, the nature of the impact is likely to be varied across the community.

5.2.1.2 A culture of compliance

Simplification

The recast of the control regulation would consolidate and rationalise the set of legal rules and therefore would resolve the problem of the multiplicity of different rules or the situations where there are apparent overlaps or contradictions and provide at least partial solutions to some of the current problems relating to the interpretation of the rules.

Sanctions

Since there would be no change of legal provisions in this respect, it is not clear whether the aspect of non-regulatory steering action would (a) result in harmonisation or increased sanctions, (b) significantly accelerate or otherwise enhance the existing process of change in legal procedures that is already underway in the Member States or (c) produce significant

improvements in compliance, particularly without parallel increases in surveillance and enforcement.

5.2.1.3 Effective application of CFP rules

In the absence of new instruments, the existing shortcomings are likely to continue, as the Commission would not be in a position to intervene proportionately to the level of non compliance by the Member States. Even in the context of a consolidation of the existing texts, the benefits that would result from the rationalisation exercise would not be enough to bring the expected results without adequate tools to enforce the CFP rules.

5.2.2 Option 2: Link to the problem of overcapacity

This option does not address the problem of overcapacity in a systematic way. Initiatives for adjustments of the fleet would be left to the discretion of Member States. As the level of control is likely to improve in those Member States that increase voluntarily their control capacity the fleets of these Member States or fleets operating in their waters are more likely to fish in line with legal fishing opportunities. There is a certain likelihood that the economic pressure thus caused will lead to a limited restructuring of the fleets concerned. However, such a restructuring would be insufficient to solve the problem of overcapacity as such.

5.2.3 Option 2: Environmental impact

As the full compliance benefit will not be realised, neither would the environmental benefits. Those benefits would be regionally varied and unlikely to be realised in a short term time frame. The overall environmental impact associated with pursuing the approach of a consolidated legal framework in combination with non-binding steering instruments are therefore likely to tend towards the existing situation on the whole.

5.2.4 Option 2: Economic impact

As a result of partial or slow uptake adoption of compliance measures, all fisheries except mackerel show negative net benefits in the early years of the projection, and in some cases these negative net benefits persist throughout the 10 year period. North sea cod, Southern hake, mackerel and Mediterranean hake would still manage to produce positive net benefits, because the small increase in compliance would be enough to trigger some recovery. However, the costs would outweight the benefits for North Sea plaice and sole, Baltic cod and Northern hake.

The costs of deployment would fall as compliance increases. The cost of accumulated enforcement expenditure is of 1,889 million in the 10 year period⁵³. Proportions at the start of the case studies represent an average 9% of gross fleet revenue, and 4% at the end of the programme. The current level of expenditure against sector revenue is 9%. Therefore, within a ten year time horizon, the model would project net benefits in terms of enforcement cost savings, i.e. to below current levels of expenditure. Both land and marine inspection costs would fall. In the case of land based inspection accounts, the implementation costs for the non regulatory environment would fall from a high of 073 m, to 040 m. The corresponding

⁵³ Idem

changes in marine related costs would be \in 58 m to \in 45 m. Most specifically, more modest levels of enforcement expenditure could be afforded in the case of mackerel.

5.2.5 Option 2: Social impact

The case study shows that some 2300 net employment gains are expected from relative improved levels of compliance. However, less efficient fishers would be removed from the sector, as they are unable to compete as a result of only partial compliance in some fisheries. Reduction of support to shore side businesses may take place with fewer boats (due to the removal of less efficient fishers) and knock on effects might be seen in the community if support industries do not find replacement for fishing-related work (e.g., engineering firms and ship builders). Some fishing communities, for example, are already at the lowest number of boats possible for keeping support businesses operating. The case study on the impacts of a reform of the CFP control regime projects for this option a crew gain between \in -1,200 and \notin 900 income per annum 10 year period⁵⁴.

Option 2 would provide for a simplified legal framework and allow for partial improvements of the control system in some Member States. However, shortcomings in the current legal provisions could not be amended and the impact of measures would mainly rely on voluntary improvements by the Member States.

5.2.6 Option 2: Cost/benefit ratio

As this option depends largely on voluntary actions of Member States the cost/benefit ratio will be different for the Member States and their fishing fleets concerned and are therefore difficult to quantify for the EU as such. However, based on seven stocks the MRAG study arrives overall for this option at a reduction of enforcement costs at land from 146.1 million \in to 63.7 million \notin from the year 2010 to 1019 and marine enforcement costs from 88.2 million \notin to 52 million \notin from the year 2008 to 2017. However, in the initial years there would be additional costs of the enforcement depending on the various species. For instance for the North Sea cod, additional costs of 8 million could be expected. Though for the whole period 2010-2019 a the net gain in enforcement, in most investigated fisheries in the study there would be loss in the initial year. In the case of North Sea cod, for instance, a loss of 97 million \notin in the first year and 49 million \notin in the second year is expected. However, according to the MRAG study, this would be compensated as from the third year with net benefits of 174 million \notin over the whole period 2010 – 2019;

5.3 **OPTION 3: REGULATORY INSTRUMENT BINDING AT EU LEVEL**

5.3.1 Option 3: General Impact

This option would allow the Community to have the strong and efficient control regime based on a simplified legislative framework that is necessary.

5.3.1.1 A new, common approach to control and inspection

A comprehensive regulatory instrument that is binding at EU level would create a new and common approach to control and inspection. The establishment of common control and

⁵⁴ MRAG p. 136

inspection standards would provide for a common basis and thereby contribute to the achievement of a level playing field. This would be enhanced by strengthening the cooperation between Member States, the Commission and the CFCA as this would allow to better target specific fisheries on the basis of an overall appropriate risk analysis. By linking financial aid to making available control means for participating in specific control tasks of the CFCA the readiness of Member States to cooperate with the CFCA and their fellow Member States would be improved.

The quality of inspection would be improved by targeting control resources at high risk activities. Risk Analysis would increase the probability of detecting regular groups of offenders and the cost effectiveness of control. A marginal increase of land based costs would result in a greater number of infringements detected (or a corresponding increase in compliance), than the same change in expenditure in marine surveillance. For that reason a shift from sea based control to a more land based control is likely to lead to a higher number of detections and hence to a higher level of compliance. At the same time due emphasis would be put on the fact that certain infringements as the use of certain devices during fishing operations can only be successfully controlled at sea. Marine platforms act as an effective deterrent for some illegal fishing practices. Their effectiveness would be significantly improved through the support of a Fisheries Monitoring Centre (FMC), risk analyses, linking VMS to aerial surveillance, and intelligence received.

The forthcoming introduction of electronic logbooks would be of particular importance for cross-checks to be fully usable as they would allow the registration of logbook data in nearly real time and further contribute to the reduction of administrative costs. Electronic logbooks would also facilitate the management of fishing effort, a management tool that is likely to become ever more important in the future.

5.3.1.2 A culture of compliance

A comprehensive regulatory instrument would set a framework that would allow the development of a culture of compliance.

Legal simplification would offer the opportunity to strengthen the current set of rules. The regulation to be adopted under option 3 would reduce complexity, inter alia, by setting up general, clear and simplified control rules. This would reduce the costs of implementation as the more complex a regulatory framework is the more costly it will be to implement. A simple set of rule would favour an equal interpretation and application of the rules in a multilingual setting as the EU, making life easier both for the industry and for the authorities. It would allow a better transparency and improve the confidence in a level playing field among Community fishermen.

The bulk of technical rules would be dealt with in Commission regulations allowing them to be easily amendable to respond to new conditions. It has been calculated that the vertical codification of the amending legislative acts alone could reduce the amount of legislative instruments in force by 36 %⁵⁵. This objective would be particularly important as the identified deficiencies in the current implementation and enforcement of the CFP are strongly related to the current complexities of the regulatory and administrative environment.

A decrease in the number of failing national infringement procedures and prosecutions could be expected because of increased clarity, consistency and awareness of the regulations and rules. The substantial changes would increase the possibilities of access to evidence of

⁵⁵ MRAG p. 195

infringements. In turn an increased deterrence could be expected. Such deterrents would be created by increasing the risks of being inspected and reducing the rewards for illegal activities (higher fines or loss of licence for repeated offences).

Harmonised sanctions would help to achieve a level playing field in fisheries by aiming at establishing penalties that are proportionate to the gain from illegal activities and comparable in all Member States. As the public consultation has shown, harmonised sanctions do enjoy large support by the industry as a means of ensuring fair competition and equal treatment of fishermen throughout the EU. Improving the mechanism for imposing penalties by introducing administrative sanctions would enhance the feeling of equal treatments in all Member States and enhance the deterring effect of the control regime. Possible reservations of the Member States in this point could be based on concerns in relation to national sovereignty. However, the outlined positive impacts together with the respective demand of stakeholders should help to overcome such reservations.

5.3.1.3 Effective application of CFP rules

A mandatory regulatory framework would enable the Commission to ensure the effective application of CFP rules. First, the capacity of the Commission to intervene proportionately to the level of non compliance by the Member State would be amplified. A strengthening of the capacities of Commission inspectors would ensure that it would become more difficult to hide shortcomings in the implementation of CFP rules. Second, a strengthened capacity of the Commission would in particular allow to ensure a better management of fishing possibilities and to stop fisheries easier in real time on the Commission's own initiative to avoid overfishing. By ensuring respect of catch limits the reputation of the Commission as guardian of the treaty, and hence of the CFP, would benefit. However, since it is likely that Member States would have strong reservations on such increased competences of the Commission, it would have to ensure that such measures are well founded and applied proportionately and equally. Otherwise it would seriously damage its authority and the confidence of Member States and stakeholders, what would be contra-productive and would put the new control system into question resulting in an even lower level of compliance with the CFP rules.

5.3.2 Option 3: Link to the problem of overcapacity

A comprehensive reform is also likely to entail a substantial restructuring of the current Community fleet and thereby to contribute to reduce the current overcapacity. As the future control system will ensure that only legal fish will be caught, the lack of quotas will entail a concentration of the fleet by market forces until it reaches a level that allows all remaining vessels to make a living on the bases of legal quotas. Even though some fleets will be more affected than others, this holds true for all parts of the Community fleet where the restructuring will result in a fleet that reflects available fishing possibilities and therefore allow Community fishermen to make a living on the basis of legal catches. This restructuring would reduce some job opportunities in the catching industry, though. However, by this the vicious circle of fishing vessels having to fish over the top for their economic survival by fishing above what the stocks can sustain with an increased economic pressure to fish even more over the top the following years to make ends meet as the legal fishing possibilities shrink, would be broken. By maintaining such a vicious circle, once the fish stocks having been substantially depleted, job opportunities in the catching industry would have been seriously affected as well but with devastating ecological consequences for the environment. After restructuring of the fishing fleet the sufficient availability of legal quotas will allow to reduce control and surveillance costs as the likelihood of infringements will be lower when sufficient economic income can be generated on the basis of legal catches.

