2007-2013 National Development Plan

THE IRISH SEAFOOD NATIONAL PROGRAMME 2007-2013

NDP
National Development Plan 2007 - 2013

Department of
Agriculture, Fisheries and Food
An Roinn
Talmhaíochta, Iascaigh agus Bia

BIM
Bord Iascaigh Mhara
Irish Sea Fisheries Board

ENTERPRISE IRELAND

Údarás na Gaeltachta

Bord Bia
Irish Food Board

IRELAND

THE IRISH SEAFOOD NATIONAL PROGRAMME

2007 – 2013

July 2010

Table of Contents

Preamble Irish Seafood National Programme 2007 - 2013

This Operational Programme has been prepared in accordance with Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund and Commission Regulation (EC) No 498/2007 of 26 March 2007 laying down detailed rules for the implementation of Council Regulation (EC) No 1198/2006 on the European Fisheries Fund.

Geographical Eligibility

Ireland is eligible as a non-convergence region for the purpose of the European Fisheries Fund. A detailed profile of the characteristics of the region where the seafood industry is located is contained in Section 3 (a) of this document.

Introduction to the National Programme 2007-2013

Background

Ireland's National Development Plan 2007-2013 provides for combined EU and national funding support of €216 million for development of the seafood sector and for a further €118 million national funds over the life of the plan which may be available on the basis of verified progressive change and restructuring within the sector. This funding support will give effect to the strategic vision which is set out in the Report of the Seafood Strategy Review Group 'Steering A New Course which has informed the National Seafood Strategy.

To realise this vision and to enable the seafood industry to restructure and innovate, an Operational Programme for 2007 – 2013 was compiled. The programme will be delivered through a number of measures and schemes which are geared to help the industry advance towards the vision and meet the targets set out in the strategy. The Operational Programme has been presented in two distinct but complementary plans.

Firstly, *The Seafood Development Operational Programme 2007-2013* which is co-funded by the European Commission provides the mechanism to channel structural funds from the European Fisheries Fund in the amount of €42.26 million to the Irish industry. The remaining funding from the Government's National Development Plan 2007-2013 will be delivered though the national funded Operational Programme (The Irish Seafood National Programme 2007 - 2013) which is complementary to the EU co-funded Seafood Development Operational Programme 2007 - 2013 which has been approved by the European Commission. The legal basis for all funding support is found in the relevant articles in Council Regulation (EC) No. 1198/2006 of 27 July 2006.

In the case of the co-funded Seafood Development Operational Programme, (2007 -2013) prioritisation was given to restructuring the Irish fishing fleet to help match catching capacity with available fishing resources. The three other elements included in that OP were measures for Inshore fisheries, environmental managements systems and local community based initiatives in areas dependant of the fishing industry. The remaining objectives and measures directed towards achieving a profitable and sustainable seafood industry are drawn together in this Irish Seafood National Programme 2007-2013 which will be funded by the Exchequer and where appropriate by the industry.

The Programme Presented in 2010.

The Irish Seafood National Programme 2007 – 2013 sets out 13 Measures which together contain 36 individual schemes that have been developed to address the Core Themes set out in the Report of the Seafood Industry Strategy Review Group. The Measures are drawn up to reflect the articles in Council Regulation (EC) No. 1198/2006 of 27 July 2006 which provide the legal basis for the Programme elements. Each scheme is founded on a specific Article or Articles of the Regulation and each will be limited to that which is permissible under the relevant Article(s).

The Core Themes cover the areas of Market Promotion, Business Development, Processing and Innovation, Fleet Restructuring, Aquaculture, Marine Environment and Conservation, Socio Economics and Education and Training. The schemes will address identified issues and opportunities in the seafood sector and will go towards the emergence of a profitable and sustainable seafood sector over the period 2007 – 2013.

The structure of The Irish Seafood National Programme 2007-2013 essentially follows the model set out in Council Regulation (EC) No. 1198/2006 of 27 July 2006 on the European Fisheries Fund.

Section One, provides a detailed background and description of the Irish Seafood Industry and the environment in which it operates. This chapter is common to that in the complementary co-funded *The Seafood Development Operational Programme 2007-2013* but contains a separate non technical summary of the Environmental Report produced as part of the Strategic Environmental Assessment process for this, Exchequer funded, Irish Seafood National Programme 2007-2013. Section Two contains the strategy impact indicators.

Section Three contains the major part of this Irish Seafood National Programme 2007 - 2013 with a detailed description of the 13 Measures and the schemes, priorities and targets attaching to each of the measures. On Page 83, a summary of the Core Themes, Measures and Scheme is presented. This Section also contains elements common to the co-funded *Seafood Development Operation Programme 2007 - 2013* such as an outline of demarcation with other activities and programmes. A summary of the planned deployment of financial resources to deliver the Programme is given at the end of Section Three in Appendix 2.

The targets set out in this Irish Seafood National Programme 2007-2013 are based on the Cawley Report "Steering a New Course: Strategy for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-2013", *Report of the Seafood Industry Strategy Review Group* (Dublin, 2006).

These targets are now only obtainable within a timeframe to 2020 due to the delay in the approval of this Irish Seafood National Programme 2007 – 2013 and the need for greater prioritising of the expenditure of scarce Exchequer resources to obtain value for money. All of the targets in this document are subject to this proviso.

Furthermore, the projected value of seafood output attributable to aquaculture investment, will depend on the species composition of the additional capacity generated from public and private investment in the sector.

The original targets and corresponding funding figures were set in 2007. The implementation of the Programme will be dependent on the availability of funding over the period of the Programme and the targets set will be adjusted as appropriate.

Section 1: An Analysis of the Fishing Sector in Ireland.

1(A) General Description of the Fishing Sector in Ireland

1(A).1 Analysis of National Circumstances

The Irish seafood industry is a vital indigenous industry which makes a significant contribution to the national economy in terms of output, employment and exports. Generating some 11,000 jobs in the coastal regions, the industry contributed circa €720 million to the national economy in 2005. This is equivalent to 0.45% of Irish GDP[1]. Geographically the fisheries industry is predominantly concentrated on the western seaboard and the harbour towns of the south and east coastline areas. The main industry stakeholders are the primary production sectors of fish catching and aquaculture, the primary and secondary processing sectors, the marketing sectors and ancillary industries such as net making, vessel repair, transport, and a number of other services.

Due to the industry's concentration in the more remote areas of the coastline, it plays a critical part in the sustainable development of the economic and social fabric of the many small communities it serves. The industry supports the economic viability of rural communities by maintaining working populations and communities in the more remote coastal regions typically characterised by low population densities, high dependency rates, below average levels of educational attainment and higher than average levels of deprivation.

While consumer demand for seafood is growing strongly, as illustrated by the growth in the sales value of Irish seafood from €617 million in 2000 to €720 million in 2005 the supply of seafood is facing difficulties mainly due to the declines in fish stocks, declining quotas and structural imbalances at catching and processing levels. The long-term sustainability and development of the Irish seafood industry will require a more integrated approach on the part of the various stakeholders along the value-chain, with a greater focus on deriving maximum value for fish, adopting more responsible fishing/farming practices, whilst safeguarding the environment and resource base.

Employment

The seafood industry supports the economic viability of rural communities, generating 10,975 jobs in the coastal regions and makes an important contribution to the national economy. These jobs are enormously significant as they maintain working populations and communities in remote coastal regions that are generally economically disadvantaged.

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[1] Source: Central Bank of Ireland Annual Report 2006

Table 1.1 provides details of employment by sector in 2000 and 2006.

	2000			2006		
	Full time	Part time / Casual	Total	Full time	Part time / Casual	Total
Fisheries	4,767	1,433	6,200	3,924	1,063	4,987
Aquaculture	830	2,075	2,905	718	1,218	1,936
Processing	2,110	2,097	4,207	2,205	662	2,867
Ancillary	1,500		1,500	1,185		1,185
TOTAL	**9,207**	**5,605**	**14,812**	**8,032**	**2,943**	**10,975**

See Table 3.10 in Section 3C(2) for a gender breakdown of industry employment.

The Fishing Fleet

As of November 2007 the Irish fishing fleet consists of 1,914 vessels registered in 5 segments (polyvalent, beam trawl, pelagic, specific, and aquaculture).

- The **Polyvalent** sector comprising 1,726 vessels, representing 90% of the vessels in the fleet and 56% of capacity (GTs).
- The **Beam trawl** segment comprising 13 dedicated vessels or <1% of the fleet.
- The **Pelagic** sector currently comprises 22 Refrigerated Sea Water Tank Vessels ranging in size from 27 to 71 meters, which together comprise 1% of the overall fleet (in numbers) and 31% of the capacity.
- The **Specific** segment comprising 127 vessels, which account for 7% of the fleet. The structure of the fleet is outlined in Table 3.5:
- The Aquaculture sector comprises 26 vessels.

Table 1.2 STRUCTURE OF THE IRISH FLEET

Source: European Commission, Fleet database (http://omaha.cc.cec.eu.int:6085/fleet/)

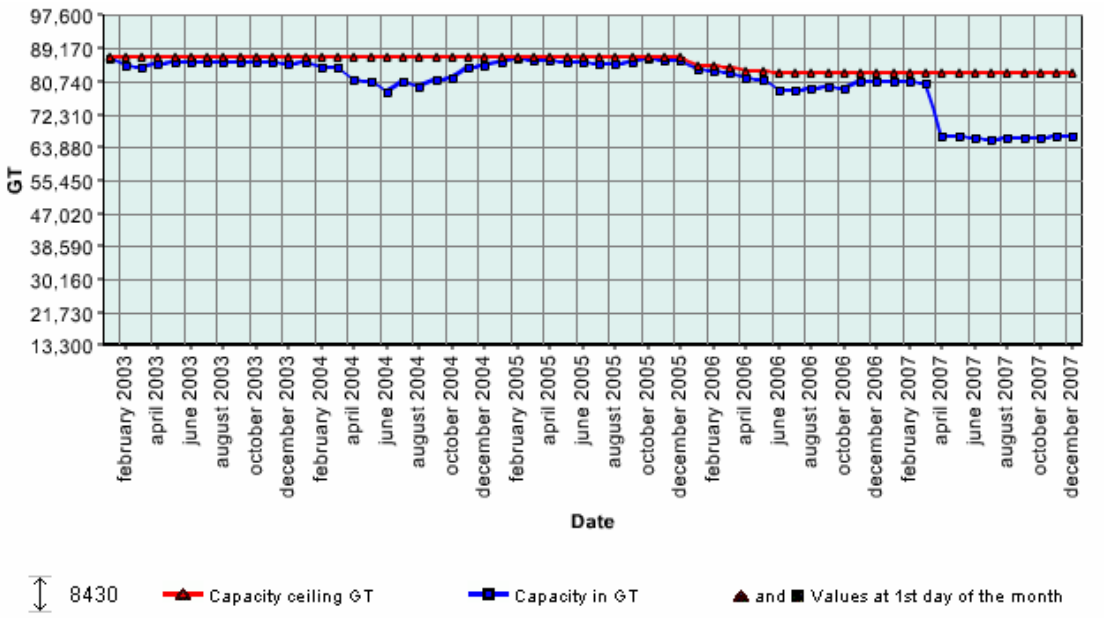
IRISH FLEET REGISTER 6/11/07

		Number	Average Length	GT	kW	Average age	Employment
Polyvalent	Inshore - Potting (LOA < 12m)	487	6.7	1,108	14,559	20.7	941
	Inshore - General (LOA < 12m)	962	7.7	3,924	30,963	24.2	1,859
	Coastal (12m ≤ LOA < 18m)	109	14.5	3,842	16,231	29.4	320
	Near-water (18m ≤ LOA < 24m)	103	21.1	13,869	38,503	22.8	604
	Offshore (LOA ≥ 24m)	55	28.2	13,918	33,136	18.5	276
	RSW Tank	4	28.7	1,247	2,881	20.3	52
	Vivier Tank (Crab)	6	21.8	1,179	2,108	9.2	33
Beam Trawl		13	25.2	1,813	6,645	25.6	73
Pelagic		22	49.4	21,810	35,164	10.0	276
Specific		127	13.1	3,249	14,880	32.5	446
Sub Total – wild capture fisheries		**1,888**	**10.2**	**65,959**	**195,069**	**23.7**	**4,880**
Aquaculture		26	27.7	4,478	10,468	24.7	
Grand Total		**1,914**	**10.5**	**70,437**	**205,537**	**23.7**	

