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TENTH DIALOGUE MEETING

19–20 October 1995

Vigo, Spain

International Council for the Exploration of the Sea
Conseil International pour l'Exploration de la Mer

Palægade 2–4 DK-1261 Copenhagen K Denmark

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INTRODUCTION

The 10th ICES Dialogue Meeting was held in Vigo, Spain, in the city's imposing Cultural Centre from 19 to 20 October 1995. The Meeting followed the structure that was laid down in 1985. From that time onwards the Dialogue Meeting has become tri-partite including professionals from the fish productions sectors, fisheries managers and fisheries scientists. The fisheries discussed at this meeting were those of the Bay of Biscay and the Atlantic waters off the Iberian Peninsula. The meeting was co-sponsored by ICES and the European Commission.

About 100 French, Portuguese, and Spanish representatives of fishermen attended. Spain was by far the best represented. There were a significant number of researchers from fisheries research institutions in France, Portugal and Spain. High level representatives of National Administrations in charge of fisheries and of DG XIV also participated. The timetable of the meeting is given in Annex 1 and the list of participants in Annex 2.

The General Secretary for Maritime Fisheries in Spain, Mr. José Loira, welcomed the participants and pointed out how important it is to achieve responsible fishing in accordance with the now adopted FAO Code of Conduct for Responsible Fishing prepared by FAO.

The President of ICES, Alain Maucorps expressed his gratitude for the co-operation of the Spanish Institute of Oceanography in organising the meeting. He then continued by highlighting the usefulness of these periodic discussions between fishermen, scientists, and administrators. These Dialogue Meetings are not scientific meetings or conferences but an occasion for direct exchange of views between stakeholders involved in the utilisation of renewable marine resources. Through these exchanges of viewpoints the Dialogue meetings shed light on possible solutions to the most urgent problems facing the fisheries.

The state of the fish stocks in the Bay of Biscay is far from satisfactory. The general decline of most of the stocks has not been brought under control, the stock decline has been accompanied by increased competition or even open conflicts between groups of fishermen. This development is not restricted to this region; it is almost general. On the other hand, the quantity and quality of the knowledge of exploited living resources and the characteristics of their exploitation has grown considerably.

Among the many reasons for the sad stock status, a certain inadequacy of the scientists' message must be recognised. The dialogue between stakeholders in the fisheries must be much closer and more efficient than has been the case hitherto. Such a dialogue will allow better analyses of the nature of the problems and possible solutions. Dialogue is an element of conflict resolution and the Dialogue Meetings contribute to this process. These meetings are however not sufficient to solve all difficulties.

While scientific methods allow complex studies, the scientists have for some years been confronted with a serious deterioration of the quality of the official fisheries statistics. Detailed and reliable information on fishing activities is an indispensable element of the evaluation process of the state of the exploited stocks and fisheries. The scientists would like to recall this problem and underline that data quality is the very basis for sound decisions to be taken.

SUMMARY OF PRESENTATIONS

OCEANOGRAPHY AND FISHERIES IN THE GULF OF BISCAY AND THE ATLANTIC IBERIAN SEAS

by

Alvaro Fernandez (IEO, Madrid)

The southern part of the ICES area offers marked contrasts from the continental shelf of the Bay of Biscay, through the narrow continental shelf of the Cantabric sea, Galician coast and Portugal to widen again in the Gulf of Cadiz. This is a conditioning factor for the distribution of the species.

The currents running along the continental shelves and up-welling in some areas modulate the production in different areas and seasons. The currents also affect the migrations and the viability of larvae. This latter effect will further affect recruitment of marine species.

In this environment important fisheries develop for pelagic (anchovy and sardine) as well as demersal and benthic (hake, angler fish, megrim, sole, Norway lobster) species. Other species live in the water column like (horse mackerel, blue whiting, mackerel) and are also exploited.

EXPLOITATION OF THREE TARGET SPECIES IN THE BAY OF BISCAY (SOLE, HAKE AND NORWAY LOBSTER) : INTERACTIONS BETWEEN METIERS, CONSEQUENCES AND POTENTIAL SOLUTIONS

by

Joseph Le Gall

**President of the Regional Marine Fisheries and Aquaculture Committee of the « Pays de Loire »
(Le Croisic, France)**

This communication deals with the following items:

A- Present situation

- Resources,
- Fishing fleets,
- Fishermen,
- Métiers.

B- Consequences

- Overcapitalisation,
- Competition for space between Spanish, French and Belgian fishermen,
- Internal competition between French fishermen in the 6 to 12 miles zone,
- Drop of the resources.

C- Coastal versus offshore fishing interaction

- Consequence of European limitations for a given fleet,
- Consequence on given species: hake, sole,
- Profitability difficulties for the whole fleet,
- Seasonal market difficulties.

D- Splitting of structures risks

- Boats of less than 12 meters: market difficulties,
- Profitability of fishing ports and auctions set to EC norms,
- Market trends in the coming five years,
- Regional planning.

E- Outlines for solutions

- Actions on fishing fleets,

- Incitements:
 - selective trawl,
 - minimum mesh size,
 - minimum landing size,
 - width of pelagic trawl.