5.3.3 Option 3: Environmental impact

The environmental benefits of having fully recovered stocks are clear. Fishing at a lower rate within the limits of established TACs would deliver significant environmental benefits in terms of stress on fish stocks. According to the case study the regulatory scenario will allow an increase in the biomass of the nine modelled stocks of up to 51 %⁵⁶. If these results were to be extended to all stocks in the EU, the effect of this regulation would be to restore all EU stocks to Bpa level and above within 15 years. Such an extrapolation might be optimistic, though, as it does not take into account natural influences and predator/prey relationships. The growth in size of fish populations as they recover would be accompanied by increases in the age distribution of fish both in the population and in the catch, associated with lower fishing pressure. Such benefits will not be limited to the target species but would have consequences for the ecosystem as a whole. As the fishing effort to fish the same amount of fish would be reduced, by-catches, both of non-target species and of juveniles of target species, would be much less. By this the impact of fisheries on the ecosystem would be reduced.

As the Commission would have the ability to react faster and better to shortcomings, in particular with respect to over-utilisation of fishing quotas, the environment would be less likely to be affected by irresponsible fishing behaviour. As this ability of reaction would be supplemented by more severe quota deductions in case of overfishing, it could be anticipated that over-exploitation of available fishing possibilities would become an exception as Member States and the sector will have a keener interest in respecting quota limits.

5.3.4 Option 3: Economic impact

The case study referred above calculated a sum of total net profits in the regulatory option of €8.9 billion across all the stocks for the time span 2010 - 2019⁵⁷. The case study projects for North Sea cod a net benefit of a comprehensive new control regime for the period from 2010 – 2019 of more than €2,8bn. These include net benefits well above €400 million as from 2013 after initial losses in the magnitude of €257 million in 2010 and €104,000 in 2011⁵⁸. For Baltic cod this would amount to a total benefit of €2,8bn with steadily increasing gains ranging from €125 million in 2011 to €417 million in 2019 with an initial loss of €30 million in 2010⁵⁹. The initial loss is most likely to be suffered by fishermen who have gained additional income from the catch of illegal fish. By definition, such activities are not worthy of protection.

The overall benefits would be likely to have a strong carry through to increased employment, particularly in the processing and ancillary sub-sectors. The case study calculated that the economic benefits would be 50% to the catching sector, 33% to the proceeding sector and 16% to the ancillary support sectors⁶⁰.

Generally the case study comes to the conclusion that the net economic benefits are highest if the current situation is addressed under option 3 provided that it will be properly implemented

⁵⁸ MRAG p. 165

⁵⁶ MRAG p. 133

⁵⁷ MRAG p. 163

⁵⁹ MRAG p. 167

⁶⁰ MRAG p. 163

both at the Community level as well as on a national level. The costs of deployment would fall as compliance increases. For that reason it would be essential that the Commission's role as a guardian of Community law is enhanced and the necessary authority bestowed on it to effectively ensure that Member States respect their obligations under Community law. Even though this is only a case study that had to work on the basis of certain assumptions which cannot take into account all possible natural influences, its results are clearly indicative of the potential that could be gained from a comprehensive reform.

This cost effectiveness would be further enhanced by using modern technologies to the extent possible. In particular systematic cross-checks of all electronically registered data which are technically easy to set up, would be an extremely useful tool for the identification of control needs. They would i.a. allow to summarise the number of vessels licensed to fish for a given fishery, link fishing areas declared in the logbook to fishing activities identified with VMS data or compare logbook data with landing data. They also would ensure that data would become more reliable and more rapidly available. More reliable data in turn would allow to break the vicious circle of poor data not allowing reliable scientific advice which then leads to unsustainable management decisions resulting in an over-exploitation of the stocks.

In the introductory phase of a new control regime both the industry and the control authorities would have to adapt to the new situation. This holds in particular true if new technologies were to be extended to fishing vessels currently not covered by their application. In this context it should be recalled that the introduction of electronic logbooks is already foreseen for all fishing vessels above 24 m on 1 January 2010 and for all vessels above 15 m on 1 July 2011. However, the utilisation of new technologies will substantially reduce running costs of control authorities by allowing them to concentrate scarce control resources on fishing activities that have been identified by way of risk analysis based on comprehensive automated cross-checks as being particularly prone to illegal activities. Some of the new technologies will also be useful to the industry, for instance the electronic logbook as it has the potential to be used in contacts with buyers of the catches.

Concerning the EU budget, the reform will have no additional impact, since there is no financial incidence on the Financial Perspectives. Indeed, any expenditure which could result from the reform is already covered by Article 8 of the Council Regulation n° 861/2006 of 22 May 2006, which establishes a financial framework for the period 2007 to 2013. In the area of control and enforcement of CFP rules, the following expenditure shall be eligible for Community financial measures:

- new technologies and IT networks (Art 8 a i. of Council Regulation n° 861/2006),
- automatic localisation devices (Art 8 a i. of Council Regulation n° 861/2006),
- electronic recording and reporting systems (Art 8 a i. of Council Regulation n° 861/2006),
- electronic recording and recording devices (Art 8 a i. of Council Regulation n° 861/2006),
- patrol vessels and aircraft (Art 8 a i. of Council Regulation n° 861/2006),
- training (Art 8 a ii. of Council Regulation n° 861/2006),
- pilot projects (Art 8 a iii. of Council Regulation n° 861/2006),
- assessment of expenditure (Art 8 a iv. of Council Regulation n° 861/2006),
- seminars and media tools (Art 8 a v. of Council Regulation n° 861/2006)

(all those actions are presently covered under Budget line 11.0801);

- all operational expenditure related to inspection by Commission inspection (Art. 8c of Council Regulation n° 861/2006) - these expenditures are currently financed under Budget line 11.0802,

- contribution to the budget of the CFCA (Art. d of Council Regulation n° 861/2006) and Council Regulation n° 768/2005 dated 26 April 2005: the CFCA expenditure are financed under Budget lines 11.080501 (administrative expenditure of the CFCA) and 11.080502 (operational expenditure of the CFCA).

In addition it is important to point out that the improvement of the capacities of the Commission will not lead to an increased need of human resources but will rather be realised by the reallocation of tasks, the focus on macro management decisions and the change in the profile of Commission inspectors.

As the experience has shown, a better control that leads to the eradication or at least substantial reduction of illegal catches entails an increase of the price for legal fish. This has been clearly demonstrated in the blue fin tuna campaign where an increased control and monitoring based on a risk assessment entailed a remarkable increase of the price for tuna. This contributes positively to the income of legal fishermen. Even though such higher income on less catches means at the time higher prices for consumers, the interests of consumers are protected by the fact that they can be assured of a sustainable supply of fisheries products.

5.3.5 Option 3: Social impact

As the stock situation improves the confidence of the industry and the public in the CFP would increase. The CFP would add to the more general political endeavours to achieve a better protection of the environment by favouring an economy that is more respectful of nature. A better confidence of the public in the CFP would in turn affect consumer behaviour and confidence as he would be convinced of buying a sustainable product, and possibly allow to yield a higher price for the product. Apart from greater quantities to be fished, the individual fish would be bigger and yield a better price for the same quantities. There would be higher returns to fishing effort and a greater cost efficiency for the fishing sector.

A stricter definition of a designated ports scheme would entail that some fishing vessels have to travel larger distances to land their catch at authorized locations. However, the negative effect of this might be limited by setting a threshold either of length of vessels or of transport capacity below which vessels would be exempted.

The risk of losing financial aid from the Community would be likely to encourage both the private sector and national authorities to abide strictly by the rules.

5.3.6 Option 3: Cost/benefit ratio

As a new control regulation would make widespread use of modern technologies allowing the identification of risky activities and the concentration of control means on such risky activities, substantial benefits in cost efficiency can be expected. Overall the MRAG study concluded that for the seven stocks investigated there would be a total gain in control costs for the period 2010 to 2019 in the magnitude of 389 million €compared to option 1. In the case of North Sea cod for instance this study expects substantial savings in later years coming to a net saving until 2019 of up to 42.9 million €for this fishery alone.

As to the fishing sector, some part of the fleets that have not already done so will have to install new monitoring devices and be submitted to correspondent transmission costs. For the

monitoring devices there will be Community funds available as this has been in the past. There will also be a sharp decrease in illegal catches which in some fisheries are, according to estimations be ICES, of substantial dimensions. However, being illegal, the magnitude of lost income as a consequence of eradicating IUU catches is by definition difficult to estimate. In any event the loss of illegal profits is not worthy of protection.

The management measures the implementation of which the control system is supposed to ensure, will take some time to bear their fruits. In a situation of a widespread stock depletion as a consequence of the current control system this will naturally take a couple of years. For the seven stocks investigated the MRAG study calculated a combined net additional benefit of 6.4 billion \notin over the period 2010 to 2019. For North Sea cod the MRAG study arrives at a net additional benefit of 807 million \notin for the whole period 2010 – 2019. Not included in this calculation are the benefits for other stocks or for the environment as such which are currently not quantifiable.

5.3.7 Option 3: Administrative costs

This section examines the changes that could result from the implementation of option 3, in terms of reduction of administrative burdens. The reduction of unnecessary administrative burdens and the high number of reporting obligations will be addressed in the context of the reform and the simplification exercise it intends to achieve. The proposals for reduction of administrative burden were already discussed on the occasion of a meeting of the High Level Group (HLG) on Administrative Burdens, on 18 September. The HLG gave full support to the proposals of DG MARE.

5.3.7.1 Drivers for the reduction of administrative burden at the level of operators

Reduction of the costs related to the Information Obligations

The proposed reform will concur to a reduction of the number of Information Obligations (IOs) in place under the current control framework, through the impact of the intensive use of modern technologies. According to the study commissioned by DG ENTR⁶¹ on the costs of the current control regime the final figures which are not yet approved by the Commission, though, concerning 6 measurement countries, and on the basis of the extrapolation carried out by DG MARE, the total administrative cost for the fishermen is 78 million EUR for the 22 EU Member States (except landlocked countries). As a result of the reform, the extrapolated total administrative costs for the fishermen would fall to 38 million EUR (see annex III).