In less than a decade the whitefish fleet has undergone unprecedented restructuring funded by private investment of €91 million and supported by State/EU grant-aid of €58.5 million. Two successive renewal programmes, the Whitefish Renewal Scheme and the Fleet Development Measure, have resulted in the introduction of 79 new and modern second-hand vessels into the fleet over the past 8 years and the withdrawal of an estimated 300 older and generally smaller vessels. Additionally 130 vessels have been modernised and more than 820 have undergone safety upgrades. Since 2005 a fleet decommissioning programme has seen the removal of 36 vessels from the polyvalent and specific segments amounting to 4,901 GT and 15,392 kW.

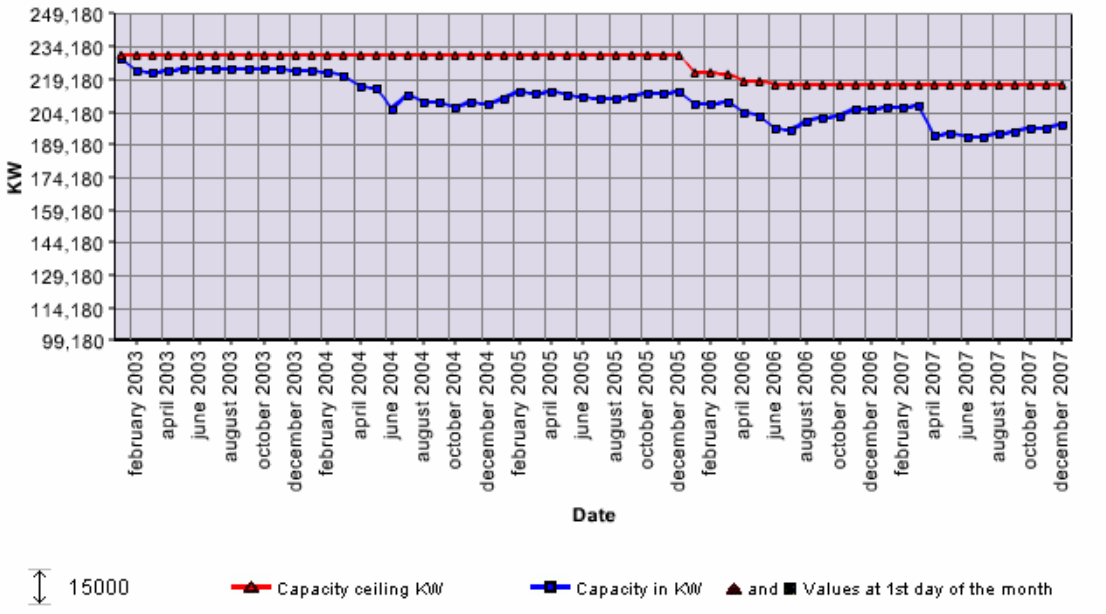
Ireland: Tonnage of the fleet compared to its tonnage ceiling.

Evolution between 1/1/2003 – 1/12/2007 (Source DG Fish)

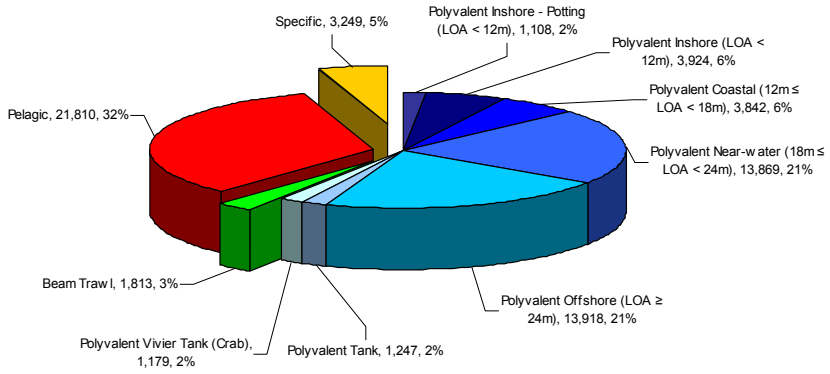


Ireland: Power of the fleet compared to its power ceiling.

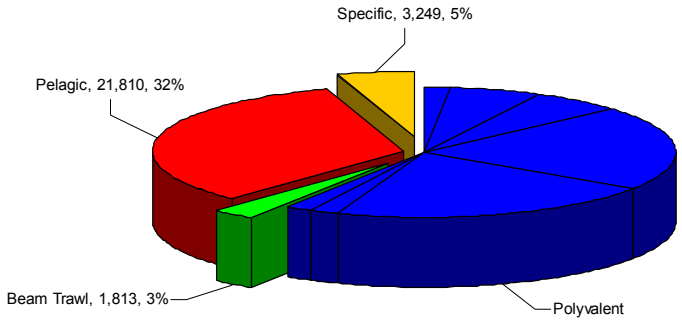
Evolution between 1/1/2003 – 1/12/2007 (Source DG Fish)



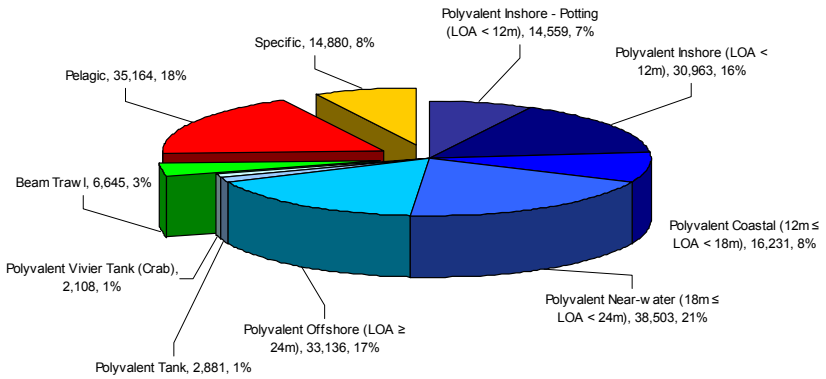
Fleet Segmentation (GT)

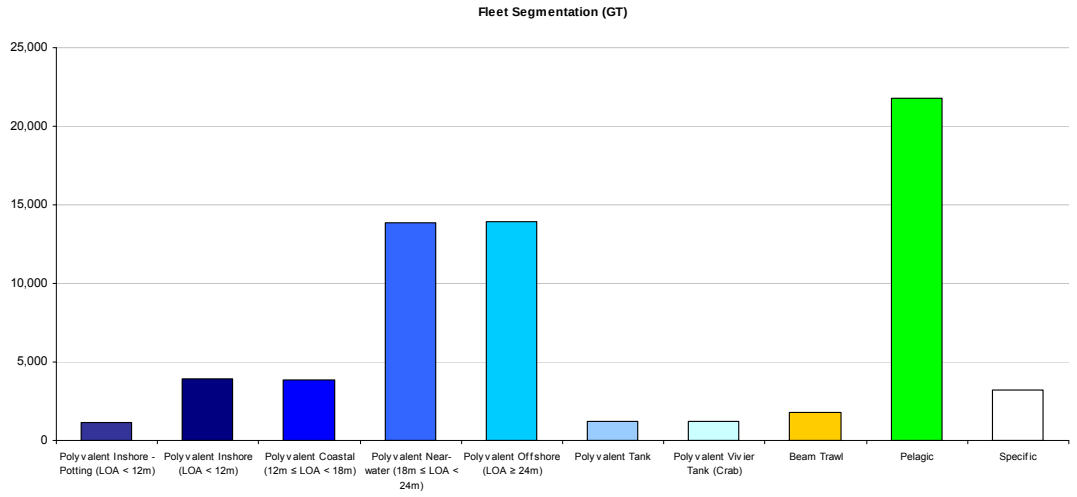


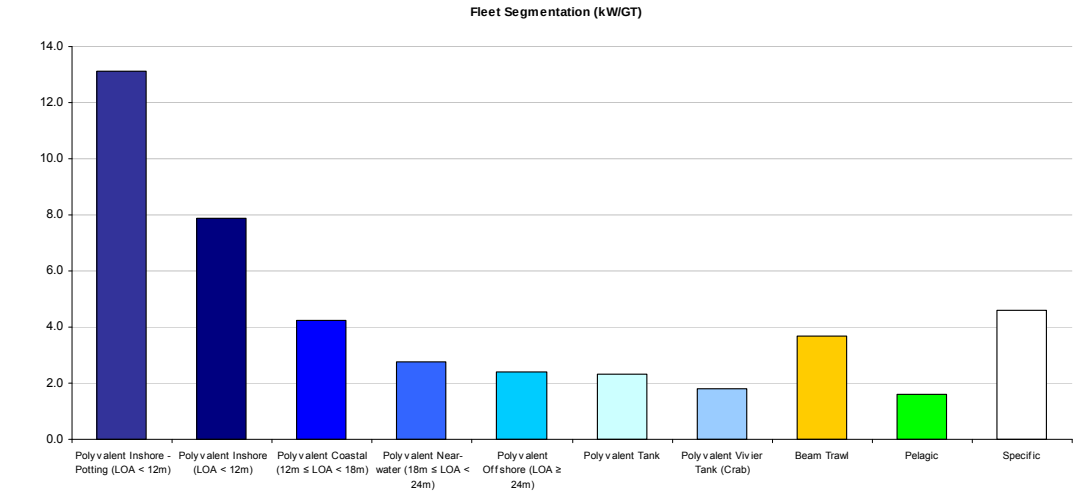
Fleet Segmentation (GT)