PROBLEMS IN THE PORTUGUESE COASTAL TRAWL FISHERIES SECTOR

by

Pedro Jorge

Director of the National Shipowners' Association (ADAPI, Aveiro, Portugal)

This communication centred in the following aspects:

1. Description of the economical activity of the trawl fisheries sector and its determinant role in the development of the coastal areas,
2. Characteristics of the Portuguese coastal trawl fleet in terms of number of units, GRT, engine power and type of trawl,
3. Fishing areas, catch composition and state of the resources,
4. Effects of technical regulation and other management measures on the fishing activities and the state of the resources,
5. Markets, value of the production and role of the Portuguese Producers Organisations. Importance of the deficient performance of the Organisation of Common Markets and its impacts on the Portuguese fish market products.

**PROBLEMS RELATED TO THE SPANISH COASTAL TRAWL FISHERIES SECTOR
IN GALICIAN WATERS**

by

Senen Touza

President of the Shipowners' Association of Marin (Spain)

The communication focused on the following aspects:

- Characteristics of the fleet and fishing grounds,
- Working conditions and their importance,
- Legal basis that rule the activity,
- Resources situation,
- Influence of the different gears on the resources,
- Proposals aimed at the rational exploitation of the fishing grounds.

THE CRUSTACEAN TRAWL FISHERY IN PORTUGUESE WATERS

by

Carlos Mota

President of the Producer's Association of Péniches (Portugal)

The crustacean trawl fleet (catching Norway lobster, shrimps and prawns) is a Portuguese fleet component that has some hopes of survival in spite of a slow but steady decline in the Portuguese fisheries.

A small old fleet carries out the fishery. The fleet is decreasing due to increasing difficulties with its economical viability. The target stocks are overexploited and these must be protected in order to provide a balanced and profitable exploitation. The required restrictions are defined by an adequate planning with the time.

It is important and urgent to introduce TACs for shrimp and prawn and to adjust the Norway lobster TAC which at present is too high compared to the actual catches. Norway lobster is a modest resource for the needs of the traditional Portuguese fleet and this resource cannot be shared with other fleets.

THE STATE OF THE MULTISPECIES DEMERSAL FISHERIES FROM THE UNITED KINGDOM TO THE STRAITS OF GIBRALTAR

by

Fátima Cardador (IPIMAR, Lisbon, Portugal) and Javier Pereiro (IEO, Vigo, Spain)

The results of the assessments of the most important demersal stocks like hake, monkfish, megrim and sole are presented as evidences of the state of the multispecies demersal fisheries in the Bay of Biscay (Divisions VIIIa and b). Hake, monkfish and megrim distributed in this region belong to stocks or management units with a wider distribution area while others like sole are considered to be isolated stocks in this area. Trends in total catches and in spawning stock biomass, recruitment and fishing mortality are presented. Short-term effects in catches and in spawning stock biomass produced by different exploitation scenarios are also given, as well as the current technical measures.

The Ibero-Atlantic demersal fisheries (ICES Divisions VIIIc and IXa) are described in terms of landings, fleet components and countries involved. The state of the demersal fish stocks of hake, monkfish and megrim are shown. Trends in total landings and in spawning stock biomass, recruitment and fishing mortality are presented. Short-term effects on landings and on spawning stock biomass corresponding to different options of fishing mortality are referred. Current technical conservation measures applied to each stock are mentioned.

IMPACT OF TECHNICAL MEASURES FOR THE MAIN «MÉTIER» ACTIVE IN THE BAY OF BISCAY

by

André Forest (IFREMER, Nantes, France)

Most of the demersal fisheries in the Bay of Biscay are composite, i.e. a given resource, composed of several stocks, is exploited by various gears (multispecies fisheries). Fishing can operate, according to the gear, the area or the season, on different components (juveniles, adults) of the populations (sequential fisheries).

As a consequence, technical interactions are strong between the various métiers exploiting these resources. An ICES Working Group devoted to fisheries in the Celtic Sea and Bay of Biscay area has analysed these interactions and brought the main conclusions presented here.

It has then been possible to describe to the fisheries managers the basic characteristics of the competition between various métiers targeting the same resources and the resulting conflicts of interest. It became obvious that relevant technical measures can be decided and enforced only when socio-economical objectives are defined in a concerted process between the authorities and the industry.

The analyses clearly demonstrated the necessity of coherence between the various types of technical measures (mesh sizes and landing sizes for instance) at the risk of decreased efficiency of some of them.

At last, they indicate that most of the demersal fish stocks in this area are overexploited and that a substantial reduction of the fishing effort is necessary if an improvement of the fishing vessels' profitability is to be expected. Moreover, the reduced exploitation of juvenile fish would have a positive long-term effect on the overall level of landings. The gains and losses will be different according to the métiers which will appreciate differently the impact of given management measures.

SCIENTIFIC BASIS FOR MANAGEMENT OF CRUSTACEAN RESOURCES IN IBERIAN WATERS

by

**Aura Cascalho (IPIMAR, Lisbon, Portugal), Ana Maria Caramelo (IPIMAR, Lisbon, Portugal)
and A. Celso Fariña (IEO, La Coruña, Spain)**

The trawl fisheries for crustaceans in Iberian waters (ICES Divisions VIIIc and IXa) are commercially important due to their economical value.

The characteristics of the biology of crustaceans and of their fisheries make the application of usual management methods difficult. Among others we can evidence the behaviour and the discontinuity of the distribution (stocklets), species sedentarity and discontinuity of growth due to moulting. The fishing effort and corresponding catch is also difficult to quantify, given the amount of discards and its multispecies aspects, caused by the capture of several species together in mixed fisheries, and by biological interactions between species.