The reasons for the reduction of these administrative burdens are:

-Extension of the use of the Electronic Reporting System (ERS) to vessels above 10 metres As the obligation to register the catch of a vessel regularly in the logbook and to submit a landing declaration was identified to be the most onerous IO, the introduction of an electronic logbook (ERS) would be likely to lead to a reduction of administration burdens in the magnitude of 70% as many of the requested data would be already available on the screen (identification data, position data) or could be clicked on a screen. Transmission costs in this regard would be neglectable. Transmission of an ERS message (~2KB size) would cost 0.20

⁶¹ DRAFT FINAL REPORT, Measurement data and analysis, as specified in the specific contract on Modules 3&4 for the Priority Area Fisheries, of the Framework contract n° ENTR/06/061, EU PROJECT ON BASELINE MEASUREMENT AND REDUCTION OF ADMINISTRATIVE COSTS

€ For a vessel having 200 fishing days annually and involved in different fishing types (gears, areas) annual costs would amount to around 100 EUR. These transmissions costs are calculated for satellite data transmitted at sea. Messages on land/in port (landing declarations, sales notes, take-over declarations) and logbook messages (before entering port) could be sent from simple laptop/pocket PC free of charge if wireless internet connection is available in port or via mobile phone. As technologies are developing fast those costs would very likely to fall in the future.

-The impact of the intensive use of modern technologies on the costs of sales notes as a consequence of the reform can not be evaluated at this time as in the future their submission would be an obligation of the registered buyer. Even though, the fact that these notes would be submitted electronically means a substantial simplification in terms of time that would be needed to fill them in as these notes are part of the normal business of registered buyers. Comparable simplifications would to be expected from other IOs that are currently based on a paper format, like for instance transport documents.

Overall, the reform of the CFP control policy, through the modernisation of the control techniques, the introduction of new technologies and the more extensive use of modern technologies that are already applied, would allow for the reduction of paper work.

The assessment of administrative costs also needs to refer to current initiatives taken in DG MARE, which intend to reduce the number of the existing information obligations (IOs) by the Member States. The project OBONT will be instrumental in the achievement of the Action Plan for simplifying and improving the regulatory environment of the CFP (COM(2005)647), as it will allow to reduce the number of the existing IOs that have become obsolete or redundant. Since IOs generally imply a cost for the economic operator who has to provide the information to his authority, as a result DG MARE will concur to the Commission's initiative aimed at cutting administrative burdens imposed on operators.

5.3.7.2 Drivers for the reduction of administrative burden at the level of the Member States

Option 3 develops tools and approaches which will entail an overall reduction of the administrative burden and reporting obligations:

-Simplification of the legislative framework will be an inherent part of the CFP control reform. As a result of the new legislative framework, the development of control policies that would continue to rely on proper enforcement of Community rules by Member States would lead to a less expensive, but more organised and effective inspection framework. Both at the level of Member State administrations and assimilated EU bodies, the reform of the regulatory framework would increase the cost effectiveness as the means and resources allocated to control purposes would be partly pooled.

-The national administrations would also have to spend less time and means on gathering data as they would be transmitted and fed into the system electronically. This would allow national administrations to substantially economize on staff that is currently needed to enter paper based information into the system. In one Member State 79 people are currently used exclusively to enter such data into the system. These could be put to more effective use in the future.

-At the same time the new approach would allow comprehensive and systematic cross-checks of all sorts of data and to concentrate on the areas where there is the greatest likelihood of irregularities. As all data would be automated it would also become easier for national administrations to provide the Commission with data. This effect would still be reinforced by

the fact that the reform would focus on those control policies which are truly effective and absolutely necessary (and avoid redundant reporting obligations.

5.3.7.3 Drivers for the reduction of administrative burden at the level of the Commission

It is one of the objectives of the reform to promote a cost effective system, which focuses on the respective obligations of the Commission and the Member States. By developing a macro management approach, the Commission will re-orientate its tasks towards the control of the control systems established by the Member States, based on risk analysis and a more rational use of resources. The extension of the power of Commission's inspectors requires that audits of parties having received delegation of power for managing fisheries are carried out. Overall, the use of modern technologies and electronic database means that the Commission will not spend its resources focusing on the report obligations by the Member States.

5.3.7.4 Possible initial investment costs

For the operators

Initial investments relate to certain adaptions that operators of fishing vessels would have to undertake like installation of VMS and ERS devices for which financial assistance from the EU of up to 50% would be available. The technological development allows to combine these two applications in one device. The installation of a new VMS/ERS device is likely to cost $2500 \notin per$ unit including the software (around $1300 \notin if$ the available financial assistance is taken into account) with approximate running costs of $700 \notin a$ year. However, as vessels above 15 metres are already equipped with VMS, the installation costs of the supplementary ERS function are likely to be substantially less. At the same time fishermen using ERS would not need to fill in paper logbooks anymore with the related savings in terms time needed for providing the same information in an electronic format (as identified in part 5.3.7.1).

The establishment of a traceability system will also benefit from the progressive move from paper based tools to electronic tools (logbook, landing declaration, sales note), and the requirement for operators and auction centers to submit their data electronically. The cost per bar code is estimated at 0.005 EUR. Overall those costs would in the long run be offset by the benefits of having an integrated control approach, where most of the IOs are dealt with electronically, and where the system provides for the automated validation and collection of data.

For the Member States

Member States would need to ensure that they have enough control resources to meet the requirements of the new control regime to reflect increases in inspections and the number of qualified inspectors supported by adding control activities as cross-checking, transparency checks and risk analysis, in particular if specific control benchmarks are to be met in the framework of recovery plans and if these benchmarks were to be increased to address specific situations.

At the end of the value chain, it is unlikely to have a measurable effect on consumers through change in the cost of seafood products as a result of the implementation of an automated data checking procedure. No additional administrative costs are expected as current procedures for furnishing data hold, so no additional costs in this respect will be passed to the consumer. Changes in supply will have an effect on the price of seafood, but it is noted in this regard that a considerable range of other factors will also determine the price a consumer pays for their seafood.

In conclusion, there are substantial benefits to be gained for all stakeholders at all levels if there is a comprehensive system of control and inspection that makes sure that the rules of the Common Fisheries Policy are adhered to in their entirety.

SECTION 6: HOW DO THE OPTIONS COMPARE?

The first table below presents the efficiency of the various options with respect to their impact on the improvement of the fisheries control system. Their relevance is assessed against the three specific objectives of the reform as identified in section 3. The second table compares the advantages and drawbacks of each option, taking into account the performance of each of them compared to the overall objective of the fisheries control reform.

It can be concluded that **option 1** would not answer the concerns of the Court of Auditors. All shortcomings in the current system would remain and harmonised and global approaches would not be developed. None of the objectives of the reform would be met.

Option 2 would provide for a simplified legal framework and allow for partial improvements of the control system in some Member States. However, since shortcomings in the current legal provisions could not be amended and since the impact of measures would mainly rely on voluntary improvements by the Member States, this option would not lead to a global approach on control, and it would not create a level playing field for all stakeholders. The concerns of the Court of Auditors would not be addressed in the absence of any new requirement.

Option 3 would establish a global and integrated control system and a common level playing field, as it would effectively tackle the issues at stake, and in doing so, provide an answer to the Court of Auditors questions. Even though this option in the beginning might require some structural adjustments, these would later lead to more efficient and effective structures and increase the level of compliance of stakeholders.

The comparison between the options demonstrates that **option 3** supports in the most efficient way the overall objective of an improvement of the fisheries control system. The other two options would not be appropriate to meet the scale of the problem and the demand for an integrated and far-reaching reform. For all the above mentioned reasons, the Commission has decided to propose option 3

Relevance of the policy options against the objectives of the reform	Option 1 Continue current policy and focus on implementation and enforcement of existing framework	Option 2 Recast of the legal control framework in combination with a steering instrument, in the form of a Code of conduct	Option 3 Regulatory instrument, in the form of a new binding regulation
Objective 1 A new, common approach to control and inspection	Negative, as control standards are not applied equally across all Member States. The complexities of the regulatory and administrative environment of the control regime in place would continue	Overall negative, as only a few Member States are likely to be responsive to voluntary measures, improvements will be fragmented thus reinforcing the situation that there are different levels of enforcement; this would be detrimental to the objective of a level playing field	Positive impact as common inspection and control rules and modern technologies will be applied in the same manner throughout the EU ensuring the same high standards in all Member States
Objective 2 A culture of compliance	Negative, the current culture of non- compliance persists, the wide variations in the level and types of sanctions applicable by the Member States in respect of infringements tend to undermine particularly the notion of a level playing field Low compliance reflected in the fact the ICES bases its assessments often to an important extent not only on reported catches but also on unreported catches	A consolidated and simplified legal framework would allow for partial improvements of the control system in some Member States only Confidence of fishermen that their peers will abide by the rules is undermined as only unilateral/group action would be taken In the absence of new legal requirements, impossibility to develop a level playing field as regards sanctions, nor to provide for positive incentives	Positive impact with a combination of a simplified and transparent framework, a new regime on harmonized levels of sanctions across the Community which would address one of the most tangible shortcomings of the current situation, and greater interaction with the sector which reinforces the legitimacy of the rules (including harmonisation of the conversion factors) Fishermen and other economic players realise that rules are applied everywhere New legal framework for increased cooperation between the Member States, the Commission and the CFCA
Objective 3 Effective application of CFP rules	Negative impact, incapacity of the Commission would continue to be matched by a continuous lack of severity of national legal systems	Consolidation with code of conduct do not introduce the necessary legal requirements that are needed for an effective control policy. No new tools for the Commission to ensure effective application of the rules.	Positive, as the Commission is equipped with adequate tools, which as a result allow for proper enforcement of CFP control policy
Overall impact on the CFP control policy	Negative, as the option fails to adequately address the main challenges, continuation of the current situation, threat for the future of the resource	Limited, as this approach would not address the current legal shortcomings and relies too heavily on a voluntary implementation by the Member States, no EU level playing field Consolidation without new instruments: continuation of the existing failures	Positive, as this option establishes a comprehensive approach to control (from the net to the plate) addressing all the aspects of the current problems, and leading to a more cost efficiency approach. Increased culture of compliance as a result of an effective application of the CFP rules.