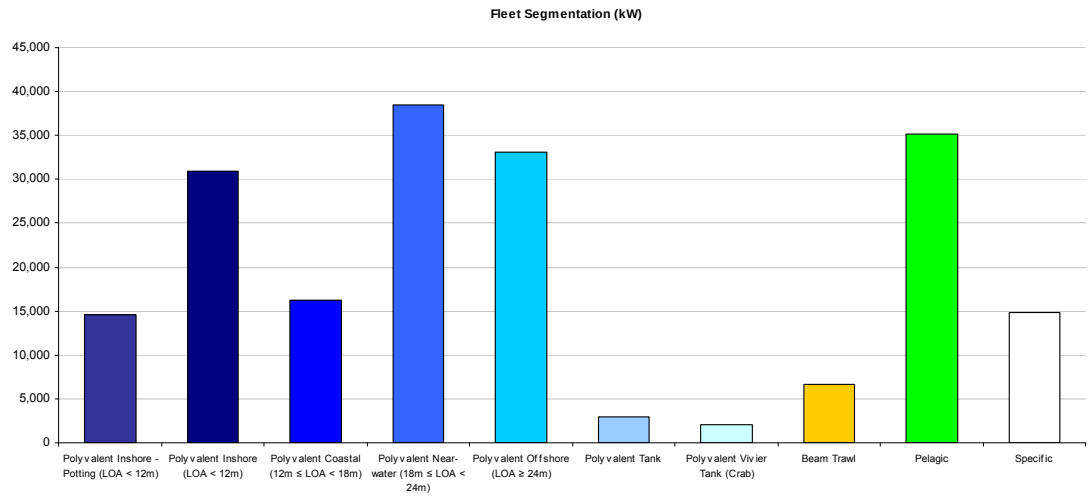


Fleet Segmentation (kW)




Fleet Segmentation (GT)
25,000
20,000
15,000
10,000
5,000
0
Polyvalent Inshore - Potting (LOA < 12m)
Polyvalent Inshore (LOA < 12m)
Polyvalent Coastal (12m ≤ LOA < 18m)
Polyvalent Near-water (18m ≤ LOA < 24m)
Polyvalent Offshore (LOA ≥ 24m)
Polyvalent Tank
Polyvalent Vivier Tank (Crab)
Beam Trawl
Pelagic
Specific


Fleet Segmentation (kW/GT)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Polyvalent Inshore - Potting (LOA < 12m)
Polyvalent Inshore (LOA < 12m)
Polyvalent Coastal (12m ≤ LOA < 18m)
Polyvalent Near-water (18m ≤ LOA < 24m)
Polyvalent Offshore (LOA ≥ 24m)
Polyvalent Tank
Polyvalent Vivier Tank (Crab)
Beam Trawl
Pelagic
Specific


Fleet Segmentation (kW)
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Polyvalent Inshore - Potting (LOA < 12m)
Polyvalent Inshore (LOA < 12m)
Polyvalent Coastal (12m ≤ LOA < 18m)
Polyvalent Near-water (18m ≤ LOA < 24m)
Polyvalent Offshore (LOA ≥ 24m)
Polyvalent Tank
Polyvalent Vivier Tank (Crab)
Beam Trawl
Pelagic
Specific

Impact of decommissioning on the Irish Fleet

It was originally intended that by 2007 the Irish whitefish sector would have been reduced by 35% and that this reduction would be achieved by the permanent decommissioning of polyvalent and beam trawl vessels over 18 metres in length. However the 27 whitefish vessels scrapped between 2005 and 2006 amount to only 3,320 gross tonnes (or 30% of the original target of 10,937 gross tonnes). It must also be borne in mind that decommissioning has also led to some displacement back into the fleet; an outcome that has been taken into account in the planning of this programme and, in particular the revised targets set. The economic analysis carried out in 2005 for the original report on decommissioning demonstrated that whitefish stocks generally, and available quota in particular, would have to be some 30% greater to yield a viable and attractive return for the boats now in the demersal sector.

However since then the economic situation of the fleet has declined further. This is due in no small measure to the ongoing and substantial increase in the cost of fuel oil, a further decline in the quotas of key deep water stocks and a commitment to further reduce quotas at an EU level to help meet international obligations including the Johannesburg Agreement on sustainability. Thus while the approach adopted remains valid, the value of some of the critical parameters has changed. An updated analysis, incorporating these adjustments, now indicates that whitefish stocks generally, and available quota in particular, would have to be some 45% greater to yield a viable return for the vessels now in the whitefish sector. On this basis, and taking into account the current capacity of the polyvalent and beam trawl segments of the fleet it is appropriate that, in total, 14,460 gross tonnes should be decommissioned of which 3,320 gross tonnes has been scrapped to date. Thus the revised target for this scheme is set at 11,140 gross tonnes. Of this amount some 8,904 gross tones will be decommissioned though this Operational Programme.

Following State Aid approval, the 2008 scheme to permanently withdraw capacity from the whitefish sector of the Irish fishing fleet - "Building a Sustainable Future for Ireland's Fishing Fleet" – was launched in February 2008. By the closing date (30th April 2008) a total of 69 vessels with an aggregate capacity of 10,464 GT's had applied for decommissioning. Based on applications received it is evident that demand for decommissioning within the industry is largely in line with the analysis carried out as part of the schemes introduction. While it cannot be definitively predicted how many of these applications will ultimately meet all of the scheme's entry requirements and/or will permanently decommission it can be said with some certainty, based on the applications received, that vessels participating in the 2008 decommissioning scheme will have the following broad characteristics:

Table 1.3 PROFILE OF VESSELS DECOMMISSIONING UNDER THE 2008 ADJUSTMENT OF FISHING EFFORT SCHEME

AGE	
Average Age	31 years
Minimum Age	15 years
Maximum Age	60 years
Length	
Average Length	23.30 m
Minimum Length	15.98 m
Maximum Length	40.75 m

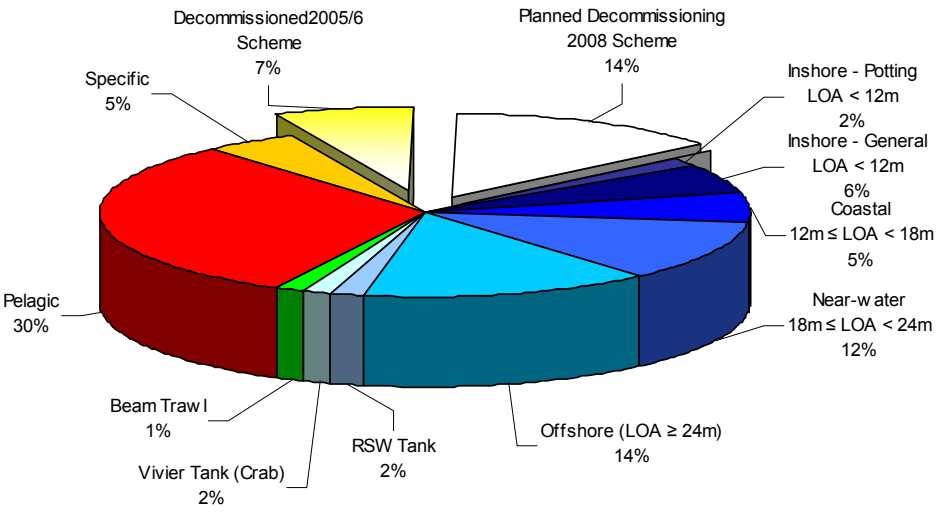
PORT OF ORIGIN (COAST)				
East	SE	SW	West	NW
23%	23%	35%	13%	6%

Segment	**LOA**	**% (By GT)**	**Average GT**	**% (By Number)**
Polyvalent	LOA ≥ 24m	38%	220	26%
	18m ≤ LOA < 24m	53%	120	67%
Beam Trawl		9%	193	7%

	Uptake	**100%**		**90%**			**80%**			**70%**		
Polyvalent	N	GT	kW	N	GT	kW	N	GT	kW	N	GT	kW
18 ≤ L < 24m	45	5,400	14,183	41	4,860	12,765	36	4,320	11,346	32	3,780	9,928
LOA ≥ 24m	18	3,970	10,923	16	3,573	9,831	14	3,176	8,738	13	2,779	7,646
Vivier Tank	1	127	319	1	114	287	1	102	255	1	89	223
Beam Trawl	5	967	4,242	5	870	3,818	4	774	3,394	4	677	2,969
TOTAL	69	10,464	29,667	62	9,418	26,700	55	8,371	23,734	48	7,325	20,767

It is clear from the tables above (Table 3.3) that vessels likely to decommission will vary greatly in size, age, capacity and home port. However it is now clear that, assuming a reasonable uptake of the published scheme, we are likely to see an immediate removal of

Fleet Capacity (GT)



Status Of The Fisheries Resource - Production

The waters around Ireland contain some of the most productive fishing grounds in the EU and it is estimated that in 2004 the total catch by all fleets within the Irish Exclusive Economic Zone was 700,000 tonnes of fish valued at €500 million, the greater proportion of which was taken by non-Irish vessels. This reflects the Principle of Relative Stability of the Common Fisheries Policy, wherein Ireland's share (quota) of the EU Total Allowable Catch is fixed for each of the key commercial species, amounting to some 20% in the case of pelagic species, 16% of Demersal species and 23% of shellfish (Dublin bay prawns/ Nephrops and a small, unused, quota of snow crab). Inshore shellfish stocks (crab, lobster, whelk, shrimp, etc.) are not subject to EU quota allocation; these stocks generated 25% of the first-point-of-sale value for the fisheries sector in 2004.

Despite the considerable overall catch, Ireland's Marine Institute reports that "over 75% of these stocks are outside safe biological limits with either a low stock size or unsustainable levels of exploitation". In addition the Institute notes that, "*misreporting of catch, discarding and poor scientific sampling data continue to undermine the scientific advice and sustainable management of the resource*" and that "*the misreporting issue has to be resolved if we are ever to achieve sustainable fisheries*".

- The very poor state of many demersal stocks is reflected both in the annual total allowable catch and quota allocations that Ireland receives and in the declared landings of the fishing fleet over the past decade. From a high in 1997, Ireland's share of the key demersal stocks has fallen from 55,470 tonnes to 32,662 tonnes

- For the key pelagic species (mackerel, horse-mackerel, herring, and blue whiting) a similar pattern is also evident and between 1995 and 2004 landings fell by 26% (305,000 to 226,783 tonnes). The use of combined figures for pelagic stocks, however, can mask some important trends and when looked at on a species-by-species basis we find that herring landings are down 39%, mackerel landings are down 20%, while landings of horse mackerel have declined by 80% over the period. Only low value blue whiting and landings of other non-quota species show any sustained increase.