The purpose of this short note is to set out and discuss the basic concepts of the models in use in the assessment and management of crustaceans and the data requirement for the application of these models.

**THE QUALITY OF LANDED PRODUCTS : A FUNDAMENTAL FACTOR
IN THE BAY OF BISCAY FISHERIES**

by

Alain Baranger

**President of the National Commission for sardine, anchovy and sprat
of the National Marine Fisheries Committee (France)**

Among the most important causes of the recent crisis in the small-scale fisheries, the massive increase in imports of marine products from outside the Community played a major role.

For various reasons, the fish market is tending to become global and Europe is becoming the place of convergence for the products of the sea.

Faced with this situation, European fisheries, and particularly French ones, have an important asset : quality. Some trials are in progress in France to improve the consumer image of products, ensuring a guarantee of freshness and quality. These could be extended and would be a way of increasing French and Spanish fishermen's incomes.

SMALL PELAGIC COASTAL FISHERIES: EVOLUTION IN THE EXPLOITATION OF THE ANCHOVY IN THE BAY OF BISCAY, AND OF THE IBERIAN SARDINE

by

José M. González Gil de Bernabé

General Secretary of the National Trade Union of Fishermen (Spain)

The communication focused on the followings aspects of the small pelagic fisheries in this area :

A- Anchovy

- Description of the historic evolution of the fishery of the anchovy and specification of the historical facts that affected to it,
- Action of the Fishermen Organisations in the management of the fishery,
- Current problems due to the appearance of vessels provided with new technologies with high catch capacity,
- Socio-economic importance of the fishery,
- Reference to the fishery in the Gulf of Cadiz,
- Analysis of exchanges of quotas.

• **B- Iberian Sardine**

- Background, historical evolution and importance for the canning sector,
- Market policy as a limiting factor in the exploitation of a resource that up to now has been stable.

C- Other small pelagic fisheries

- Current problems with the *Trachurus trachurus* Linnaeus (market control and lack of minimum size harmonisation).

CHANGES IN THE SARDINE AND ANCHOVY STOCKS IN REGION 3

by

Graça Pestana (IPIMAR, Lisbon, Portugal) and Josú Santiago (AZTI, Basque Country, Spain)

The communication deals with the following aspects :

A- Sardine stock

The fishery of sardine is one of the most ancient fisheries along the Iberian Atlantic coastal waters and is performed by Portuguese and Spanish fishermen using purse seine gears. Catches from the stock (ICES Divisions VIIIc and IXa) show high fluctuations between years. During the period 1940–1994 the minimum catch was 49 000 tonnes (in 1949) and the maximum catch was 250 000 t (in 1961). The present catch is around 140 000 t per year. The natural variability in the abundance of this stock is the main cause for these fluctuations. Research on this resource focuses on its distribution, behaviour and abundance estimates provided by the research surveys.

B- Anchovy stocks

Two management units or two stocks of anchovy are considered: one in Division IXa (West Iberian Atlantic coast) and the second in Sub-area VIII (Bay of Biscay).

Anchovy in Division IXa has been caught by Portuguese and Spanish fishermen. Current Portuguese catches do not exceed 1 000 t per year, and the most important Spanish catches take place in the Gulf of Cadiz, ranging from 3 000 t to 6 000 t every year.

Since the 40s, anchovy in the Bay of Biscay has been exploited by French and Spanish purse seiner fleets. The maximum catches were taken in the 60s with a peak of 84 000 t. These catches were obtained with a modern fleet including 620 units. Since then till the 80s, a sharp decline in the catches have occurred (8 000 t in 1986) and the number of vessels has been reduced to 250. The catches increased to 30 000–40 000 t in the 90s, due to several consecutive good recruitments but also due to an increase in fishing effort by the arrival in the fishery of 175 French boats using pelagic trawl. Despite this apparent recovery of the stock, the estimated biomass between 1987 and 1994 is much below historical biomass that had been realised in the past.

FISHERIES MANAGEMENT: ATTRIBUTION OF TACS AND QUOTAS

by

Carlos Albuquerque

Director for the Fishery Resources and International Relations (DGP, Lisbon, Portugal)

An example of the allocation of the Portuguese quota of hake by vessel is described. Selected criteria and main reasons justifying the method applied are given.

COASTAL FISHERY MANAGEMENT: BASIS FOR RESPONSIBLE EXPLOITATION

by

Rafael Conde de Saro

General Director of Fishery Resources, Fisheries General Secretariat, SGPM (Spain)

1. Indirect management of the fishing effort by TACs and quotas,
2. Direct management of the fishing effort through limitation of the capacity and the fishing time (maximum levels of effort by fishery),
3. Management and regulation of the national fishing activities:
 - limitations of the fleets by gears and fishing grounds: Cantabrico, North West, Gulf of Cadiz,
 - conditions to control fishing: modalities, census by modalities and changes of modalities,
4. Participation of Professional Associations, and Associations of Producers and Fishermen Associations in the management of the resources:
 - the maximum captures for pelagic species in the Cantabrico and North West.
 - Fishing plan for anchovy in the Gulf of Cadiz.

MANAGEMENT OF ARTISANAL FISHERIES: THE CASE OF THE BASQUE COUNTRY

by

José L. Espel Fernandez

Vice Fishery Advisor, Basque Country (Spain)

There are a number of problems related to the management of an artisanal fishery in the Basque country: over-exploitation of the fishery, ancestral customs, regulations of gears by local producers associations themselves in some cases contrary to scientific advice.