Advantages and drawbacks of each policy option	Advantages	Drawbacks
Option 1 Continue current policy and focus on implementation and enforcement of existing framework	-Demonstrate commitment of the EU to tackle the shortcomings of the control policy under the current framework -Does not require the adoption of additional regulatory measures which would come in addition to the current framework	 The economic viability of the fishing industry is jeopardized in the medium and long run as a result of ever more depleted fish stocks; fishermen leave the industry as a result of falling wages and low return on capital; lower levels of fish landed result in lower throughputs into fish factories and increased unemployment Due to the depletion of most stocks in the absence of an effective control system, transfer of effort to other fisheries with resulting pressure on these and other biodiversity issues; knock-on effects in ancillary support industries Current culture on non-compliance persists; credibility of CFP will be questioned; fragmentation of the legal framework continues
Option 2 Recast of the legal control framework in combination with a steering instrument, in the form of a Code of conduct	 Consolidated and simplified legal framework Certain improvements of compliance, as a result of clearer legal provisions and voluntary approach taken by some Member States No effort needed to adjust to a new legal framework since no new requirements would be introduced 	-Structurally the same economic disadvantages as in Option 1 but effects will show later or in a mitigated way -There would still be no culture of compliance throughout the EU -Current shortcomings in the legal provisions could not be addressed since no amendments or changes would be made; voluntary changes by some Member States lead to different control standards which results in distrust among Member States; no level playing field -Consolidation with code of conduct do not introduce the necessary legal requirements that are needed for an effective control policy
Option 3 Regulatory instrument, in the form of a new binding regulation	-Most efficient solution, as control policy becomes truly global and integrated, to ensure compliance with CFP rules, and the sustainable exploitation of living aquatic resources -Culture of compliance, and new governance will prevail; trust in the CFP as a policy will be restored; level playing field for all fishermen in all EC waters; intensive use of modern technologies will render control more cost efficient -New and simplified legal framework, with new tools for the effective control of CFP rules -Price rise in the medium term as a result of legitimacy/consumer confidence and an increase in the age structure; higher returns to fishing effort and greater cost efficiency and business confidence restored	-Some Member States' authorities have to undertake some structural adjustments to incorporate changes - Authorities and sector have to adapt to the new legal framework -Resistance expected from Member States to engage in the harmonisation of sanctions

Relevanceofthepolicyoptionsagainstthe three pillars	Option 1 Continue current policy and focus on implementation and enforcement of existing framework	Option 2 Recast of the legal control framework in combination with a steering instrument, in the form of a Code of conduct	Option 3 Regulatory instrument, in the form of a new binding regulation
Environmental Pillar	-Absence of stocks replenishment. Irreversible biological changes due to overfishing and continued overcapaity -Heavy toll on the ecosystem as TACs are calculated in a way to allow to only extract quantities that do not threaten the state of the stock in question -Loss of the scientific basis for management decisions	-Overall increase of 22% of the biomass.As the full compliance benefit will not be realised, neither would the environmental benefits -Benefits would be regionally varied and unlikely to be realised in a short term time frame. The overall environmental impact associated with pursuing the approach of a consolidated legal framework in combination with non- binding steering instruments are therefore likely to tend towards the existing situation on the whole	-Overall increase of 51% of the biomass. The growth in size of fish populations as they recover would be accompanied by increases in the age distribution of fish both in the population and in the catch, associated with lower fishing pressureSuch benefits would have consequences for the ecosystem as a whole. -As the Commission would have the ability to react faster and better to shortcomings, in particular with respect to over- utilisation of fishing quotas, the environment would be less likely to be affected by irresponsible fishing behaviour.
Economic Pillar	-Low profitability. Total catch volumes would be lower and the smaller individual fish would be less valuable than when a stock would be fished within sustainable limits -Increased economic pressure : operators are forced, in view of ever more shrinking fishing possibilities, to exploit fish stock more than they can sustain and thereby reducing the basis for fishing in future years, would force more people out of business at a high environmental cost -Increasing administrative costs including increased costs for understanding and interpreting the relevant rules as well as the necessary training to inspectors and managers	-All fisheries except mackerel (according to the model) show negative net benefits in the early years of the projection, and in some cases these negative net benefits persist throughout the 10 year period -Within a ten year time horizon, the model would project net benefits in terms of enforcement cost savings, i.e. to below current levels of expenditure.	 -Sum of total net profits in the regulatory option of €8.9 billion across all the stocks for the time span 2010 – 2019 -Substantial restructuring of the current Community fleet contributes to reduce the current overcapacity (cg Blue fin Tuna case study) -The initial loss is most likely to be suffered by fishermen who have gained additional income from the catch of illegal fish. By definition, such activities are not worthy of protection. The utilisation of new technologies will substantially reduce running costs of control authorities by allowing them to concentrate scarce control resources on fishing activities that have been identified by way of risk analysis
Social Pillar	-More fishermen would leave the industry, thereby increasing unemployment in coastal areas that often have to face less working opportunities than other areas -Collapse of the local ancillary support industry which in turn could force the fishermen of an affected place to move to another place -Fisheries continue under the present regime to be tempted to improve their economic performance by unreported catches	 -Less efficient fishers are removed from the sector, as they are unable to compete as a result of only partial compliance in some fisheries. -Over the 10 year period, crew gain between € -1,200 and € 900 income per annum.⁶² 	-Net employment gain of almost 4000 jobs -A better confidence of the public in the CFP would in turn affect consumer behaviour and confidence as he would be convinced of buying a sustainable product, and possibly allow to yield a higher price for the product -Apart from greater quantities to be fished, the individual fish would be bigger and yield a better price for the same quantities. There would be higher returns to fishing effort and a greater cost efficiency for the fishing sector.

SECTION 7: MONITORING AND EVALUATION

7.1. Core indicators of progress towards meeting the objectives

The Commission will progressively develop indicators for the assessment of the control system of the Member States. As the Commission will develop its role as auditor of the control system of the Member States, it will carry out its activities on the basis of clear performance indicators that that will include:

a. the evaluation of the quota and the effort management system;

b. the evaluation of data validation systems, including systems of cross-checks of VMS, catch, effort, marketing data and data related to the Community fishing fleet register as well as the verification of licences, fishing permits and special fishing permits;

c. the evaluation of the administrative organisation, including the adequacy of the available staff and the available means, the training of the staff, the delimitation of functions of all authorities involved in monitoring, control and surveillance and enforcement as well as the mechanisms in place to coordinate the work and the joint evaluation of results of those bodies;

d. the evaluation of the operational systems, including procedures for monitoring, control and surveillance and inspection, and of designated ports;

e. the evaluation of national control and inspection programmes including the establishment of inspection levels and their implementation;

f. the evaluation of the national system of sanctions, including the adequacy of the sanctions imposed, duration of proceedings, economic benefits of which offenders are to be deprived and the deterrent nature of such system of sanctions.

7.2. Monitoring and evaluation arrangements

Every two years, Member States shall also transmit a report to the Commission on the implementation of this regulation. On this basis, the Commission should undertake an intermediate evaluation of its new initiative within four years of its adoption assessing the extent to which its realisations, results and impacts on economy, society and environment are consistent with the objectives set. The evaluation results will be used for decision making needs on the future of to the regulatory framework if appropriate.

The Commission will communicate the evaluation results to the European Parliament and the Council. The reporting would be carried out in a transparent manner by making the reporting documents publicly available and inviting feedback. The evaluation contained in these documents will take as indicators measures effectively taken, but will also look into the scope and substantive effectiveness of such measures in respect of the basic objective.

ANNEX I: TABLES

Table 1⁶³

Scientific advice about the state of the stock	Number of stocks					
	2003	2004	2005	2006	2007	2008
Outside safe biological limits	30	29	26	26	26	28
Inside safe biological limits	12	10	14	11	12	13
The state of the stock is unknown due to poor data	48	53	53	57	58	55

. Scientific advice about overfishing	Number of stocks					
	2003	2004	2005	2006	2007	2008
The rate of fishing on the stock is known compared to maximum sustainable yield rate			34	23	32	33
The stock is overfished ⁶⁴			32	21	30	29
The stock is fished at the maximum sustainable yield rate			2	2	2	4

"Emergency" scientific advice	Number of stocks					
	2003	2004	2005	2006	2007	2008
Scientific advice to stop fishing	24	13	12	14	20	18

Table 4. Difference between TACs and sustainable catches						
	2003	2004	2005	2006	2007	2008
Excess of TAC over sustainable catch (%)	43%	48%	57%	47%	44%	49%

Summary of the scientific advice about fishing opportunities	Number of fish stocks					
	2003	2004	2005	2006	2007	2008
Stocks where stock size and fishing mortality can be forecast	40	34	40	31	29	30
Stocks where a scientific advice concerning fishing opportunities is available	59	52	54	65	61	59
Stocks where no scientific advice is available	31	40	39	29	35	37

Table 2

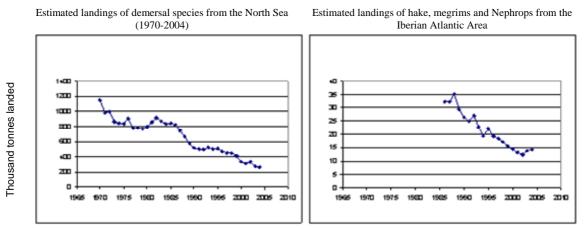
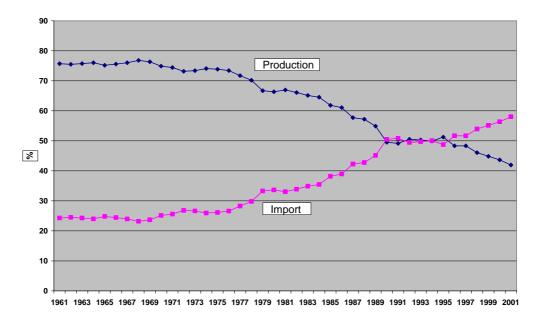


Figure 1. Left panel, estimated landings in the North Sea, 1970 - 2004. Right panel, estimated landings of the main demersal species (hake, megrims, monkfish and Nephrops) in the Iberian Atlantic area. Data from ICES (2005) in both cases.

Table 3: Relation between EU15's fish production and imports 1961-2001 (in %)(Source: Eurostat)



The balance between production and imports of fish products (food and non-food) in the EU.