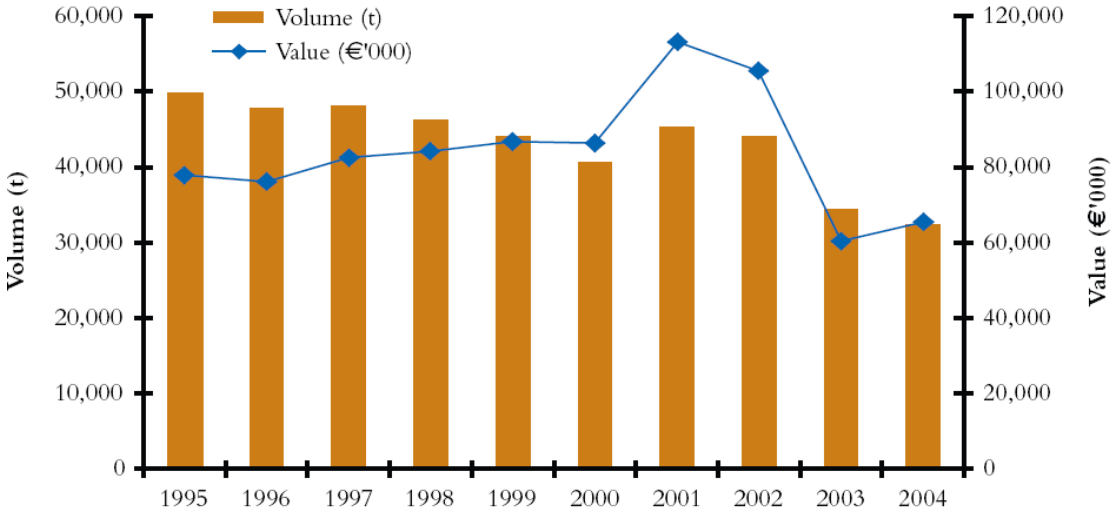
- In contrast to the decline in landings of demersal and pelagic stocks, landings from the main shellfish stocks all increased significantly over the period with a combined increase of 48% (18,179 tonnes to 26,832 tonnes) between 1995 and 2004. However, current analysis of these stocks clearly indicates that this trend is not sustainable and effort reductions on all of the major shellfish stocks are urgently required if yields are to be maintained at or close to maximum levels.

While various reasons can be postulated for the critical decline in many stocks in recent years, clearly over fishing is a major factor in every case. Furthermore this is true not just for the shared stocks that the Irish fleet exploits, it is equally the case for many stocks where Ireland is allocated the biggest proportion of the total catch; for example whitefish in the Irish Sea, herring in the Celtic Sea and off the northwest coast to mention but a few.

Demersal Stocks: Whitefish and Dublin Bay prawns

The trend in demersal landings for Irish vessels for the period 1995-2004 is illustrated below.

Irish demersal landings, volume and value from 1995 to 2004



Hake, Monk, and Megrim Fisheries:

The hake, monk, and megrim mixed-stock fishery is currently the most important fishery exploited by Irish whitefish vessels, particularly those operating off the southwest and west coasts. Ireland's quota of these stocks is 9% of the EU Total Allowable Catch, and with a first-point-of-sale value of €18.9 m in 2004, the combined landings of these 3 species accounted for 29% of the value of all demersal landings that year. While the hake stock declined throughout the 1990's as a result of high levels of fishing, the stock is now considered to be harvested sustainably and Ireland's quota has increased by 12% since 2004. Our quota of monkfish has similarly increased by 30% between 2004 and 2006. However the megrim quota has decreased over the same period by 2%. Overall, Ireland's combined quota for this group of stocks has increased by 10% since 2004. According to the Marine Institute the quality of the science for megrim is 'poor' mainly due to poor quality landings data. The Marine Institute also notes that international misreporting is a serious problem in the monkfish fishery and as a result the state of the stock is uncertain. ICES, in its most recent advice, reports that monkfish, like hake, while harvested sustainably in relation to precautionary limits, is currently 'over exploited in relation to its highest yield'. Consequently there is currently no capacity to absorb increased effort either from the current fleet or to accommodate additional fishing pressure from vessels displaced from other fisheries.

Dublin Bay prawns (Nephrops) Fisheries

An important high value fishery for vessels operating in the Irish Sea, Celtic Sea and Aran grounds off Galway, the Dublin Bay prawn (Nephrops) fleet also takes a significant quantity of cod, and other species, as a by-catch. Where these by-catch species, especially cod, are depleted or over-exploited, management measures designed to protect them also impact on the activities of the prawn fleet.

Ireland's quota for Dublin Bay prawns amounts to 21% of the Total Allowable Catch, and with a first-point-of-sale value of €13.7 million in 2004, prawns accounted for 21% of the value of all demersal landings. In general the state of the prawn stocks are not well known. However they have sustained high levels of fishing effort and discard rates for many years and all indications suggest that the stocks have remained stable. . There are, however, particular problems with the Aran stock – west of Galway.

Cod, Haddock, Whiting Fisheries

The main, and well documented, issue for the cod, haddock and whiting stocks has been the dramatic decline of cod in all the main fisheries around Ireland and in the North Sea. Cod was subject to very high levels of fishing in the 1990's and the stocks both in the Irish Sea and off the north-west coast (where there was an important fishery in the past) are considered to be in a severe state of decline. In the Irish Sea, for example, the spawning stock is estimated to have fallen from 21,000 tonnes in 1973 to less than 5,000 tonnes today. Whiting stocks too are severely depleted in the Irish Sea and off the north-west coast, while they are over-fished in the Celtic Sea. Furthermore while the exact status of

the haddock stock in the Irish Sea is unknown, it is likewise considered to be over-exploited. All of these trends are reflected in the landing statistics for the three species and cod landings dropped 78% between 1995 and 2004 while for whiting and haddock the equivalent figures show drops of 57% and 39% respectively. Overall Ireland's quota of cod, haddock and whiting amounts to 17% of the Total Allowable Catch, however Ireland is allocated 66% and 58% of the respective cod and whiting quotas in the Irish Sea underscoring their traditional importance to the national fleet. With a first point- of-sale value of €12.1 million in 2004, the combined landings of cod, haddock and whiting accounted for 18% of the value of all demersal landings that year, down from 26% in 1995. The severe decline in the status of these stocks, both in the Irish Sea and off the northwest coast, has resulted in significant displacement of traditional fleets from these areas and today many of the larger vessels from the Greencastle fleet travel regularly to the Celtic Sea to fish. Likewise the traditional Irish Sea whitefish fleet has all but disappeared. It is clear too that as more vessels turn their attention to the hake, monk and megrim fishery in the Celtic Sea and to the Dublin Bay prawn fisheries both in the Irish Sea and off the south-west coast, these already heavily fi shed stocks are very vulnerable to further over-exploitation.

Plaice and Sole

Another significant fishery exploited by Irish whitefish vessels, in particular the beam-trawl and the near-water (18 – 24 metre) fleets, is the plaice and sole fishery. Ireland's quota of plaice and sole in home-waters is 36% of the EU total allowable catch, and with a first point- of-sale value of €4.5 million in 2004, the combined landings of these 2 species accounted for only 7% of the value of all demersal landings that year. While quotas increased slightly (+3%) between 2004 and 2006, they are currently 17% less than they were in 2003 and almost 43% down on the equivalent values in 1995. Sole is locally important in both the Irish Sea and Celtic Seas and off the south-west, while plaice is predominantly an Irish Sea fishery with smaller quotas along the south coast and off Donegal. The latest scientific advice for these stocks indicates that sole is overexploited both in the Irish Sea and in the Celtic Sea. For plaice, once again the advice is that the stock is over fished in the Celtic Sea. In the Irish Sea, however, the stock is harvested sustainably. The latest scientific advice for these stocks indicates that sole in the Irish Sea is 'stable' while it is over fished in the Celtic Sea. For plaice the situation is similar with the Irish Sea stock fished sustainably, but again over fished in the Celtic Sea.

Deep Water Stocks

This small, but locally very important, mixed-stock fishery increased significantly between 2001 and 2004. While the deep-water fishery comprises a large range (>10) of species, landings by the small number of Irish vessels (<10) that have taken part in the fishery have been dominated by orange roughy. The latest advice from ICES, however, starkly underlines the severely depleted status of most deep water species (including orange roughy) and far from expecting any increase in landings from this fishery going forward, it is likely that only a small number of vessels (1 – 2 from the west/north-west) will participate in the fishery, and then only in a limited way in the future.

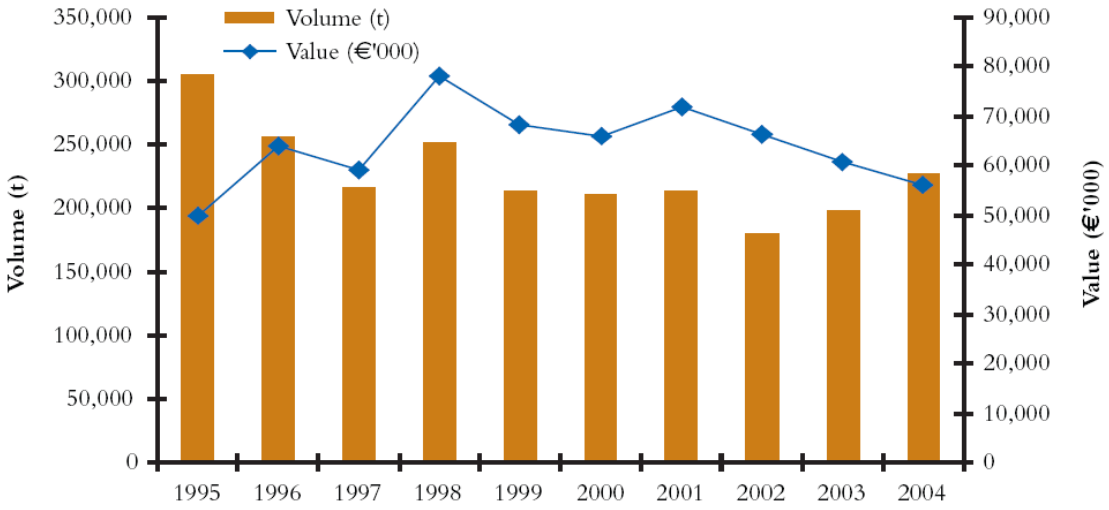
Pelagic Stocks

Unlike the demersal fisheries which are often mixed fisheries, pelagic fisheries are conducted on a series of largely discrete fisheries that follow one another between September and April.

The most important of pelagic fishery is the mackerel fishery, exploited by Ireland's pelagic fleet and a number of polyvalent vessels which traditionally operate in late autumn and spring. Ireland's quota of mackerel is 21% of the EU Total Allowable Catch, and with a first-point-of-sale value of €27 million in 2004, it accounted for 48% of the value of all pelagic landings that year. While the allowable catch for mackerel declined dramatically in the mid-nineties and again in 2005 and 2006 as a result of high levels of fishing and falling stock size, the spawning stock has increased over the last three years.