On the other hand the industrial decline of the region leads to an increase of the pressure on the artisanal fishery with the presence of illegal fishermen.

In a great number of harbours, artisanal fishery coexists with the industrial long-range fishery and the decline of the latter influences the growing fishing effort of this artisanal fishery, as mentioned above.

The problems of long range fishing are repeated in the small scale fishery that operates along a short coast (120 km). These problems include deficient regulations, gears infraction, irregular captures and a strong social pressure.

MANAGEMENT OF FISHERIES IN THE BAY OF BISCAY AS SEEN FROM THE FRENCH PERSPECTIVE

by

Rémi Toussain

Director of Fisheries and Aquaculture (Paris, France)

A- Main features of the living resources (fisheries and aquaculture) production in the Bay of Biscay

- variety and multiplicity (resources, enterprises, métiers, products, markets, landing and processing sites, producers organisations),
- collective consciousness of this production role in the cultural, social and economical equilibrium in the whole area,
- efforts of political and administrative regional structures to ensure sustainable use of the potential of this area.

B- Mandates and roles of the national administration

- ensure resource sustainability,
- define users rights allocation mechanisms,
- enforcement and respect of international, European and national legislation,
- prevent or arbitrate conflicts between users (groups),
- enforcement of overall governmental orientations (European cohesion, employment priority).

C- In the Bay of Biscay context, analysis of the implementation difficulties and of the problems related to:

- complexity of the sector,
- multiplicity of actors having often diverging interests,
- worrying state of exploitation levels of the main resources,
- quasi-saturation of the coast line for marine aquaculture.

SOME PROBLEMS AND SUCCESSES OF MANAGEMENT IN THE NORTH-EAST ATLANTIC

by

David de G. Griffith (ICES)

The presentation compared stock development in different areas. The examples discussed were:

1. Anchovy in the Bay of Biscay (ICES Division VIII),
2. Atlanto-scandian herring and specifically the Norwegian spring-spawning component of that stock complex,
3. Haddock in ICES Division VIa,
4. Northern hake.

The first point to be noted is that these stocks are all decreasing. This may be a result of changes in the productivity of the environment, or it may be a result of too heavy fishing or both. However, whatever the cause continued fishing will aggravate rather than help the situation. Even when the environmental factors are the main cause for the decline we cannot just sit back and do nothing. We must adjust our fishing to the productivity of the environment. Management must respond actively to stock changes whatever the causes may be. This has not been the case with these stocks, and the projections of decline became true.

The second point in the comparison is that all stocks when declining change distribution and migratory behaviour, something that can confuse the analysis of the stock status. For example comparison between the anchovy in the Bay of Biscay and the Atlanto-scandian herring show similar patterns as in the comparison between the haddock in ICES Division VIa and the Northern hake. There are dramatic changes in the distribution and migratory pattern in response to high fishing pressure.

The fisheries scientists are in this light asked the following: should the strategy be to continue to fish at the existing high level of mortality, or should the catches be reduced now to allow the stock to recover? Using the analogies outside the Bay of Biscay this question could be re-phrased: should catches be reduced now with a hope of stock recovery, or should we continue fishing and experience the catch decline in the medium term (for Northern hake probably within 3-4 years)? The choice seems to be how the accumulated catch should be distributed over time and not how the total amount of fish available to the industry should be accumulated in the longer run. If the fishing mortality is not reduced the stock will decline, and the catches will be reduced in consequence. While the fish stocks show variation in their annual productivity, on average there seems little hope of a general stock recovery under the present fishing pressure in the Bay of Biscay.

As a challenge to the managers and professionals the speech concluded with a proposal to link the annual TAC directly to the latest stock estimate, e.g. a fixed percentage of the spawning biomass. This would allow the fishing to fluctuate in phase with stock development. A similar strategy has been adopted for the North Atlantic salmon.

RECENT DEVELOPMENTS IN FISHERY MANAGEMENT POLICY

by

Alain Laurec (EC, DG XIV, Brussels)

The Common Fisheries Policy does not recognise scientists, professionals and managers but is a democratic system with many stakeholders; it is a management system with consultation and dialogue. There are weaknesses in the Policy, but the stakeholders blaming each other for the imperfections of the system cannot overcome these.

The CFP has three elements: Resource Conservation, Market Regulation and Structure of the Fishing Sector. The Policy is based on decisions in the Council of Ministers initiated by Commission proposals. In this respect everything is quite transparent and the CFP has the form it has to day, not because Brussels said so but because all stakeholders have developed the CFP together.

The EC 1991 report clearly identified a need for better links between the three wings of the CFP. Very schematically, the TAC and quota policy – Resource Conservation - results in decisions being taken at an annual rhythm for a species in a zone. The structural policy, e.g. building a boat has a much longer time horizon, the boat will be there for 10 to 20 years, will have access to several zones and several resources.

The lack of connection between the element of annual biological management by stock and the structural element that control capture capacities has lead to the consideration that direct control of fishing effort would better than the TAC system allow for the establishment of the desired link between these two elements. Therefore, the Commission sees merits in management in terms of effort and capacity regulation. But it has so far not been politically possible to implement such management schemes.

Another element in future management schemes is a more direct involvement of the stakeholders in the management process. The Commission has studied the Dutch experiences in this respect in details and sees real possibilities for improvements through such strategies.