	Starting condit (Spawning Stock		SSB in 2019			
	Bpa(Bpa: Biomass below which the precautionary approach should apply)	2006	Option 1	Option 2	Option 3	
North Sea cod	150,000	29,000	156,100	195,700	250,700	
Baltic cod	240,000	81,000	265,300	312,500	344,200	
North Sea plaice	230,000	197,000	204,400	241,900	283,700	
North Sea sole	35,000	28,000	39,700	40,500	41,400	
Northern hake	140,000	140,000	177,100	190,700	203,800	
Southern hake	35,000	15,000	13,900	21,700	35,700	
Western mackerel	2,300,000	2,231,000	2,377,900	2,377,600	2,377,600	
Mediterranean hake	-	3,000	6,600	9,800	13,000	

Table 4: Performance of the Options in terms of stock⁶⁵ (in tonnes)

 Table 5: Performance of the Options in terms of stock, continued⁶⁶

	Improvement over	Year Bpa achieved			
	Option 2	Option 3	Option 1	Option 2	Option 3
North Sea cod	25%	61%	2012	2011	2011
Baltic cod	18%	30%	2017	2014	2013
NS plaice	18%	39%	-	2014	2011
North Sea sole	2%	4%	2010	2010	2010
Northern hake	8%	15%	2010	2010	2010
Southern hake	56%	157%	-	-	2019
W. mackerel	0%	0%	2010	2010	2010
Med Hake	48%	97%			

Catching	Option 1 (a)	Option 2 (b)	Option 3 (c)	Net gain (No Reg) (d)	Net gain Regulation (e)	Difference (e)-(d)
NORTH SEA COD	358	527	717	169	359	190
BALTIC COD	678	695	967	17	289	272
NORTH SEA PLAICE & SOLE	15	-	155	- 15	140	155
WESTERN MACKEREL	515	578	640	63	125	63
NORTHERN HAKE	252	312	443	60	191	130
SOUTHERN HAKE	- 46	433	301	480	347	- 133
MEDITERRANEAN HAKE	0	61	147	61	147	86
Sub total	1,772	2,607	3,370	835	1,599	764
Processing						
NORTH SEA COD	406	597	812	192	407	215
BALTIC COD	3,288	4,204	4,690	916	1,402	486
NORTH SEA PLAICE & SOLE	219	-	25	- 25	- 193	- 168
WESTERN MACKEREL	245	554	614	309	369	60
NORTHERN HAKE	112	101	53	48	- 58	- 106
SOUTHERN HAKE	- 9	22	60	31	69	38
MEDITERRANEAN HAKE	-	14	33	14	33	19
Sub total	4,259	5,492	6,288	1,485	2,028	544
Ancilliary						-
NORTH SEA COD	66	97	132	31	66	35
BALTIC COD	198	123	178	- 74	- 20	54
NORTH SEA PLAICE & SOLE	4	18	32	14	28	14
WESTERN MACKEREL	100	112	124	12	24	12
NORTHERN HAKE	31	58	156	27	125	98
SOUTHERN HAKE	- 8	18	49	25	56	31
MEDITERRANEAN HAKE	-	2	2	-	-	-
Sub total	391	429	672	36	280	243
TOTAL	6,422	8,528	10,330	2,356	3,908	1,550

 Table 6: Projected changes in employment under each option⁶⁷ (Number of people)

ANNEX II: REPORT ON THE PUBLIC CONSULTATION

On the initiatives proposed by the Commission to modernize and reform the control of the Common Fisheries Policy

The Commission carried out a broad stakeholder consultation to assess the effectiveness of the envisaged measures, their impact on operators and administrations, and to form an integral part of the impact assessment report. All interested parties were invited from February to May 2008 to express their views on the nine fields of action identified in the consultation paper, as well as to present their opinions as to what further measures would be appropriate to strengthen the control system of the Common Fisheries Policy.

I. GENERAL OBSERVATIONS

There were a total of 25 contributions received in response to the Commission's invitation for public consultation from a wide range of stake holders including *inter alia* associations from the industrial sector – of fishermen, producers, fisheries control technology stakeholders; advisory bodies, a public authority, NGOs and individuals. The geographical range was also a broad one including French, German, Portuguese, Polish, Spanish, British, Belgian and Dutch parties.

The initiative of the Commission and its main objectives were widely endorsed by the participants in the consultation. All unanimously agreed on the need of reform of the control system and expressed appreciation of the opportunity to take part in the decision-making process through the consultation. They also confirmed that the 9 objectives set out by the Commission in the consultation paper are the main points of interest in the overall assessment of the reform.

Along with the overall support of the 9 objectives, the stakeholders raised a number of important considerations to be taken into account by the Commission, made some valuable and creative suggestions for possible solutions to those concerns and all stressed on the need of a continuous dialogue and cooperation between all parties involved in the control process.

Many of the participants emphasized for instance that it is the culture of compliance which should be the main objective of the reform as opposed to the culture of control. The industry also called for a bottom-up as opposed to "top-down" approach in the decision-making process with more active involvement of stakeholders, scientists, NGOs and national administrations, leading to more transparency, clarity and broader support. There were also a number of suggestions for public training initiatives, especially for fishermen.

The majority of the concerns were related to the objectives of strengthening the capacity of the Commission and to the potential costs and administrative burdens that use of modern technologies might incur. They underlined that the principles of proportionality and subsidiarity ought to be observed in these respects. Another important concern express was the risk of over centralization of the control of the CFP and the risk of infringing Member States' sovereignty.

Notably all stakeholders supported the introduction of harmonized administrative sanctions by the Commission, the simplification and rationalization of the rules and the strengthening of

cooperation and assistance. An important point was raised on the cooperation with developing countries. A major concern raised was on the non-discrimination between EC vessels fishing outside Community waters and third country fleets.

Even though stakeholders generally agreed that on-land inspections should be further developed and utilized, all of them emphasized the importance of sea inspections as the only means to assess the compliance of fishing gear, engine size, illegal discarding etc. Some suggested that the Community Fisheries Control Agency (hereinafter CFCA) should play a constructive role in that respect.

NGOs and public authorities particularly supported the reform as an efficient tool from an environmental sustainable fisheries perspective. It is interesting to note the innovative contribution of the FishPop Trace Consortium- a mixed association financed under the EU Seventh Framework Programme, drawing the attention to the development and implementation of modern technologies such as biotechnology, genetics, chemistry and forensics in optimizing control mechanisms.

II. SUMMARY OF THE CONTRIBUTIONS RECEIVED BY CONSULTATION ISSUES

1. Objective No. 1 Develop a new approach as regards inspection and control

All parties to the consultation strongly agreed on the urgent need of new approach towards inspection and control, drawing the attention to the Court of Auditors Report as well as to the need of level playing field and a degree of harmonisation. The majority of contributions stressed on the need not to abandon nor undermine the inspections at sea.

However many raised concerns towards the way of achieving harmonisation especially with regard to the conversion factors. It was underlined that it should not damage any Member State, should be based on sound scientific analysis and adopted in close cooperation with stakeholders and Norway. Some representatives of the industry noted the difficulty and risk in fixing an absolute conversion factor which can not take into account the differences depending on the fish stock, season, regional and fleet particularities.

Another important consideration noted was the constraint posed by certain Member States wishing to maintain the control over their fleets. Parties and especially the industry emphasized the need of consistent implementation, monitoring and regulation in all Member States. In this connection, some requested clarification on the definition of "high risk activities", proposing the creation of a list of them and/or the guiding criteria in their assessment such as prioritizing certain species and fishing gears for assessment. The creation of a "help desk service" on the Regulation by the Commission for Member States, RACs and professional organizations was also proposed.

All endorsed the harmonization at EC level of the inspection procedures in sea and on land as a guarantee of equal treatment and fair competition. It was observed that so far cooperation between states was confined to sea inspections whereas land inspections were very divergent. Some contributors noted that it is precisely the role of the Commission to propose and promote these standards throughout the chain of commercial exchanges starting from harbours and including the imports. Others advocated for a "bottle neck" approach to inspection meaning verifying catches where caught. The industry suggested that the Commission should take account of their potential impacts on the logistical organisation of the fishing enterprises so as not to overburden them with control at too many stages before placing the product on the market. A few contributors encouraged the expansion of onboard observer programmes and even the placing of cameras on vessels for specific high risk fisheries.

There were a few proposals for drafting a separate regulation or guidelines on the control harmonization elaborating in further details the main articles but also giving an authoritative guideline on their uniform interpretation for all inspectors and operators. Other contributors suggested that a traceability system for fish and fish products should be developed and implemented from the point of landing until they reach the consumer- best practices already in place in member states were given as an example i.e. in UK.

2. Objective No. 2 Rationalisation of the rules

There was a broad consensus on this objective. Most of the stakeholders viewed it as the main prerequisite for the development of a culture of compliance. Transparency and broad acceptance were underlined as fishermen and other operators have to be able to understand and rely on the rules in order to apply them. The drafting of an evolving "jurisprudential guide" of authentic interpretations to the articles in the regulation given by the Commission and the Member States' authorities was proposed.

A concern was raised that rationalization of the rules should not mean complete unification since account should be taken of the differences in the fishing zones, vessels etc. It was strongly recommended by a number of contributors that implementing regulations should be adapted to the particularities of the main fishing zones. Another concern noted was on the interaction between the control regulation and the IUU Regulation proposal and the proposal on authorisation. Some stakeholders from the industry suggested all these should be merged in one single regulation.

The industry also called for reassessing some of the existing obligations in particular the ones concerning the declaration of all commercial transactions for all fish bought by approved first buyer as it created an excessive administrative burden for operators. It was proposed to simplify this obligation while at the same time still guaranteeing the traceability of the transported products by extending control over the commercial exchanges, in borders and at ports. One stakeholder suggested that the document required should be an invoice as opposed to a declaration. The obligation to declare the fishing zone in the documentation was also put in question as difficult to verify and duplicating the information already contained in the logbook.

The stakeholders from the industry requested more flexibility in the multi-annual management of TACs and quotas, especially regarding the tolerance margins granted in fixed % as it was very sensitive for certain species and differed according to the fleet specificities. Some disagreed with the current 8 % margin, proposing one of 10 % as an acceptable compromise for some species. Another proposal in this respect was to ensure that quota reductions and other management measures resulting from breaches of the CFP are targeted only towards the Member States responsible in a proportionate manner.

Finally, all agreed that the new single control regulation should be workable and enforceable in order to be applied effectively. To this end some proposed further involvement of the stakeholders in the drafting process and a prior testing in practice of the rules before their adoption.

3. Objective No. 3 Strengthen the capacity of the Commission

This objective was overall supported by the contributors. However important clarifications were made by the industry on the constraints before it. There was also an underlying concern about touching upon Member States' sovereignty and the principle of subsidiarity was called for.

Many underlined the need of redefining the cooperation between Member States and the Commission in this respect. Stakeholders also insisted that they should have part in this process according to the bottom-up approach.

The possibility of transferring the decision making capacity on Real Time Closures to the Commission raised many concerns and reservations in the industry. It was pointed out that the Commission already has the possibility to announce interruptions in the fishery. The stakeholders called for prior consultation with them before any measures of this character are taken, stressing the risk of the entire fishery industry paying the price for isolated breaches. Many took the position that this competence should remain for the Member States and/or professional organizations. Public authorities and NGOs on the other side supported the strengthening of the Commission's capacity to act on its own initiative for fisheries resources management in teal time except in the area of inshore waters.

Clarification was requested by the industry about whether it will have to pay the cost of the sanctions imposed by the Commission or is this for the Member State, in particular in cases of suspending Community aid. In any case stakeholders called for transparency and proportionality in this process. NGOs strongly favoured the introduction of more and flexible instruments to the Commission for timely intervention targeted precisely at the fisheries sector. The measures proposed included *inter alia* suspension of aid payment in the fishery sector, excluding operators and vessels from Fisheries Partnership Agreements, access to European Fisheries Fund, reducing future fishing rights in cases of non-compliance, reimbursement of subsidies received by non-complying companies and individuals etc. As justification for these measures NGOs drew the attention to examples of overfishing, IUU fishing and the need of promoting an overall ecosystem approach.