Blue whiting (worth €8 million in 2004 or 14% of the value of pelagic landings), although landed mostly for fish meal, is important for a small number of vessels. It is likely that the outlook for the blue whiting TAC is for reductions in the medium term, as the stock returns to a period of lower productivity. Horse mackerel (worth €6.3 million in 2004 or 11% of the value of pelagic landings), developed as a target fishery from the 1980s, is of uncertain status. Herring (worth €5.2 million in 2004 or 9% of the value of pelagic landings) has seen declining landings for a number of years and stocks are currently outside safe biological limits.

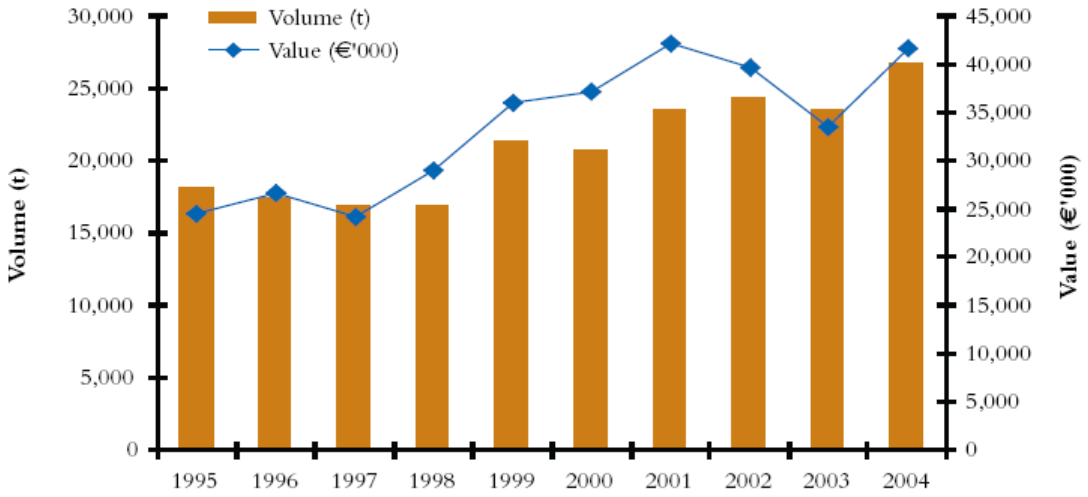
Irish Pelagic Landings, Volume and Value from 1995 to 2004



Shellfish Stocks: Crab, lobster, scallop and whelk

In 2004 crab and lobster accounted for 50% of the volume and 60% of the value of landed shellfish (excluding Dublin Bay prawns/Nephrops which is included earlier). The other major shellfish stocks are scallop, shrimp and whelk which account for the majority of the remainder in both volume and value terms. All of these stocks are fully exploited and generally stable, but productivity is below maximum sustainable yield. Any further effort increases on these stocks will result in reduced catch rates and correspondingly lower profitability.

Irish Shellfish Landings, Volume and Value from 1995 to 2004



Adjustment of Fishing Effort

The introduction of the decommissioning programme for older whitefish vessels was the first in a series of initiatives aimed at ensuring the long-term sustainability of the sector. However, there was insufficient uptake on this decommissioning programme and therefore more serious adjustment will be required in the Operational Programme 2007-2013.

At the time of its inception the Fleet Development Measure 2000-2006 supported the introduction of new vessels and modern second hand vessels into the Irish fleet with the aim of reducing the average age from 35 years. This proved successful and the average age now stands at 25 years. Similarly funding was available to modernise vessels within the fleet: this however, in the same way as the replacement of older vessels with modern, more efficient vessels, had the effect of increasing the effective fishing effort of the fleet and was discontinued under the CFP review in 2002.

Over the past eight years the renewal programme has brought about improvement in safety and operational standards of the current fleet while decommissioning has removed some larger, older vessels. The completion of the twin-track approach of renewal and restructuring is vital to the future success of the catching sector as it will deliver a smaller fleet that is modern, efficient and safe.

The Aquaculture Sector

Aquaculture activities are located right around the coast with particular concentration in Donegal, Connemara, West Cork, Waterford, Wexford and Carlingford Lough. The sector includes the farming of finfish species such as salmon and trout, artic char and perch and shellfish species such as mussels and oysters and to a lesser extent clams, scallops, abalone and sea urchins.

There are 13 operations producing salmon and six producing freshwater and sea-reared trout as well as three perch farming operations. There are about 80 mussel farms with sites in the southwest and western coastal areas as well as a substantial bottom-mussel fishery. This provides raw material for 5 mussel-processing plants, which produce a range of value-added products. There are 150 operations producing Pacific oysters concentrated mainly in Wexford, Waterford, Cork, Mayo and Donegal but also at other locations around the coast. The number engaged in aquaculture production was 1,936 in 2005/06.

The Seafood Market and Processing Sector

The value of Irish seafood sales amounted to €720 million in 2005 Sales of seafood on the Irish market amounted to €311 million (€137m into retail and €174m into foodservice); exports were valued at €354 million, with a further €55.1 million earned through direct landings of fish by Irish vessels at foreign ports. The processing sector is concentrated in the coastal regions of Donegal, Galway, Cork, Kerry and the South East. There are 198 firms, mainly SMEs, engaged in handling/distribution and processing of fish, of which just ten companies have more than 50 people employed full-time, while a significant number of small operators supply a local market or sell to niche market outlets

Table 3.4 provides a breakdown of the processing sector by turnover, illustrating the lack of economies-of-scale within the industry. Less than 10% of all companies operate with annual turnovers in excess of €10 million, with the top 50 companies accounting for 80% of overall turnover in the sector.

Table 1.4 Breakdown of the Seafood Processing Companies by Turnover

Annual Turnover (Million €)	No. of Companies	Bulk Seafood	Fresh/Live Seafood	Prepared Seafood
< €1 million	103	0	71	32
€1 - €5	62	9	34	19
€5 - €10	14	3	4	7
€10 - €20	11	3	1	7
>€20	8	1	1	6
Total	**198**	**16**	**111**	**71**

Export Markets

Between 2000 and 2006 the value of seafood exports increased from €331 million in 2000 to €355.5 million in 2006. Approximately 85% of seafood exports are directed to EU markets with the balance going mainly to Far Eastern and African markets. The main market destinations have remained largely unchanged over the years with France being the premier market accounting for 24% of exports with a value of €85.8 million in 2006. This was followed by Great Britain at a value of €67.7 million, Spain, €61 million, Germany €28.2 million, Italy €22.9 million and The Netherlands at €15.2 million.

Imports

Between 2000 and 2006 seafood imports for human consumption increased in volume and value by 56% and 53% respectively to reach 37,855 tonnes and €143 million. The main supply market continues to be Great Britain.

1(A).2 An Analysis of a Non Convergence region.

Ireland is a non-convergence region for the purpose of the European Fisheries Fund.
The seafood industry comprising the fishing, fish farming and processing/marketing sectors is predominantly located in the coastal regions stretching from Donegal in the north-west, in Counties Mayo and Galway in the west, along the counties of the south west and southern coasts and on the east in Wexford, Dublin and Louth. These coastal locations are mostly at a distance from main urban areas and centres of urban activity. They are therefore highly dependant on the income and economic activity generated from the seafood industry which is crucially significant to sustaining the livelihoods of the communities living in these remote regions. The industry plays a critical part in the sustainable development of the economic and social fabric of the communities it serves.

The wide dispersal of the seafood industry activity around the 7,500 kms of the Irish coastline is illustrated on the accompanying maps of fishing and aquaculture activities. The distance of some areas such as in north Donegal and Castletownbere in West Cork from the urban centres is evident. Typically these remote regions are economically

disadvantaged and have limited attraction for young people seeking opportunities for a good livelihood. For instance, in the areas surrounding Castletownbere the level of unemployment is substantially above the national average; in parts of the north west , the participation in third level education is below the national rate. Much of the socio-economic fabric of coastal areas involved in fishing and the seafood industry generally is intrinsically linked to the activities and profitability of the sector and the importance of the seafood industry to the economic viability of the coastal and remote regions cannot be overstated.

1(A).3 Main Lessons Learned from the Programming Period 2000-2006

Under the NDP 2000 – 2006, €150 million in Exchequer and EU funds was allocated for investment in the seafood sector. Development funding was channelled through four Operational Programmes (OP's) under the Financial Instrument for Fisheries Guidance (FIFG):

- Productive Sector OP,
- Border Midlands and Western (BMW) Regional Programme,
- South and Eastern (S&E) Regional Programmes,
- Employment and Human Resources Development OP.

Assisted by this investment the total value of the seafood industry increased from €621 million in 2000 to €702 million in 2005: a significant achievement against a background of declining quotas and stricter compliance. The impact of the NDP 2000 - 2006 also served to unlock private investment in the sector while at a local level economic activity has been stimulated through the provision of income and employment opportunities in areas with few alternatives.

Evaluation Reports that have commented on seafood industry support in the 2000-06 period, included the Mid-Term Evaluations (MTEs) and Mid-Term Evaluation Updates (MTEUs) for the NDP and Community Support Framework (CSF) 2000-06; the Productive Sector Operational Programme 2000-06; the Employment and Human Resources Development Operational Programme 2000-06; the Border, Midland and Western Regional Operational Programme 2000-06; and the Southern and Eastern Regional Operational Programme 2000-06.

Fisheries

The main criticism resulting from the mid term review of the 2000-2006 Productive Sector Operational Programme in respect of measures for the fisheries sector was that financial and physical progress at the time of the review was low (14.7%). However, when contractual commitments were taken into account the actual situation was that progress was in excess of 50%. The delays were partially explained by delays in the approval of the Priority (until December 2000) and, consequently, in obtaining State Aid approval for the Measures and the impact of new EU regulations, adopted in December 2002, which placed limits on (a) the grant aiding of new fishing vessels and (b) the extent of the fishing effort permitted in the North-West.

In the new OP, the Sea-fisheries Development Programme spending profile is front-loaded to an extent that by the time the mid term review takes place it is intended that almost 90% of the total co-funded programmes will have been spent. Additionally, all co funded programmes are scheduled for completion by 31st December 2010. Further, the advice from the Evaluators to introduce more clarity, transparency, and competition in project selection has been noted and will underpin the next programme.

Under the Operational Programme 2000-2006 the funding provision for decommissioning (*i.e.* individual decommissioning rate) was predetermined in Community legislation with an upper limit on the level of grant aid available for any vessel wishing to exit the fleet. The level set for this upper limit may partially explain the low take up on this intervention. Conversely, a greater allocation might have allowed for significant greater adjustment of the fleet that would, in turn, have assisted with the stock recovery programmes and other conservation measures put in place to address those species in danger of being over-fished.