The Commission has three requests to the scientists:

1. The Commission wants a direct link between research and the management needs for information, a link that is not always functioning. The best example of this is when the Commission asked the scientists for information on the relation between the characteristics of the fishing vessels and their fishing power. There was very little response from the scientists. That means that EC finds itself unarmed for the coming discussion on effective management through the control of fishing efforts
2. The available scientist knowledge you have must be made more readily accessible and more clearly presented. Through such measures the information will be much more useful and lead to more informed decisions. Making scientific knowledge more useful is probably to be able to simplify. The scientists are much firmer when they say that the exploitation rate must be reduced than when they say how much can be taken in 3 or 4 years. But the advice to the Commission does not stress this imperfect certainty. The Commission partly takes the responsibility for this because if the scientists answer poorly, it may be because the Commission has phrased the question poorly. The usefulness of this dialogue exercise is that each of us tries to do our job a little better.
3. The nature of choices should be clearly perceived, not only by the administrative managers, by the ministers, but by the public opinion, in particular how the general public will perceive what is the nature of the choices involved. When a reduction of the TAC is refused, what has happened? The industry has not obtained fish that the Commission was hiding in its drawers in Brussels because these fish simply do not exist. The reality of the possible choices is very often: a sacrifice in the short term, benefits in the medium and long term, or what the CFP has mostly done since its beginning: avoided the inconveniences in the short term and pushed forward the moment of sacrifices. But everybody must understand the reality of the choice. The task is difficult for the scientists because you have to transmit a simple message when you have the feeling of an extremely complex situation. But at the level of a political decision complex arguments are often useless.

ECONOMICAL ASPECTS OF FISHERIES IN THE BAY OF BISCAY

by

Yves Perraudau

Centre d'Etudes sur l'Economie Internationale et l'Entreprise, (University of Nantes, France)

Fisheries economy is a field of practice for theory, methods and assessment techniques for economical and management sciences. Despite obvious sector-related peculiarities, many sets of problems related to the fisheries sector are rather similar to others known in economy, such as optimal allocation of production factors or increasing international competition in marketing fishing products. It is essential to use known economical references, already in use in the analysis of other sectors in order to understand the overall economic situation of fisheries.

The resort to this kind of tool for an overall analysis makes necessary unavoidable prerequisites related in particular to the quality of market information; its transparency is far from being reached in the marine fisheries and aquaculture sector.

The work undertaken since 1992 aims to mitigate this deficiency with the cooperation of the industry and has resulted in the publication of:

- a bulletin (three issues per year) giving an overall economic overview,
- a note on the «advanced results», giving by the end of the first quarter of the year (n+1) the main preliminary results of the year (n),
- an annual report giving detailed data and analyses related to fishing and aquaculture results.

DISCUSSION AND CONCLUSIONS

General Comments

There is concern about the state of the resources in the Bay of Biscay. Too many fish are caught, and the fish caught are too small. This is the Scientists' message and the Professionals and Administration involved in the fisheries now share this viewpoint. The consensus is - in some cases - relatively new because the biologists have had difficulty in conveying this message. This statement of agreement was met with some scepticism as to whether it in the end will be politically possible to take appropriate measures, e.g. introduce an increase in the legal minimum mesh size and the binding introduction of selective trawls.

However, fisheries management is not just a matter of biology. There are socio-economic elements, e.g. reducing fishing effort only by vessel decommissioning would require that other industrial sectors would have to absorb a large number of fishermen who have had to leave the fishing sector.

The problems facing the fisheries in the Bay of Biscay are complex: e.g. there are several fleets and types of gears, and several fisheries include heavy discarding. The problems also include international aspects, e.g. for the Northern hake stock that is exploited by more than 14 countries, although the French and Spanish fleets take 80% of the total catch.

Understanding the role and viewpoints of stakeholders

The three stakeholder groups presented at this meeting (Professionals, Managers and Scientists) suffer from a certain lack of understanding for each other's points of views, area of competence and limitations. This is not the result of a deliberate choice by a stakeholder, and it is therefore necessary to find means to overcome this lack of understanding and search for ways of collaboration. An element in this search is future meetings with several sectors and professions represented.

The lack of understanding stems, at least partly, from the time scale of the various analyses. Scientists tend to look more at the long- or medium-term problems, while the industry is faced with the immediate need for an economic revenue to ensure survival in the short run. When providing management advice fisheries scientists often have to consider the short term. As was discussed several times during the meeting the short-term projections have a different precision compared to the more structural advice on reduction of the fishing mortality, i.e. the fishing effort. Industry and management do not always appreciate this difference, but the precision that can be achieved has implication for what is the best form of management.

The time scale problem is not only a management issue but also an everyday economic problem facing the Professionals. The Professionals underline the problem of immediate survival, so the question of regulating fisheries is how to meet both short- and long-term issues. There are two possibilities: either the sector will be regulated through the market, often a brutal form of regulation or alternatively, the State intervenes with a policy that softens the socio-economic sufferings. Such softening policies will need a scientific basis to suggest that the measures will work towards achieving more sustainable fisheries than those experienced today.

The three sectors feel themselves misunderstood:

1. Scientists because they see that they satisfy neither the Administrations nor the Professionals.
2. Managers who feel themselves misunderstood because they are always seen as the Bad Guys.
3. Professionals who have to create daily miracles of turning fish into money - and each day there are less fish. The Professionals of different types of gear feel themselves misunderstood by others Professionals.