The introduction of a warning system involving communication between the Commission, Member States and the fishing sector as a tool for prevention was proposed by some stakeholders. The possibility of the Commission to intervene in the data submitted by Member States was also promulgated. All agreed that the infringement procedures should be revisited to make them faster and more efficient. There were a number of proposals to harmonize and redefine the competences of inspectors and also to increase the number of EC inspectors, especially in sensitive fishery zones, allowing them to operate without prior notice.

4. **Objective No. 4 Harmonise sanctions**

This objective was broadly endorsed by all contributors. It was noted by many stakeholders that the when harmonising, the Commission will have to take due account of the opinions and practices in all Member States in this respect. All stakeholders strongly favoured the introduction of administrative sanctions in particular as a way of ensuring fair competition and equal treatment of all EU fishermen. It was agreed unanimously that these sanctions should be dissuasive and depriving the perpetrators of the economic benefit from the infringement thus giving confidence in the system to all players.

An important concern raised by the industry was that of ensuring uniform interpretation of the sanction rules in all Member States and notably, by all inspectors in charge. A special training programme coordinated by the Agency was proposed as a way to reach this goal. Stakeholders also noted that fishermen were often unaware, especially when fishing in the EEZ of Member States other than their Flag, of the sanctions and procedures applicable under the respective national legislation so it was suggested that they were made accessible in all Community languages.

A few contributors questioned the competence of the Commission to harmonise and impose sanctions in the light of the principle of subsidiarity. Other concerns raised in this connection were about the specificities (i.e. aggravating and attenuating circumstances) of each infringement, the need of individualization by national courts, the appeal possibility and the case-by-case approach. Many other stakeholders however took the position that the Commission does indeed have this competence, putting forward the conclusion of the Council Legal service from 16 April 2008 that:"The Community is competent to establish a sanctions scheme"'.

Some operators proposed the introduction of positive incentives regime (i.e. allocating supplementary fishing days for enhanced observer coverage) to complement the sanction system and encourage operators to report perpetrators. Other stakeholders underlined the importance of introducing licence points system for CFP infringements operating in parallel to the other penalties and envisaging a "black list" of persistent offenders, subjected to increased monitoring.

One contributor advocated for the introduction of trade sanctions in addition to the administrative ones as it is necessary to impose sanctions on both companies that commercialize illegal fish products and countries allowing those activities. NGOs promulgated the strengthening of sanctions for serious infringements of the CFP so as to include monetary penalties but also confiscation of catches, gear and even vessels.

5. Objective No. 5 Strengthening of cooperation and of assistance

All operators strongly favoured the enhancing of cooperation between the Commission, fishery control authorities in Member States and operators from the whole chain of production including the transport, market, small scale fishermen etc. All agreed that the Agency should play a more important and constructive role in this respect. There were proposals put forward for it to verify control and training standards, to conduct workshops, seminars and exchange programmes.

Some recommended the strengthening of cooperation aiming at harmonizing the methodology of inspections at sea and even more on land, taking into account the best practices existing in Member States. It was noted that currently operators have suspicions about the varying standards of inspections which can be addressed by creating a transparent methodology subject to external verification and even audit.

Special emphasis was put on the cooperation with competent authorities from third countries, in particular developing ones. Some stakeholders proposed the establishment of cooperative arrangements to ensure that developing states have the means and competence to control fishing activities in their waters.

One of the individual academic contributors stressed on the efficiency of encouraging cooperation between fishermen and their professional organizations in the form of consortium so as to manage certain fisheries zones and to control each other in doing so. Italy and its shell fishing were given as an example of such decentralized approach towards control.

6. Objective No. 6 Develop a culture of control

Generally all contributors agreed with this objective and identified it as a key one. The majority of the industry stakeholders however put the emphasis on the development of a culture of compliance rather than control. Contributors proposed that the Commission should assist Member States who are primarily responsible for informing the fishery sector of the rules.

Many contributors noted that to achieve this objective the credibility of the whole system ought to be increased and fishermen have to understand and believe in the ratio of the applicable rules. To this end it was proposed that fishermen, scientists and producers are more involved in a "bottom-up" decision-making process for instance with respect to quota management giving the examples of US, Canada, Norway and Iceland where this is already applied. Furthermore, representatives of the industry suggested that the implementation of the CFP and control rules including inspections and sanctions should be made in close cooperation with the stakeholders so that the effort to comply comes from the bottom.

The industry also underlined the need to define on EC level the powers and obligations of national inspectors and standardise the procedures including the right of the vessel to be informed of its rights and legal assistance available so as to enhance transparency and their credibility for operators. It was suggested that some data bases should be made available to the public online.

Advisory bodies proposed the introduction of an efficient intervention system through RFMOs and within the CFP in order to improve the confidence of fishermen that the control rules apply equally and in the same manner to all operators. Another suggestion was to use positive incentives in return for participation in schemes for use of more selective gears, support for real time closures, and participation in stock avoidance plans.

7. Objective No. 7 Use of modern technologies

This objective was broadly endorsed with the specification by the industry however that it is the Commission who should bare the main cost of the implementation. Many noted that technical equipment should be introduced only when and where necessary so as not to create disproportionate financial and administrative burdens.

The industry underlined that the cost of the new technologies, the data transmission and their maintenance should not be at the expense of fishermen but of specialized funds. It was strongly advocated that these measures should not apply to vessels smaller than 15 meters. It was also stressed that the commercially sensitive data should remain strictly confidential and be used only for the purposes of control.

Some contributors came in with innovative ideas on this objective such as the implementation of non-collaborative type of control technologies allowing to detect non-reporting actors and biased reports as well as to provide evidence for further investigation. It was suggested that in addition and to complement the VMS system airborne surveillance, coastal radars, spaceborne sensors like Synthetic Aperture Radar are used to improve coverage, availability, accuracy, integrity and cost. The attention was also drawn to the new generation of SARSAT COSPAS beacons and the future MEOSAR capabilities like GALILEO, GPS and GLONASS as providing return link and reducing false alarm rates.

Another interesting proposal on this objective was made by the above mentioned mixed FishPop Trace consortium. They suggested the development of framework incorporating strict forensic validation based on molecular biology to complement the Monitoring, Control and Surveillance in the fisheries sector. It was underlined that these applications are available but there is still a lack of cooperation between scientific institutions, control authorities and policy makers. An example of a project working in the area was given- The Global Fish Barcode of Life Initiative for identification of fish species from sample of tissue or fish products on the basis of DNA sequence library. One of the stakeholders proposed the establishment of reference laboratories in Member States and one at a Community level.

8. Objective No. 8 Increase of cost effectiveness

This objective was broadly favoured. Many stakeholders took the view that introduction of modern technologies can reduce the cost of operations. The simplification of the rules in a common regulation was also seen as a tool to this end. The main concern raised by stakeholders was that the reduction of costs does not lead to reduction of controls at sea. Many proposed that it is quality rather than quantity which is important in this respect and thus the focus should be on high risk activities.

9. Objective No. 9 Adapt the mandate of the Agency

All contributors unanimously agreed on the need to adapt and broaden the mandate of the Agency. The industry also called for increase of the transparency and dialogue in its operation by giving the stakeholders an observer status in its working bodies.

Many viewed that the Agency should play a greater role in developing and harmonizing on land control procedures, in analyzing Member States best practices in this respect and encouraging inter state cooperation. It was also suggested that the Agency should be allocated more human resources to conduct inspections at sea, in particular in sensitive areas. The creation of EU corps of inspectors with full range of inspection powers was broadly encouraged.

Some viewed it as a potential mediator in the communication between Member States and the Commission. Others recommended that it is given the competence to standardize control of fisheries around offshore Natura 2000 and other nature conservation sites, including the ability to establish buffer zones for the protection of the sites.

III. CONCLUSIONS

- All stakeholders welcomed and unanimously supported the Control reform. Valuable proposals were made for its optimization.
- Generally all agreed with the main 9 objectives of the reform and particularly favoured the introduction of harmonized administrative sanctions and inspection procedures on EC level.
- Stakeholders clearly advocated that they want this constructive dialogue between them and the Commission to continue both for the decision-making and for the implementation process.

ANNEX III- ADMINISTRATIVE COSTS FOR THE FISHERIES SECTOR

Table 1-Administrative costs under the current control regime

С	oun	cil Re	egulation 2847/93 o	f 12 October 1993 es the common fisherie	stablishing a	Ta (€	riff per ur)		me our)	Price (per action or equip)	Freq (per year)	Nbr of entitie s	Total nbr of actions	Total cost	R	egulato origin (%)		
N 0	As s. Art.	Ori g. Art.	Type of obligation	Description of required action(s)	Target group	i	е	i	е						Int	EU	Nat	Reg
1		, 6,2, , 19e	Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	logbook and landing declaration: all vessels above 10 meters	17		0.4 5		7.4	340	22500	7650000	56801250				
2	4,2		Inspection	Inspecting and checking (including assistance to inspection by public authorities)	inspection: all registered vessels	18		0,9 2		16.6	2	83000	190900	3161304				
3	9,1		Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	submission of sales note: registered buyers	12		0.1		1.2	1	98000 00	9800000	11760000				
4			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	Geographical posi transport documer		nding ir	nformati	ion,	0,0			0	6300000				
													Total administ rative costs (€)	78022554				

*The 3 most costly IOs (logbook, landing declaration and sales note) together with the IO "inspection" (identified as an important "irritant") account for 87% of total cost of the control regulation. As the cost in relation to the remaining IOs is minor (ranges between 0.05% to 3.2% of total cost), these IOs are not individually displayed in the table. **According to the study undertaken by the Consortium, national obligations, going beyond EU requirements as set out in the Regulation under review, amount to 7 million Euro.

***All the information obligations (IO) contained in the Control Regulation have been mapped and measured by a consortium, led by Deloitte ("DRAFT FINAL REPORT, Measurement data and analysis, as specified in the specific contract on Modules 3&4 for the Priority Area Fisheries, of the Framework contract n° ENTR/06/061, EU PROJECT ON BASELINE MEASUREMENT AND REDUCTION OF ADMINISTRATIVE COSTS"). Those figures have not been approved yet by the Commission but serve as a basis for our calculations.