During the 2000 – 2006 programming period safety and efficiency levels within the sector were significantly improved through grant-aiding new vessels, the modernisation of existing vessels, support for essential safety equipment and safety training.

One of the main lessons learned over the programming period 2000-06 was the need for a more competitive sector at all stages in the supply chain. This is especially the case in the context of static/declining quotas and particularly when faced with increasingly competitive markets and growing pressures from large-scale buyers. While significant progress was made in this area during the 2000 -2006 programme period, it remains the case that, at every stage in the supply chain, the industry must strive ever more to operate at maximum efficiency and cost effectiveness. Significant opportunity exists for ongoing improvement in this area and the industry must be encouraged to be more innovative, improve product quality and other standards and engage in accredited quality programmes. In particular, attention must be paid to identifying how quality standards can be maintained onboard vessels.

Another clear lesson form the 2000 – 2006 programming period is the pre-occupation, by industry, with supply related issues. Consequently not enough attention has been paid to developments in environmental policies and their potential impact on the industry. Addressing this deficit will be a critical feature of the 2007 -2013 programming period and features prominently in this OP.

During the 2000 – 2006 programming period, significant progress was made developing a new Shellfish Management Framework for Ireland' inshore fisheries sector and providing the information required to enable informed management decisions for the sector. A solid foundation has been laid for the future sustainability of the inshore sector by the establishment of a new fisheries management system for shellfish. Continued support for

these initiatives is essential if we are to maintain the economic viability of the sector, the stocks on which it depends, and the fabric of coastal communities.

Initiatives aimed at supporting coastal communities under the *Supporting Measures* intervention of the 2000-2006 Operational Programme encouraged the provision of facilities and development of techniques aimed at maximising the value of seafood landed. These initiatives provided much of the information which will be required to expand this support under the new OP, the successful implementation of which is designed to secure the viability of island and coastal communities.

In developing an operational programme for the coming years it is imperative that we also reflect carefully on what has already been achieved with Community structural funding under the National Development Plan 2000 – 2006. In doing so we highlight those areas that should continue to receive Community financial aid going forward, and glean new directions that must now be mapped and followed.

While overall the NDP/FIFG 2000 – 2006 programme has seen huge inroads made in many critical areas, some measures promoted by the FIFG have not lead to the expected results. It is therefore clear that we must now aim at a better use of EFF funds through a more efficient set of measures.

Fisheries Critical successes achieved during the 2000 – 2006 programme period:

- The renewal and restructuring of the fleet.
- The development of the inshore sector.
- An increased transparency in the management of fisheries resources and the marine environment and a much greater level of stakeholder involvement.
- An improved knowledge and understanding of many commercially important species.
- The development and deployment of novel technical measures.
- A raised awareness and implementation of quality, hygiene, and added value in the supply chain.

Areas where improvements can be achieved and further work is required.

In general there remains a need to invest more in human resources in all our fields of intervention. Similarly we must continue to promote equal opportunity in all areas. There also remains a need to work towards a simplified conceptual and regulatory framework, and promote transparency, user-friendliness, and flexibility of implementation.

Resource Issues

- For the fleet there remains an urgent need to continue the drive towards a sustainable balance between available resources and fishing capacity;
- We must continue to support investments aimed at gaining more benefit from catches.
- We need to deepen our understanding of the fisheries resource base.

- Real time management of the resource and the marine environment should remain a target of future Operational Programmes.
- We must encourage the adoption of catching and production techniques that are compatible with the sustainable use of the environment and the conservation of natural resources.
- We must continue to promote selective and environmentally friendly forms of fishing.

Fisheries and the Marine Environment

- Significant attention must be paid to the conservation and restoration of habitats to meet international obligations in relation to the conservation of fish stocks and the maintenance of overall biodiversity targets.
- Halting the loss of biodiversity within the marine environment – in particular where such loss is as a direct result of fishing or fishing related activities – must be prioritised.
- Further "greening" of the sector must be encouraged – there must be greater intervention in support of the environment.
- We need to deepen our understanding of the marine environment, particularly in the area of base-line data acquisition. This knowledge will in turn can feed into, and thereby improve the technical and scientific advice available to managers and policy makers.
- We must promote energy efficient forms of fishing.
- We must prevent pollution and correct its negative consequences.
- We must increase support for undertakings that reduce negative environmental impacts of the sector.
- We must contribute more directly to nature conservation and natural resources management via, for example, the creation of protected marine areas and the protection of zones favourable to the reproduction of species.

Sustainable development of coastal fishing areas

- The Operational Programme must contribute more directly to the socio-economic development of coastal areas and of fishing communities.
- A new focus must be given to the retraining of workers in the areas affected by a decline in fishing activities;
- A new emphasis must be given to the restructuring required by the changing economic and market environment of the areas affected by a decline in fishing activities;
- Interventions should be specifically targeted at integrated coastal development in key coastal areas and, additionally, at small-scale local enterprises in coastal areas linked in some way to the fishing sector.

Aquaculture

The main lesson learned from the previous programme in aquaculture and having regard to comments made in the MTE Report, is that there is a need to allow for a greater time lag between approval of investment projects and the resultant increase in output from the investment implemented.

Experience gained from the programming period 2000-2006 points to the need for all sectors of the Irish aquaculture industry to be internationally competitive, particularly in terms of their unit cost of production. This will require ongoing investment in new technology and applied testing, together with the necessary training to maximise the benefit from that effort. The impact of new farming technologies in recirculation, effluent water treatment and improved stock genetics will be to lower unit costs and to keep the sector competitive.

A lack of consistent profitability beset the salmon farming sector in Ireland in recent years. This was brought about by the dumping of below cost salmon on the EU market and sub-optimal stock performance in recent years with regard to feed conversion ratios and survival. The introduction by the EU in 2005 of Minimum Import Prices (MIP) for farmed salmon for five years has largely addressed market issues related to dumping. Recent improvements in husbandry, stock breeding and feeding practices have improved survival and performance and effective applied testing is ongoing and expected to further ameliorate the situation in future. However there is a very real need to invest further to improve the unit cost of production in salmon farming.

The bottom grown mussel sector has been the most successful component of Irish aquaculture. Seed mussel in the Irish Sea is a shared resource between Ireland and Northern Ireland and this makes the regulation of this sector a complex issue. A review of how the sector is to be regulated and developed, on an all-island basis and the administrative arrangements that will support the sustainable development of the bottom mussel industry into the future is currently underway. Apart from these management issues, there are serious technical challenges facing the sector, in particular, the issue of improving the yield from the seed mussel that is re-laid. A concentration on maximising the yield from re-laid seed mussel, supported by the necessary training, applied testing and carrying capacity studies is urgently required to ensure the sustainable future of the on-growing element of the sector. At present most of the output is exported in an undifferentiated bulk form and there is scope to add significant value.

Across all sectors of the aquaculture industry in Ireland, there is a need to create a revised set of arrangements for the monitoring and regulation of fish farms that deliver maximum confidence to all of the stakeholders at a cost that is economically sustainable to the farmer and the State.

Aquaculture – Environment

The CLAMS (Co-ordinated Local Aquaculture Management Systems) process is a nationwide initiative to manage the development of aquaculture in bays throughout Ireland at a local level. The process fully integrates aquaculture interests with relevant national and European Union policies as well as single bay management practices, the interests of other users of the bays, integrated coastal zone management plans and County Development Plans. The CLAMS process was implemented with funding from the FIFG under the NDP 2000 to 2006 and was highly successful in that it represented a further pro-active step by fish and shellfish farmers to engage in public consultation on their existing

and future plans with all relevant interests and in the process reduce the potential for conflict.

The Seafood Development Programme (SDP) under Peace II

The objective of this programme was to benefit the seafood processing industry on a cross border/cross community basis. The activities of the programme enabled players in the seafood industry to pool resources and network information. Feedback from participants and the Government indicates that these initiatives helped companies on both sides of the Border establish quality cross border/cross community relationships. Combined efforts between producers brought about concrete benefits such as taking advantage of economies of scale, sharing market information and winning new business. Those participating have indicated that none of these benefits would have been derived in the absence of the programme. The Government consultees also reported the creation of significant synergies between Departments and broader fisheries management knowledge transfer.

In summary, the 2000-06 NDP marked the beginning of a process of restructuring and transformation of the industry across all its sectors. However, despite the progress made and the continuing strong demand for seafood, the supply side still faces serious challenges mainly due to declining fish stocks, declining quotas, structural imbalances at catching and processing levels, and unreliable supply of aquaculture products.

Essential to the achievement of the vision of Ireland's strategy for the seafood industry as outlined in *Steering a New Course*, is a further sharp reduction in fishing capacity and effort; more effective management and conservation of fisheries; a much bigger role for aquaculture in meeting the increasing demand for seafood and a restructured processing sector.

3(A).4 Context Indicators

The overall objective of the Government's National Development Plan 2007 - 2013 is to provide balanced regional development and social inclusiveness. Approximately 40% of Ireland's population live in rural areas and these rural areas present different experiences, economically and socially. The regional and coastal location of the seafood industry contributes to the achievement of this objective by providing opportunities to maintaining populations and livelihoods in the coastal regions. Much of the socio-economic fabric of coastal areas involved in fishing is intrinsically linked to the activities and profitability of the fishing industry. Therefore constraints arising from structural and operational changes in the fishing sector, developments on world markets, dwindling fisheries resources and the need to exploit natural resources and the environment in a sustainable manner, have an immediate impact on the balance and quality of life in these communities

Primary Production

The primary output from the fisheries and aquaculture sectors in 2000 and 2006 is presented in Table 1.5 below. In 2006 output amounted to 336,054 tonnes valued at €346.2million.

Table 1.5 Primary Production from Fisheries and Aquaculture

	2000		2006	
	Tonnes	€'000	Tonnes	€'000
Total Landings at home ports	197,197	155,085	190,253	161,764
Total Landings at foreign ports	75,679	33,946	88,379	59,594
Total landing at all ports	272,876	189,031	278,632	221,358
of which:				
- Whitefish	36,772	65,330	27,601	50,031
- Pelagic	206,576	65,912	193,196	73,604
- Shellfish	29,528	57,789	57,834	97,723
Total landing at all ports	272,876	189,031	278,632	221,358
Aquaculture Production*				
-				
- Finfish	20,565	75,362	12,726	61,412
- Shellfish	31,110	21,510	44,696	63,248
Total Aquaculture*	51,280	96,872	57,422	124,660
Total - Fishing and Aquaculture	324,156	285,903	336,054	346,198

Source: Department of Agriculture, Fisheries and Food and BIM

The volume and value of fish landed by Irish vessels in 2006 amounted to 278,632 tonnes and €221 million. In volume terms, the bulk of landings comprise pelagic species (i.e. herring, mackerel and horse mackerel) at 193,196 tonnes valued at €73.6 million. Landings of shellfish amounted to 57,834 tonnes valued at €97.7 million and whitefish amounted to 27,601 tonnes valued at €50.1 million. The value of output from the aquaculture industry reached €124 million in 2006 from 57,422 tonnes of fish and shellfish. The shellfish sector contributed 44,696 tonnes of this output valued at €63.2 million while output from finfish farms was 12,726 tonnes valued at €61.4 million.