To remove the misunderstandings, the role of the stakeholders must be recognised by all participants in the fisheries. This recognition implies that questions should be addressed by the right persons, e.g. there are questions such as sharing of the overall resource, which a fisheries biologist cannot answer. So, insisting on asking these questions of fisheries biologists will not move the dialogue forward.

The understanding problems are not only between the Professionals, Managers and Scientists, but also within each group. The solution to many problems requires there is no suspicion between member states and between groups of fishermen. Therefore, more discussion among fishermen from the different member states is needed to make an open debate possible and to jointly search for solutions and compromises.

All stakeholders are absolutely and totally interrelated and cannot ask miracles of each other. There must be dialogue, tensions and open conflicts must be replaced by joining forces in the search for compromises that are acceptable to all stakeholders, everyone has to accept their responsibilities in their area.

Uncertainties in the advice

All scientific evaluations involve uncertainties, but it would be catastrophic to hide behind the uncertainties in order not to take necessary decisions. The uncertainties must be explained and that is where the dialogue begins. E.g. the uncertainties on the development of the hake stock essentially relates to the coming recruitment, and that prevents precise projections on what the captures will be in two or three years. This is extremely important in the dialogue between Scientists, Managers and Professionals that the nature of the uncertainties is well perceived.

Contact between the Scientists, The Fishing Sector and Management

The need for close contacts was underlined and it was concluded that there was room for improvements. It was noted that the Scientists should not feel pressed when the Fishing Sector asks them for explanations. The sector wants a dialogue, but sometimes the industry felt the need to put pressure on the biologists to get the Scientists to provide answers. The Scientists should learn to live with these «pressures» and actually be honoured as it demonstrated the recognition of the role of the Scientists. The Scientists should stand their ground and to the best of their ability provide an impartial and objective opinion based on data and analysis.

Discards

There are several fisheries in the Bay of Biscay in which very significant amounts of fish are discarded.

Discards occur for many reasons: there is discard if the fisherman considers that the transport and landing cost of what he has caught will be higher than what he gets by selling. That is independent of the regulations, but it is an essential part of the discards. It can be remedied by more selective techniques, which should be the first attempt to reduce discards. This includes proposals of increasing minimum mesh sizes, introduction of more selective devices or the banning of certain types of fishery in certain sectors where there are many juveniles. This is simple in theory, but such proposals are in practice confronted by groups of fishermen who ask for derogation.

Within the Common Fisheries Policy (CFP) there is the specific problem of the discards caused by the sharing of quotas - the relative stability. National quotas are not necessarily compatible for different species, which are taken at the same time. The quota-sharing between EC members states is very imperfect and regularly results in a member state having exhausted its quota on a species, while the quota on the accessory species has not been so. The Managers favour exchange between member states, and the Commission is usual inflexible towards requests for increasing TACs. A Commission proposal is that when the quota is exhausted for a species but not for an accompanying species the fishery would not be closed but the excess catch would be subtracted in the overall balance sheet, i.e. from the next year's quota.

Input regulation of the fisheries in the Bay of Biscay

The CFP is based on a TAC system. The possible replacement or supplement of this policy with input control as advocated by the EC met with significant problems. These problems include comparison of effort measures between, e.g., trawlers and static gears. The only fishing effort measured at present is that of the trawlers – and a need to look at the static gear and find equivalencies with the trawl was recognised.

Effort control as an alternative or supplement to the existing TAC control is interesting for the Commission because the Commission finds it desirable to attain a lasting reduction of the exploitation rate. The Namibian hake may serve as an example with many analogies to the Northern hake: similar species; different zone; same type of pressure. The example shows that diminishing the fishing pressure can have an immediate effect on stock recuperation.

The Managers - the EC - deal with the fleet capacity on a national scale. But within countries there are several fleets and the capacity discussion can be addressed on the finer level - the national fleet can be segmented, and the segmentation that existed in the past can be improved. But fleet segmentation in terms of capacity reduction means that some fleets will be reduced more than others, which is something that politically has been difficult to accept.

In recent regulations on fishing effort the EC has used engine power measured in kilowatt as a measure of the power of the trawlers. The engine power was used because the Scientists proposed nothing better. This is a good example where a dialogue would be very helpful, where close cooperation between the Managers' needs and the production of scientific knowledge should go hand in hand.

For the fixed gears limiting the kilowatts will not result automatically in a reduction of capture capacity; the right measure for this group of gears deals with the fishing devices, their length and their number. But before proposing any management measures leading to effort reduction for the fixed gears, the statistics on the lengths and the dimensions of the devices must first be available. So what management wants for the fixed gears is 1) a guarantee that the selectivity will not get worse; 2) certainty that there is sufficient entry control to the fishery and 3) control that the potential inflation of the efficiency of the fixed gears and trawls is under control.

Specific problems related to the stock and fisheries in the Bay of Biscay

The discussion included a number of specific problems in the interpretation of the development of the fisheries on and the stock structure of both anchovy and hake.

The Scientists and Managers were adamant: there are not sufficient resources in the Bay of Biscay for the capture capacity that exists at present. Low TACs, when the ships are there, will generate fraud or serious control problems, and this suggests that many fisheries problems in the Bay of Biscay basically come from the existing over-capacity. This over-capacity must be faced seriously; regulations must take social dimensions into account to avoid throwing people into unemployment without accompanying measures. But it is worse to stop this development, as was demonstrated by the previous CFP. The reduction of captures should be done in an organised manner or there will be a crisis that will eliminate a number of boats in a disorganised manner.