Table 2-Administrative costs for the new fisheries control system

Commission proposals for the new fisheries control system						Tariff (€per hour)		Time (hour)		Price (per action or equip)	Freq (per year)	Nbr of entitie s	Total nbr of actions	Total cost	Regulatory origin (%)			
N 0	As s. Art	Ori g. Art	Type of obligation	Description of required action(s)	Target group	i	е	i	e						Int	EU	Nat	Re g
1		6,2, 19e	Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	logbook and landing declaration: all vessels above 10 meters	17		0.1 4		2,3	340	22500	7650000	17671500				
2	4,2		Inspection	Inspecting and checking (including assistance to inspection by public authorities)	inspection: all registered vessels	18		0,7 8		14	2	83000	190900	2680236				
3	9,1		Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	submission of sales note: registered buyers	12		0.1 0		1.2	1	98000 00	9800000	11760000				
4			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	Geographical pos transport docume		nding i	nforma	ition,	0,0			0	6300000				
												<u> </u>	Total administ rative costs (€)	38411736				

*The 3 most costly IOs (logbook, landing declaration and sales note) together with the IO "inspection" (identified as an important "irritant") account for 87% of total cost of the control regulation. As the cost in relation to the remaining IOs is minor (ranges between 0.05% to 3.2% of total cost), these IOs are not individually displayed in the table.

ANNEX IV: CONTROL PROVISIONS IN CFP LEGISLATION

Basic regulations

- 1. Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy, Chapter V, (OJ L 358, 31.12.2002, p 59-80)
- 2. Council Regulation (EEC) No 2847/1993 of 12 October 1993 establishing a control system applicable to the common fisheries policy, (OJ L 261, 20.10.1993)

Implementation of Control regulation

- 3. Commission Regulation (EC) No 728/1999 of 7 April 1999 providing, pursuant to Article 7(3) of Council Regulation (EEC) No 2847/93, for a notification period for Community fishing vessels carrying on fishing activities in the Baltic Sea, the Skagerrak and the Kattegat (OJ L 93, 8.4.1999)
- Commission Regulation (EC) No. 1449/98 of 07 July 1998 laying down detailed rules for the application of Council Regulation (EEC) N° 2847/93 as regards effort reports (OJ L 192, 8.7.1998, p. 4–8)
- 5. Commission Regulation (EC) No. 500/2001 of 14 March 2001 laying down detailed rules for the application of Council Regulation (EEC) N° 2847/93 on the monitoring of catches taken by Community fishing vessels in third country waters and on the high seas (OJ L 73, 15.3.2001, p. 8–12)
- Commission Regulation (EC) N° 2244/2003 of 18 December 2003, laying down detailed provisions regarding satellite-based vessel monitoring systems (OJ L 333, 20.12.2003, p. 17–27)

Common Market Organisation

 Council Regulation (EC) No 104/2000 of 17 December 1999 on the common organisation of the markets in fishery and aquaculture products (OJ L 17, 21.1.2000, p. 22–52)

Logbook

- 8. Commission Regulation (EEC) No 2807/83 of 22 September 1983 laying down detailed rules for recording information on Member States' catches of fish(OJ L 276, 10.10.1983)
- Council Regulation (EC) No 1966/2006 of 21 December 2006 on electronic recording and reporting of fishing activities and on means of remote sensing (OJ L 409, 30.12.2006, p. 1–10)
- Commission Regulation (EC) No 1566/2007 of 21 December 2007 laying down detailed rules for the implementation of Council Regulation (EC) No 1966/2006 on electronic recording and reporting of fishing activities and on means of remote sensing (OJ L 340, 22.12.2007, p. 46–57)

TAC and quotas

11. Council Regulation (EC) No 40/2008 of 16 January 2008 fixing for 2008 the fishing opportunities and associated conditions for certain fish stocks and groups of fish stocks, applicable in Community waters and, for Community vessels, in waters where catch limitations are required (OJ L 19, 23.1.2008, p. 1–203)

Technical measures

12. Proposal for a Council Regulation concerning the conservation of fisheries resources through technical measures in the Atlantic and the North Sea.

Recovery Plans and Multiannual management plans

- 13. Council Regulation (EC) N° 423/2004 of 26 February 2004 establishing measures for the recovery of cod stocks (O.J. L 70 of 9.3.2004, pp 8-11)
- 14. Council Regulation (EC) No 811/2004 of 21 April 2004 establishing measures for the recovery of the northern hake stock. (O.J. L 185; 27.5.2004, pp 1-3)
- 15. Council Regulation (EC) No 2166/2005 of 20 December 2005 establishing measures for the recovery of the Southern hake and Norway lobster stocks in the Cantabrian Sea and Western Iberian peninsula and amending Regulation (EC) No 850/98 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms. (O.J.L345; 28.12.2005, pp 5-10)
- 16. Council Regulation (EC) N° 2115/2005 of 20 December 2005 establishing a recovery plan for Greenland Halibut in the Framework of NAFO (OJ L 340, 23.12.2005, p. 3–6)
- 17. Council Regulation (EC) No 1100/2007 of 18 September 2007 establishing measures for the recovery of the stock of European eel (EC) No 1559/2007 (OJ L 248, 22.9.2007, p. 17–23)
- Council Regulation (EC) No 388/2006 of 23 February 2006 establishing a multiannual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay, (O. J. L 65; 7.3.2006, pp 1-4)
- 19. Council Regulation (EC) No 509/2007 of 7 May 2007 establishing a multi-annual plan for the sustainable exploitation of the stock of sole in the Western Channel (O.J. L 122, 11.5.2007; pp 7-9)
- 20. Council Regulation (EC) No 676/2007 of 11 June 2007 establishing a multiannual plan for fisheries exploiting stocks of plaice and sole in the North Sea;(O.J. L157; 19.06.2007, pp.1-6)
- 21. Council Regulation (EC) No 1098/2007 of 18 September 2007 establishing a multiannual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 779/97 (OJ L 248, 22.9.2007, p. 1–10)

PPS

- 22. Council Regulation (EC) No 1627/94 of 27 June 1994 laying down general provisions concerning special fishing permits (OJ L 171, 6.7.1994, p. 7–13)
- 23. Council Regulation (EC) No 41/2006 of 21 December 2006 fixing for 2007 the fishing opportunities and associated conditions for certain fish stocks and groups of fish stocks, applicable in Community waters and, for Community vessels, in waters where catch limitations are required (OJ L 15, 20.1.2007)

Other texts

- 24. Council Regulation (EC) No 643/2007 of 11 June 2007 amending Regulation (EC) No 41/2007 as concerns the recovery plan for bluefin tuna recommended by the International Commission for the Conservation of Atlantic Tunas (OJ L 151, 13.6.2007, p. 1–16)
- 25. Council Regulation (EC) No 2347/2002 of 16 December 2002 establishing specific access requirements and associated conditions applicable to fishing for deep-sea stocks, (OJ L 351, 28.12.2002, p. 6–11)
- 26. Commission Regulation (EEC) N° 1381/87 of 20 May 1987, establishing detailed rules concerning the marking and documentation of fishing vessels, (OJ L 132, 21.5.1987, p. 9–10)
- 27. Commission Regulation (EEC) N° 1382/87 of 20 May 1987, establishing detailed rules concerning the inspection of fishing vessels, (Official Journal L 132, 21/05/1987 P. 0011 0013)

ANNEX V: CURRENT CONTROL SITUATION

A. Elements of the current control mechanisms

- Monitoring of fishing vessels and their activities, through satellite tracking (VMS), vessel sightings and onshore inspection (applicable for all vessels exceeding 15 m);
- Catch monitoring via a system of vessel logbooks (allowing for margins of tolerance of 20% for inspections at sea), landing declarations and sales notes (both recording actual live weights). Log books are applicable to all vessels over 10 m in length⁶⁸ and for landing weights in excess of 50kg. The completed sheets are submitted within 48 hours and landing declarations and sales are supposed to be cross checked by the inspectorate to ensure consistency. The Commission specifies the form of reported outputs required, outputs and output frequencies are reported to the Commission on a monthly basis, and at more frequent intervals as and when the catch reaches 70% of quota. Vessel logbooks are to become electronic as from January 2010 (for vessels 24 m and over in length), extended to vessels 15 m and over by July 2011. That landing declarations reflect the actual weight of fish landed in live weights, as opposed to the estimates shown on the log sheets;
- Monitoring of transparency including the sales note (when fish is sold at auction) and take-over declarations, when the fish is transported within and outside national borders;
- Fishing effort monitoring (days at sea assigned to specific vessels);
- Monitoring of fishing gears and minimum landing sizes against a set on technical conservation regulations applicable to various species, fishing methods and fishing zones;
- Monitoring of third country vessels, when landing into Community ports, and when fishing inside Community waters, and specific RFOs, when the EC is assigned a controlling role, for example NEAFC;
- Special measures applying to recovery species, including:
 - special fishing permits, pre notification of landings and authorisation to land;
 - o designated ports;
 - reduced margins of tolerance;
 - separate stowage of recovery species
 - set inspection benchmarks (in the form of a set percentages (10-20%⁶⁹ of landings, depending on species);
 - \circ compliance observers^{70;}
 - \circ weighing systems^{71;}
 - traceability inspections and
 - o prohibition of transhipments.

B. Current control situation in the MS

The controlling means applied by each Member State is on land and at sea fisheries inspection. The primary offence detected on land relate to unreported landings. The primary offences detected at sea relate to technical measures and unlicensed fishing. Inspection support means include a Fisheries Monitoring Centre (FMC), data cross checking systems (currently under development), VMS (and requiring refinement), surveillance ships and

aircraft. Some national administrations also use more sophisticated deterrent and detection systems, most notably forensic analysis, evaluate regular patterns of fisheries fraud and to check product traceability beyond first hand sales (i.e. factory inspections), and inspector hit squads (groups of inspectors that can be deployed to specific sites at a moments notice). Controlling systems are presently being improved through Joint deployment Plans (facilitated by the CFCA); and information sharing and joint Memorandums of Understanding between Community countries, and with cooperating Third countries (Norway and Faeroes).

The main means of deterrent comprise the inspection activity, as previously defined, penalties and in some unilateral cases, dialogue and cooperation.⁷²

One of the fundamental problems that exist with the system is that control is not applied equally across all MS. This means that within a single fishery control is uneven. For instance, French and Belgian vessels fishing in French waters may be subject to different rates of inspection (MRAG, 2003). Fishermen often complain, justifiably, about this sort of treatment, and we showed in our 2003 report that this situation will always lead to higher levels of non-compliance in fishermen's behaviour.

It has also been elaborated (MRAG 2003 study), that compliance does indeed increase as the level of inspection increases. These issues have been repeatedly recognised by the COM and led to the initiation of the CFCA in 2005. It is still too early to tell whether the Agency is having a significant effect on levels of compliance in the EU, but they have coordinated two Joint Deployment Plans (Southern North Sea, Baltic) in 2007 as well as inspector exchanges and training.

However, the activities of the CFCA are based on control programmes that focus on stocks in critical condition (North Sea Cod, Baltic Cod and BFT). What is actually required of a system of control is to be able to act rapidly to cauterise any impending problems. This has clearly failed to be the case in EU waters – control systems have apparently not been able to detect the increase in non-compliance that has accompanied the reduction in TACs required to keep stocks at target levels.