Exports

Table 1.6 Irish Seafood Exports 2000 - 2006

	2000		2006	
Product Categories	**Tonnes**	**€'000**	**Tonnes**	**€'000**
Freshwater Fish	17,554	68,143	8,476	44,597
Pelagic	126,134	110,473	74,252	81,272
Demersal	28,875	43,753	19,766	63,776
Shellfish	29,858	102,954	41,723	147,365
Fishmeal/Oil	13,835	6,270	19,444	18,495
Total Exports	216,256	331,593	163,661	355,505

Source: Central Statistics Office

Between 2000 and 2006, total seafood exports increased in value by 6.95% from €331 million to €355 million. During the same period, the total volume of exports decreased by

24% from 216,256 tonnes in 2000 to 163,662 tonnes in 2006. The shellfish category accounted for the largest increase in sales value during the period, total sales of shellfish grew from €102.9 million in 2000 to €147.4 million in 2006.

The Fishing Fleet

As of November 2007 the Irish fishing fleet consists of 1,914 vessels registered in 5 segments (polyvalent, beam trawl, pelagic, specific, and aquaculture.

- The **Polyvalent** sector comprising 1,726 vessels, representing 90% of the vessels in the fleet and 56% of capacity (GTs).
- The **Beam trawl** segment comprising 13 dedicated vessels or <1% of the fleet.
- The **Pelagic** sector currently comprises 22 Refrigerated Sea Water Tank Vessels ranging in size from 27 to 71 meters, which together comprise 1% of the overall fleet (in numbers) and 31% of the capacity.
- The **Specific** segment comprising 127 vessels, which account for 7% of the fleet.
- [The Aquaculture sector comprises 26 vessels

The structure of the fleet is outlined in Table 3.2 which can be found in Section 3(A):

Employment

Geographically the industry operates right around the coast of Ireland and is particularly concentrated on the western seaboard from Castletownbere, Co. Cork, in the south-west, to Killybegs, Co Donegal, in the far north-west, and the harbour towns of the south-east coastline.

Table 1.7 Industry Employment 2000 – 2006

	2000			2006		
	Full time	Part time & Casual	Total	Full time	Part time & Casual	Total
Fisheries	4,767	1,433	6,200	3,924	1,063	4,987
Aquaculture	830	2,075	2,905	718	1,218	1,936
Processing	2,110	2,097	4,207	2,205	662	2,867
Ancillary	*1,500		1,500	*1,185		1,185
TOTAL	**9,207**	**5,605**	**14,812**	**8,032**	**2,943**	**10,975**

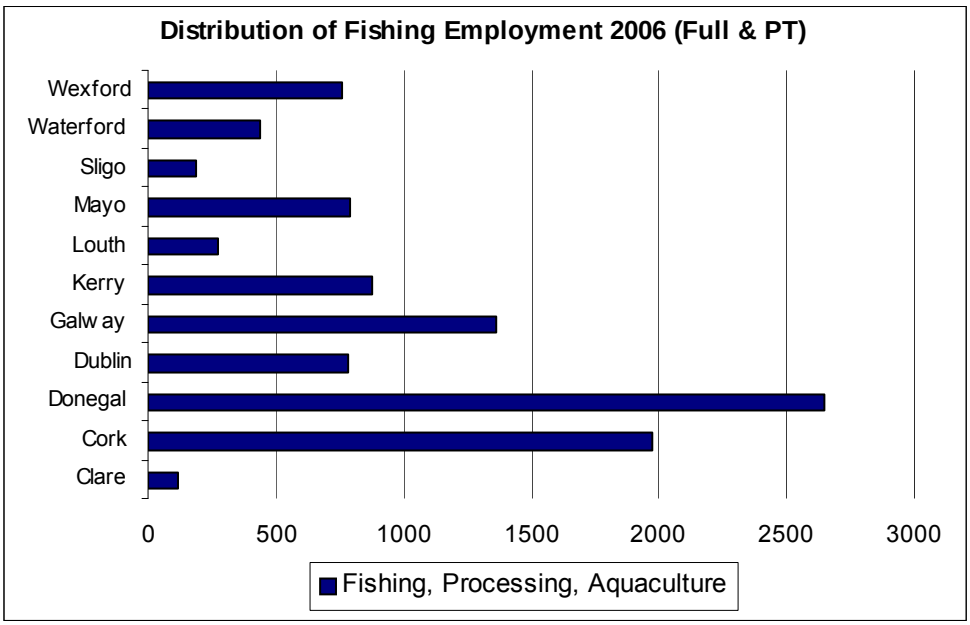
* Includes part time. Source: BIM

While employment in the fisheries sector has been declining (as is also the case for agriculture), these jobs are nevertheless enormously significant as they maintain working populations and communities in remote coastal regions, where there are fewer opportunities for commercial or industrial development and which are typically characterised by: high rates of unemployment and out migration, low population densities,

high dependency rates, below average levels of educational attainment and higher than average levels of deprivation. Table 3.7 provides details of employment by sector in 2000 and 2006.

Figure 3.1 shows the distribution of employment in 2006 by region. This trend remains largely unchanged in the past five years emphasising the role of the seafood industry in sustaining remote, coastal communities.

Figure 1.1 Distribution of employment, by region, in 2006.



Source: BIM

Impact of decommissioning on employment in the fleet sector.

The impact of the current (2008) decommissioning scheme on employment within the catching sector will, ultimately, depend on the number and size of vessels decommissioning as well as the re-employment opportunities within the sector. Based on the applications received (at the time of writing) it is likely that up to 250 individual will be directly affected; that is, they are or have been crew (in the period leading up to the introduction of the scheme) on vessels likely to decommission.

- It is the case, in Ireland, that current crew shortfalls within the sector will ensure that a percentage of those directly affected by decommissioning will find immediate and effective re-employment on vessels remaining in the fleet.

- It is also projected that a significant number of those affected by the decommissioning scheme are experienced fishermen from countries other than Ireland.

- Others may opt for re-training and *Bord Iascaigh Mhara* is currently investigating possibilities in this area; especially in the context of those wishing to retrain for the Merchant Marine.

- Additionally, it is intended that as part of the wider initiative to be introduced under AXIS 4, a *Community Support Scheme* will be incorporated aimed specifically at crew directly affected by decommissioning. While grant aid under this scheme will NOT include individual payments to affected fishermen, projects that include re-employment/diversification opportunities for these fishermen will score additional marks in the selection process.

1(B) Driving Forces, Challenges and Opportunities Facing the Irish Seafood Industry

The Irish seafood industry has recorded significant progress as a result of the investment made under the NDP 2000 – 2006. However, the industry is currently in transitional phase and is facing a range of developmental challenges, primarily relating to declining stocks and a consequent structural imbalance at catching and processing levels. In order to deliver a sustainable and profitable seafood industry, it is paramount that the challenges facing the industry are addressed in the coming years. This will require a concerted effort on the part of all industry stakeholders – including fishermen, industry representative organisations, Government Department and State Development Agencies.

The challenges and opportunities are grouped under seven core themes. Four of these: (i) Fleet Restructuring, Development and Management, (ii) Aquaculture, (iii) Processing Restructuring & Development and (iv) Market Development & Innovation are of a sectoral nature, while the remaining three: (v) Competitiveness, (vi) Education & Training and (vii) Environment, have relevance to the entire industry. The *key drivers* of these core themes are outlined below:

Fleet Restructuring, Development and Management.

Over 75% of the fish stocks in the waters around Ireland are below safe biological limits and many urgently need to be rebuilt from their present low levels. Irish demersal quotas (whitefish and prawns) have fallen by 37% since 1995; the mackerel quota is down 40% in the same period; herring quotas are down 35%; and horse-mackerel is down 55% since 1998. As Ireland's quota share of all the key commercial stocks is fixed under the Principle of Relative Stability, accessing additional catching opportunities through changes to the CFP is not an option. Consequently, reducing fleet capacity, effort, and fishing mortality on fish stocks as well as developing long term management plans must drive thinking on fisheries management for many years to come.

Increasing the resource base by gaining access to overseas fisheries through third country and private agreements remains a possibility, although such opportunities represent a new departure for Irish vessels and are only appropriate for a small component of the pelagic

fleet. In addition these opportunities are, generally, only important for the individual companies involved and from a national perspective do not deliver significant direct returns to Ireland's coastal communities. If however, they result in reduced competition for traditional stocks in home waters then, clearly, third country and private agreements impact directly on the viability of the remaining fleet.

It is abundantly clear that, decommissioning to date notwithstanding, the catching capacity in key fleet sectors currently exceeds the resources available to Irish vessels in EU waters. This is exacerbated for certain stocks, particularly monkfish and mackerel, where the number and catching capacity of vessels engaged in these fisheries greatly exceeds the resources available. This has led to difficulties within the sector and also has increased tension between vessel owners and the control authorities as vessels have striven to maintain economic viability.

The critical challenge now facing the fishing fleet remains the timely and appropriately managed evolution of a catching sector that is adjusted to a scale consistent with available resources; that operates under and supports a Fisheries Management Regime (comprising both a Quota Management System and a Fleet Management and Licensing policy) that is equitable and transparent; that incorporates effective control and enforcement mechanisms; that delivers biologically sustainable stocks; that promotes economic viability and stability for vessel owners; and which generates a greater focus on market needs.

Similarly, the balanced development and sustainable management of inshore stocks based on an integrated Inshore Development Strategy and developed in partnership with the key stakeholders involved is the critical challenge facing the inshore fleet.

Additionally the introduction of effective technical measures supplemented with strong control and enforcement must be a key part of future management. Scientists, managers, and stakeholders must continue to work together through the Regional Advisory Councils to ensure accurate data are available to develop the long term management measures that will be required to rebuild and sustainably manage the resource.

Finally, pursuing strategies that increase landings from non-Irish fleets is another significant challenge for the future. Such landings, whilst not directly contributing to the catching sector, provide increase throughputs and economic activity in Irish fishing ports.

Aquaculture

The aquaculture industry still has some way to go to achieve its development potential, despite state support, the absence of quotas and the scope at national level that exists to influence this sector's development. One of the factors constraining the further expansion of the aquaculture sector in Ireland, as identified in the *Steering a New Course* strategy document, is that there is significant public concern regarding perceived environmental impacts arising from the activity. Demonstrating the environmental sustainability of the aquaculture sector (e.g. compliance with the objectives of the EU water and nature legislation) will help dispel any undue concerns.