The proposed restriction of fishing in the Bay of Biscay was met with hesitation and the experience with the closure of the herring in the North Sea was recalled. This closure, for about five years, is claimed by some to be the cause of the destruction of an entire industry, and when the stock came back it could unfortunately no longer be fished because there was nobody to manufacture the herring. It was recognised that the proposal for reduction in the Bay of Biscay is not for a closure, but a request for a 70% decrease of the present fishery. It was pointed out that this 70% decrease in hake capture must be compensated at the level of the boat's turnover. Those fishing hake could turn to anchovy fishing; however, the anchovy is according to the assessment unable to sustain an effort increase. Another solution for these boats could be to turn to bottom trawling, but sole and Nephrops, which would be the most interesting species, are overexploited. The industry must join forces with the Managers to find ways to implement the scientific advice and at the same time take the ship's economic needs into account.

There were a number of specific questions. These were addressed on the spot, but mostly the scientific groups would have to look into the problem in more details. These questions included:

- The specific status of hake in ICES Sub-area VII ;
- The scientific and logical basis for the exchange of the anchovy quotas ;
- The reduction in minimum legal landing size of the horse mackerel ;
- The status of the southern hake stock and measures to be taken for an as-soon-as-possible recuperation of this stock.

The answer to the question of the hake in Sub-area VII could not be given immediately; the Scientists need to look into this in the working group and to investigate further. The Assessment group will listen to what the La Coruña fishermen are saying about high catch rates for hake in this area and see if this information is representative of what other fleets find. Are they just finding a pocket of fish which maybe changes the picture only a little bit, or is it something which is happening over a broader area and changing the entire picture? The other problem is that it is very important to look at the historical series. This year's increase may be purely circumstantial.

The southern hake stock is much more worrying than the northern. The tendency is towards a further decrease. There is a bad exploitation pattern. Last year's relatively good recruitment was, as we all know, not taken advantage of and the over-exploitation of juveniles continued. Any plan for the sector itself will be affected by the resource's inherent fluctuation.

Convenor's Concluding Comments

ICES President and Convenor of the Meeting, Alain Maucorps, noted that many persons had taken the floor and some perhaps had not had the time to fully express themselves. This showed the need to continue the discussions. A key conclusion from this meeting is that the dialogue must be voluntary and based on the active will of all stakeholders in fisheries management for progress towards more healthy stocks. This is a condition *sine qua non*.

With regard to the lack of understanding especially of the scientific messages, steps have already been identified at the meetings of the research institute directors of the Community. As a first step a workshop will be held where scientists and communication experts will get together to try to make scientific advice more comprehensible. The scientists' messages are not clear and there is room for improvements. Such improvements can be achieved with the help of communication experts, overlooked by the scientists to ensure that their messages are not distorted.

Wide-ranging discussions like this meeting generate frustration because the discussions touch on many interesting questions without time to go into depth with the issues. Some, therefore, will leave with frustrations that will generate continuation of discussions at more targeted meetings.

One issue has not been mentioned. In order to address themselves to the professionals, the scientists need persons to talk to. It is not always easy to talk directly to the fisheries professionals, who are very busy people. It should perhaps be considered to spend public money on such persons in the most representative professional organisations. This would make the dialogue easier.

The scientists are not professionals of communication, but the system cannot rely exclusively on communication professionals who may fiddle or improve the image of the message rather than conveying its content.

In spite of the possible frustrations this exchange of views was found to be useful. This 10th ICES Dialogue Meeting was held in a country of the southern ICES zone. There will be others, more targeted. The discussions can be on different levels, e.g. community or national levels. These levels harmoniously complement one another.

ANNEXES

ANNEX 1

Tenth ICES Dialogue Meeting

Timetable

19 October

- 09:00 Registration
09:30 Introductory remarks and welcome
- A. Maucorps, President of ICES
 - M. Pérez, Mayor of Vigo
 - J. Loira, Secretario General de Pesca Maritima de España

Overview

09:50 A. Fernandez – Oceanography and fisheries in the Bay of Biscay and the Iberian Atlantic seas

The Demersal Fisheries

- 10:20 J. Le Gall – Exploitation of three target species in the Bay of Biscay (sole, hake and Norway lobster): interactions between métiers, implications and potential solutions
10:35 P. Jorge – Problems in the Portuguese coastal trawl fisheries sector
10:50 S. Touza – Problems in the Spanish coastal trawl fisheries sector
11:05 C. Mota – The crustacean trawl fishery in Portuguese waters
11:20 Coffee
11:50 A. Cascalho, A. Caramelo and C. Fariña – The scientific basis for the management of the crustacean resources in Iberian waters
12:05 F. Cardador and J. Pereiro – The state of the main demersal resources from the United Kingdom to the Straits of Gibraltar
12:20 A. Forest – The impact of technical measures on the principal métiers in the Bay of Biscay
12:35 Discussion
13:00 Lunch
14:30 A. Baranger – Exploitation of anchovy in the Bay of Biscay: access to the resource, technical aspects and coexistence
14:45 J. Gil de Bernabé – Small pelagic coastal fisheries: evolution in the exploitation of the anchovy in the Bay of Biscay and of the Iberian sardine
15:00 G. Pestana and J. Santiago – Changes in the sardine and anchovy stocks in Region 3
15:15 Discussion