Most specifically, the 2003 report also identified some useful inspection trends. Land based enforcement is perceived to be the most cost effective tool and for the countries identified. It is up to five times as likely to detect an offence and 2.5 times more efficient than marine based activities. This implies that switching some costs of sea based enforcement to land will increase the probability of detection but will only have a marginal effect on the number of offences detected unless applied with at increasing proportions. The number of offences detected at sea is largely stable. However, a marginal benefit from increasing land based costs would result in a greater number of infringements detected (or a corresponding increase in compliance), than the same change in expenditure in marine surveillance. However specific offences (technical/unauthorised fishing) are only detectable at sea, thus requiring maintenance of marine based activities, but catering for a reduction.

The CoA underlined the following findings on the control situation:

- large proportions of the fleet exempted from logbook obligations (under 10m), but in some cases catching significant quantities of recovery species (France, Spain, UK);
- limited means available to the Commission to apply pressure on the Member States;

- inadequate application of control measures as specified in the core Control Regulation (EC 2371/2002) (i.e. additional to those cited above), or specific species recovery programmes. These include:
 - inadequate use of cross checking procedures i.e. for consistency between logbook, landing declarations, and sales notes, or log book, VMS tracking and vessel sightings;
 - failure of some fishers to comply with VMS, and inadequate definition of non corruptible VMS systems;
 - o inadequate enforcement of transport regulations;
 - o inadequate enforcement of market and traceability regulations;
 - o inadequate enforcement of country landings;
 - inadequate control of fishing gears in specific areas (North Sea blinders in beam trawl fisheries and the continued use of drift nets in the Mediterranean);
- inadequate application of control measures as specified in the species recovery programmes. These include:
 - o failure to appropriately evaluate catch declarations (Baltic cod)
 - lack of a strategy to secure compliance with effort limitation schemes (North Sea cod, southern hake and *nephrops*)
 - Vessel Monitoring Systems (VMS) not used effectively to cross check prior notification of landings and fishing effort (North Sea cod)
 - o by-catch rules not systematically checked (North Sea cod)
 - reduced margins of tolerance (8%) against catch estimates in the log book not properly enforced (All species recovery programmes);
 - o inadequate control in the landings of undersized fish (Northern hake)
 - no catch declaration system in place (Bluefin tuna)

ANNEX VI: INFORMATION ON THE BIO-ECONOMIC MODEL USED FOR THE IMPACT ASSESSMENT REPORT

Bioeconomic modelling was achieved through linking a biological population model, projected over a 10 year period from 2010 (the date on which any regulation would be implemented), with an economic model of fleet performance. Age-structured biological models were constructed using the latest ICES Working Group results for relevant stocks with extractions separated into reported, unreported (unallocated in ICES terminology) and discards, tuned over the period 2000 – 2006 to ICES assessment results.

The biological model used was that described in the Cabinet Office (2004) report and was deliberately chosen to be simple and deterministic so that it could be easily integrated with the economic model. It uses ICES (2007) assessment data to obtain figures for historical recruitment, stock numbers at age, weight at age in the catch and stock, natural mortality and selectivity at age and projects the stock into the future using these parameters. The time-frame for this work (about 6 weeks) did not allow for the development of particularly complex integrated bioeconomic models in, for example, the FLR framework. The model that we developed allowed stochastic as well as deterministic recruitment to be simulated (either as bootstrapped data or as lognormal distributions) but, apart from emphasising the uncertainty in future projections, this was not helpful when integrating with the economic model which, because of its complexity, could not be developed beyond a deterministic formulation in the time available. Therefore, we only present deterministic results which are effectively similar to median stochastic results.

Forward projections were undertaken assuming a constant target fishing mortality, equal to the target fishing mortality in 2007. The target fishing mortality was modified by corrections for discarding and unreported catches to generate a realised fishing mortality (Fr=Ft.d.u, where Ft was the target fishing mortality, d and u were the discard and unreported catch rates respectively, and Fr is the realised fishing mortality rate). The latest ICES assessments available to us were those in which the last year in the assessment was 2006, and the latest stock status was effective for 1 January 2007. Using the ICES calculated Fr in this and previous years, together with discard and unreported catch rates calculated from ICES reported data, we were able to estimate Ft in these previous years. We then adjusted Ft (2007) according to the anticipated catch levels in 2007, management action taken by the EU in 2007, 2008 and in the future (i.e., a default starting point is to set discards and unreported catches to zero, estimate the real target fishing mortality associated with the 2007 TAC, and then apply this in all future years but with the re-introduction of discards and unreported catches). We then projected the stock forward to 2019 under this Ft until the stock had recovered to a size greater than Bpa, when we reverted to larger fishing mortality.

For some stocks (eg North Sea cod) harvest control rules are currently specified by the Commission's recovery plans, which constrain annual TAC changes to 15% and aim for annual population growth rates of \geq 30%. A fishing mortality rule was adopted for these stocks so as to be consistent across all models (i.e. those with and without clear harvest control rules), and this had the added advantage of dealing with target fishing mortalities that have demonstrably been achievable in the past. For the cod stocks, this fishing mortality approach produces more conservative growth figures than the strict implementation of the 15% TAC variance rule.

For instance, with North Sea cod adopting the 15% rule implies a fishing mortality of 0.15 in 2008 and 0.12 in 2009, which in the absence of unreported landings should result in SSB of 116000 in 2009 (ICES 2007; ACFM report section 6.4.2a) and even with 34% unreported landings and 15% discarding would result in the stock being above Bpa in 2010 - i.e. before the control actions proposed by the Commission could come into effect, and two years before the date estimated by our final model (Table 32). Adoption of the TAC rule in the model would have meant that the fishery would be being asked to deliver much lower fishing mortalities than have ever been achieved for this stock (i.e. Ft<0.15, Fr<0.23). Without considerably enhanced control activity from 2007 (in the period before the new control measures could come into effect in 2010) this would imply much higher intrinsic discarding and unreported catch levels than we have hitherto seen. One option available to us would have been to use the TAC rule and suggest a return to much higher levels of unreported catches at these very low target fishing mortalities. The relationship between Ft and unreported catch rate would imply that at Ft < 0.15 we should be expecting unreported catch rates of at least 100%, but this is based on data from the period before Scotland and Denmark increased their control action and increased compliance after which the unreported catch rate dropped significantly from over 100% to 34%. It is hoped that when the COBECOS project is complete a better understanding of the relationship between control actions and compliance may be developed, but at the time of undertaking this modelling that project had not yet delivered mature bio-economic models that could be used in this work. Nevertheless, we did explore this option, raising the quota in 15% increments from 22000 t in 2008 to 33000 t in 2011 and increasing the unreported catch rate to 100% over this time period. The resulting stock trajectory was very similar to the trajectory of our main model up to 2010 after which time it increased more rapidly, reaching 280,000 t in 2012 despite 100% unreported catches, and the cessation of the recovery plan at this point meant that the quota rose from 33,000 t in 2011 to 145,000 t in 2012 (and in fact that actual removals rose from 72,000 t to 162,000 t).

The level of detailed speculation about likely rates of under-reporting in each year of this model, and the fact that it rather unrealistically predicts a rapid change in quota and catch in 2012, suggested to us that it was not as likely to reflect reality as our assumption that the fishery might be able to maintain a constant and low fishing mortality over this time consistent with its demonstrated performance in 2006. In all our models it was necessary to project likely decisions and events through to 2010 before the 10-year projection could even start. This is a longer projection (3 years, 2007 - 2010) than ICES normally undertakes in its assessment advice, and we did not feel confident that even recovery plan decision rules would necessarily be followed over that time period since recent actions taken by the EU have not often followed either ICES advice or the recovery plan decision rules fully (WWF, 2007).

Consequently, for both cod stocks we chose to stay within the bounds of fishing mortalities and estimates of unreported catch that have recently been made (in the case of the North Sea cod stock, we have used a target F of 0.33, which is close to the achieved level of 0.38 in 2006 when the level of unreported catch was 34%, and delivers a realised F of 0.5 which is well below Fpa). Others have noted the perverse effects of this 15% rule in the past, and we wanted to avoid this (Kell et al., 2006, Kelly et al., 2006). However, to give some confidence that our model produced results generally consistent with the recovery plan, we can report that for the two cod stocks, in the absence of unreported fishing, this approach produced significant deviations from the 15% and 30% rules only when biomass was lower than Blim (an allowable deviation under the harvest control rules) and, over the period of recovery of the stock delivered annual changes in biomass of 45% for North Sea cod and 21% for Baltic cod.

In all cases we have attempted to develop our Option 1 model to reflect what is actually happening with that stock at the moment, and what might realistically be expected to happen in the years before the new control measures could come into effect. In some cases existing control action (for instance the JDPs in the North Sea and Baltic affecting plaice/sole and cod, and the actions by individual Member States) combined with the situation of the stock (high recent recruitment, for instance) creates a situation where some recovery of the stock will be expected in the next few years even with some continuing level of unreported catches. This is consistent with ICES advice and the continuing efforts of Member States to comply with recovery plans.

In all stock projections of this sort a large number of assumptions have to be made about the likely future state of reality and projections to 2019 from 2007 are necessarily extremely uncertain. This does not invalidate the objective of the modelling exercise, however, which is to compare the likely outcomes under conditions of continuing poor compliance and under conditions of improved compliance that is assumed to develop under the proposed control actions. The various stock projections differ only in the proportion of unreported catches (or in the case of the plaice/sole model the proportions of juvenile discards), and because the underlying model structure is the same for all Options the results are a direct comparison of the benefits of increasing compliance.

To simulate the condition when stocks have recovered to Bpa and above, we relaxed the condition F=F2007 in the second year that SSB was greater than Bpa. To be consistent with the Commission's long term management plans, an appropriate F to apply after recovery would be Fpa. However, our approach was to be quite conservative about recruitment (see below, discussions on individual case studies) choosing either the geometric mean of recent (10 year) recruitment or allowing a hockey-stick stock-recruit relationship to reach an asymptote of a geometric mean of the past high recruitment levels. This decision was taken to reflect caution that historical high recruitments, particularly in the cod and hake stocks, may have resulted from both high stock sizes and favourable environmental conditions. Taking a cautious approach reflects our view that recruitment will recover following a recovery of stock size but that environmental conditions still remain less favourable than in the 1980s. Therefore, we were unable, in some cases, to apply Fpa and achieve stable recovered populations (stability in the final population was important in this exercise to avoid confusing reductions in catch and therefore net benefit in the final years). Instead, we chose a final realised fishing mortality level for when SSB>Bpa that was consistent with our recruitment assumptions and allowed populations to reach a smoothly asymptotic maximum above Bpa.

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