Fisheries Management

- 15:35 J. Espel – Artisanal fisheries management: the case of the Basque Country
15:55 Refreshment break (tea/coffee)
16:25 C. Albuquerque – Fisheries management: attribution of TACs and quotas
16:45 R. Conde de Saro – Coastal fisheries management: the basis for responsible exploitation
17:05 R. Toussain – Management of fisheries in the Bay of Biscay as seen from the French perspective
17:25 A. Laurec – Recent developments in fishery management policy
17:45 Discussion
18:30 End of session
21:00 Dinner at the invitation of the City Council (transport to be provided from hotels)

20 October

Synthesis

- 09:00 Y. Perraudeau – Economic aspects of fisheries in the Bay of Biscay
09:20 D. de G. Griffith – Some problems and successes of management in the North-east Atlantic

Highlights and Outcome of the Meeting up to this point

09:40 Scientists (J.-J. Maguire)
09:55 Managers (F. Poinsard)
10:10 Industry (C. Mota)
10:25 Refreshment break (tea/coffee)

Concluding Session

10:45 General discussion
12:45 Concluding remarks by Convenor
13:00 End of meeting

ANNEX 2

Tenth ICES Dialogue Meeting

List of participants

EC

Laurec, Alain

FRANCE

Baranger, Alain
Charrier, Frederic
Forest, André
Josellon, Lucette
Lacroix, Nicole
Le Gall, Joseph
Parrés, Alain
Perraudeau, Yves
Poinsard, Francis
Poisson, Henry
Saudray, Yves
Toussain, Rémi

CANADA

Maguire, Jean-Jacques

PORTUGAL

Albuquerque, Carlos A.
Baptista da Silva, Pedro J.
Campos, Aida
Caramelo, Ana María
Cardador, Fátima
Freitas Mota, Carlos N.
Gil Sousa, Joaquim
Jorge, P.
Lima, Carmen
Martín, Rogelia
Oliva da Silva, José
Pestana, Graça
Ribeiro Cascalho, Aura

SPAIN

Alonso, Lamberti, Gonzalo
Álvarez, Frédéric
Area Gil, Francisco
Barbara Costas, Antonio
Barciela Villa, Agustín
Brion Ageitos, Rogelio
Camiñas Hernández, Juan A.
Carceller, Teresa
Carpente, José
Casas, Miguel
Cendrero, Orestes

Conde de Saro, Rafael
Crespo, Jesús
Delmas de Salcedo, Miguel A.
Domínguez Bea, Joaquín
Espel, José Ignacio
Espinosa, Elena
Echeverts Durán, Jesús
Fariña, Celso
Fernández García, Alvaro
Freire Lino, Francisco
Fuertes Gamundi, José Ramón
García Elorriaga, Antonio
García Neira, Manuel
García Piay, José M.
Gil de Bernabé, José M.
Gómez, Alfonso
Gómez Cos, Alvaro
González Fernández Juan José
González-Garcés, Alberto
González García, Hugo
Gordejuela Aguilar, Ramiro
Gorriaran Laza, Gregorio
Guerra, Angel
Guisande, Castor
Hermida Trastoy, Andrés
Hernández Rodríguez, Juan J.
Igelmo, Alfredo
Iglesias Prieto, Reinaldo
Irigoyen, José María
Labarta, Uxio
Lamela Cacheiro, José
Lens Lourido, Santiago
Loira, José
Longueira, Jesús
López García, Juan Manuel
López Peña, Francisco
Mariño Sanjuan, Francisco
Marques Carrera, Carlos
Martín-Bermejo, Iñaki
Martín Fregueir, Juan Carlos
Martínez, Francisco Javier
Martínez Portela, Julio
Massó Bolívar, Tomas
Menendez Braña, Fernando A.
Miguez, Alberto
Montoya, Rafael
Odrizola, José Manuel

Olaizola, Esteban
Otero Pena, Alberto
Paz Canalejo, Xabier
Pazos Vázquez, Manuel
Pereda, Pilar
Pereiro Muñoz, Javier
Pérez Contreras, Nélida
Pérez-Crebeiro, Antonio
Pérez Martín, Ricardo Issac
Povedano, José
Quiroga Lorenzo, Hector
Rivera López, Antonio
Robles Pariente, Rafael
Roca Dopico, José
Rodríguez Vázquez, José A.
Rosales Santiago, Eladio
Ruiz, Antonio
Ruiz Perea, Catalina
Ruiz Tapiador, Francisco
Saborido, Francisco
Sainza Sousa, Carmen
Salom Llorach, Santiago
Sánchez Carrete, Bernardo
Santaella, Eladio
Santiago Burrutxaga, Josu
Santiago Pereira, Laureano
Sobrino, Ignacio
Souto González, Manuel
Suárez de Vivero, Juan L.
Suárez Llanos, José A.
Tizón Ferreira, José A.
Touza, Sénen
Trujillo, Valentín
Ulloa Alonso, Edelmiro
Urbietta, Juan María
Uresberueta, Angel
Urruticoechea, José A.
Varela, Manuel
Vázquez, Antonio
Vázquez Alcantara, Joel
Velasco Garrido, Carlos
Vieira Pérez, Manuel
Vieites Baptista, Juan M.

ICES

De Griffith, David
Hopkins, Christopher
Maucorps, Alain