Environment

It is clear from the foregoing that Ireland's fishing and aquaculture industry remains an important and valuable source of economic activity both on a national scale and, particularly, in the remote coastal communities in which it is largely based. It is an industry that has seen steady market growth, is a strong exporter of fish products and despite recent contractions, the catching sector alone continues to provide in excess of 5,000 direct jobs while an additional 10,000 jobs onshore are dependent on catches from Irish vessels. Despite this there is widespread concern about the future of the industry. This concern comes not only from a wider population keen to foster a better environment, but also from within the fishing industry itself. There are more complex driving forces:

- There are concerns about the apparent inability of our current approach to deliver healthy stocks whose exploitation is sustainable and where fishing is undertaken without negative impact on the wider marine environment.
- /There is concern too about the critically low size of some fish stocks and the fishing pressure exerted upon many others that are outside safe biological limits. There is also a growing anxiety that some previously non-quota, particularly deep-water, species have been fished too heavily in some areas; that damage to the seabed may be widespread and that this could ultimately impact on other species, including fish, that depend on these habitats and the communities that build up around them.
- Poorly understood food webs are possibly being damaged with unknown but potentially significant consequences.
- Marine mammals too may be at risk as they are taken as an incidental by-catch in some fisheries. For some of these species this unwanted, but all too often disregarded, exploitation coupled with wider unseen environmental degradation may render local populations unsustainable.
- As elsewhere in the European Community, Ireland's marine environment is faced with a number of threats including loss or degradation of biodiversity and changes in its structure, loss of habitats, contamination by dangerous substances and nutrients and impacts of climate change.

Critically, the long-term sustainability of both the fisheries and aquaculture sector is directly linked to our ability to maintain healthy fish stocks *and* to maintain a healthy marine environment. The challenge of achieving both of these becomes an opportunity for the future. As the evolution of an economically viable and socially stable seafood sector remains a central tenet of this operational programme, *de fatco* a key driving force is to address *inter alia* the environmental challenges set out here.

- Stewardship of the marine environment is one pillar upon which EU policy decisions reflect national, international, and public concerns on the environment. Fostering a new and deeper understanding throughout the seafood industry of its obligation to maintain a diverse and robust marine environment is both a challenge and an opportunity identified in this OP.

- Achieving a better stewardship of the marine environment will also depend on a sensible and responsible approach to conservation and to the industry's environmental performance, which will require strong policy support at EU and national level.

The initiatives set out in this Operational Programme - Fleet Restructuring, the introduction of Environmental Management Systems, and improved Fisheries Management – have been selected to individually (and in combination) provide a new platform to meet head-on the environmental challenges identified. Additionally, they will, in combination with other initiatives set out elsewhere in this Operational Programme and in the National Strategic Plan ensure that the opportunities to be gained by meeting these challenges are fully realised.

Processing Restructuring and Development

Similar to other sectors within the food industry, seafood processing operates in an increasingly difficult environment. In order to establish a profitable, competitive and sustainable seafood-processing sector, significant strengthening and consolidation needs to occur, accompanied by a major performance uplift in the sector.

Market Development and Innovation

The development of effective marketing and innovation strategies will enable the maximum possible value to be achieved for each tonne of fish landed or harvested.

Recognising the current challenges faced by the processing and marketing sector, the National Seafood Strategy will aim to address critical supply chain and marketing weaknesses, support a greatly enhanced innovation and new product development (NPD) performance within the sector and develop a significant uplift in management capability and knowledge.

The key growth opportunities in international markets in addition to the domestic market include:

- **Natural health and well-being products:** Focused on the natural goodness of fish and the proven nutritional benefits.
- **Products that are convenient and easy to prepare**: Targeting the premium end of the convenience category.
- **Snacking, grazing and flexi-eating opportunities**: Within the snacking category currently valued at €66 billion across Europe.
- **Eco-friendly, organic and environmentally responsible products**: Responding to consumer concerns on the welfare of the marine environment.
- **Functional foods and ingredients**: Tapping into a developing sector currently valued at €19 billion worldwide.
- **Emerging markets in new EU Member States:** As increased affluence leads to higher spend on food, especially luxury items.

- **Strong growth projected in Asian markets for nutritionals and food ingredients, in particular, China**: Accelerating market-led R&D activity in conjunction with the wider food industry.

Competitiveness

Given that this industry is operating in an increasingly competitive market, there is a critical requirement to ensure that it is operating at maximum efficiency.

Education and Training

Significant increased focus will be given to commercially focused education and training programmes, in addition to regulatory driven and developmental, educational and training programmes on a lifelong learning basis. Diversification training for those wishing to leave fisheries will be provided.

SWOT analysis of the fisheries sector

Articulating the strengths, weaknesses, opportunities for, and threats to, the fisheries sector is recognized as a critical element of the strategic planning process central to this Operational Programme. A general SWOT analysis of the Irish Seafood industry is presented below. Additionally, and recognizing the central role the marine and coastal environment now plays in national policy, the Common Fisheries Policy, as well as other Community and national legislation, a separate SWOT analysis is presented covering fisheries and the marine environment.

SWOT Analysis of the Irish Seafood Industry

STRENGTHS	WEAKNESS
Seafood Industry: Indigenous industry Using a renewable and highly prized resource Economic opportunities for coastal communities Generating over €700m in annual value Directly employing over 11,000 people in marginal coastal communities where employed opportunities are limited **Sea fishing:** Productive fishing grounds Strong tradition of fishing and sea-faring built up over many generations **Inshore fishing:** Productive fishing grounds Traditional, environmentally friendly methods Maximum economic return to local communities **Aquaculture:** Potential to provide sustainable source of seafood to meet growing demand **Processing & Marketing:** Potential to add value to seafood products thereby maximizing economic return	**Sea fishing:** Imbalance between catching capacity and resource supply Historical lack of buy-in to conservation action Quality of independent, industry based data Low share of TAC in Irish fishing grounds **Inshore fishing:** Historically, lack of emphasis on inshore fisheries management **Aquaculture:** Sub-optimal levels of investment Lack of buy-in by all stakeholders to coastal zone management Lack of clear contingency planning for disease and biotoxin outbreaks Supply failures of aquaculture product **Processing & Marketing:** Poor value generation capability Lack of commercial awareness of market opportunities through out seafood industry
OPPORTUNITIES	**THREATS**
Seafood Industry: Demand for seafood growing Potential for high value generation from every part of seafood production chain Industry participation in the process of implementation for the Seafood Strategy 2007-13 To balance environmental needs with market organisation	**Seafood Industry:** The ability to maintain a healthy marine environment Very low investment in the area of innovation, technology transfer and new product development **Sea fishing:** Sustainability of fish stocks - 75% of stocks outside safe biological limits

Potential of Training element of Operational Programme 2007-13 to support achievement of objectives re higher value generation and environmentally sound production practices, as well as improved safety practice Sea fishing: To achieve a balance between catching capacity and resource supply and thereby stabilize the economic and social dynamic of the catching sector and the communities that depend on it Industry commitment to improved conservation practices and participation in conservation actions Inshore fishing: High quality, environmentally sound, small scale fishing for high value local consumption Work with the sector to strengthen management arrangements Aquaculture: Increasing environmentally sustainable production capacity to meet demand for seafood Develop and implement codes of best practice for aquaculture – in terms of its regulation and its production methods Added value, high value production for niche markets Embed a coherent coastal zone management strategy Action on foot of Shellfish Waters Directive will ultimately produce a higher quality product and lead to substantial improvements in water quality in shellfish waters Diversification into new species and production techniques Processing & Marketing: Through a fundamental restructuring programme, to tackle lack of profitability and poor market focus so as to achieve well organised, commercially fit processing and marketing sectors Take advantage of the results of the functional foods research initiative to add value to seafood products	Unsustainable effort levels Inshore fishing: Lack of awareness of market opportunities Lack of buy-in to management arrangements Aquaculture: Market conditions and poor competitiveness Disease outbreaks Biotoxin closures (shellfish) Lack of engagement by industry with environmental interests Lack of ability to provide reliable supply to processing sector Designation under Shellfish Waters Directive yet to be completed and appropriate water quality action programmes yet to be fully implemented Processing & Marketing: Fragmentation and lack of profitability in the processing sector Uncertainty of supply and shortage of raw material

1(C) Description of Marine Environment and Labour Market Conditions

1 (C).1 Description of Marine Environment

Europe's marine environment is faced with increasing and severe threats. The evidence of the deteriorating status of our seas and oceans has continued to accumulate over the past three years. Europe's marine biodiversity is decreasing and continues to be altered. Marine habitats are being destroyed, degraded and disturbed. The principal threats to the marine environment that have been identified include:

- The effects of climate change;
- Pollution;
- Litter;
- Microbiological pollution;
- Oil spills as a result of accidents as well as pollution from shipping and offshore oil and gas exploration;
- Pollution from ship dismantling;
- Noise pollution;
- Certain types of fishing gear;
- The impacts of illegal or unregulated fishing;
- The introduction of harmful non-native species principally through discharge of ships' ballast water and leisure craft;
- Nutrient enrichment (eutrophication) and associated algal blooms;
- Discharges of radionuclides.

Water Framework Directive

The directive establishing a framework for Community action in the field of water policy, commonly known as the Water Framework Directive (WFD), was formally adopted by the EU Parliament and Council in October 2000 and incorporated into Irish law by Regulation in December 2003. That Regulation identified Ireland's Environmental Protection Agency (EPA) and local authorities as the competent authorities for the implementation of the directive. In addition, the Regulation identifies other public bodies that are required to assist in the implementation process.

- The Regulation identifies four River Basin Districts (RBDs) wholly within the State (Eastern, South-Eastern, South-Western and Western) and three International River Basin Districts shared with Northern Ireland (Shannon, North-Western and Neagh-Bann).
- Implementation at RBD level is being undertaken by the local authorities with the assistance of consultants.
- Special arrangements have been made with the Northern Ireland authorities to undertake the implementation in the three International River Basin Districts.

- A national steering committee was convened by the Department of the Environment, Heritage and Local Government in 2001 to oversee the implementation of the directive. In January 2004, the EPA convened a Technical Co-ordination Group to deal with this at a more detailed level; a number of Working Groups have been established under the former to investigate and make proposals on specific matters.

- Water Quality in most estuaries and bays around Ireland is high. Some areas experience de-oxygenation and a number of areas, mainly in the east and south, have been classified as eutrophic.
- The quality of shellfish waters is generally good and the further designation of 54 new sites in addition to the existing 14 shellfish waters will ensure greater protection of areas where shellfish are grown.
- Harmful Algal Blooms (HABs) - a naturally occurring phenomenon when micro-algal species that produce toxins become concentrated in shellfish and pose a risk to human health - can lead to extended closure periods for harvesting of shellfish. Sampling for Harmful Algal Blooms is ongoing.
- Work is currently being undertaken by both the EPA and the Marine Institute to monitor nutrient content in the Irish and Celtic Sea. While it is noted that there is no excessive nutrient enrichment in these areas it is recognized that there is a need to expand activities into the remaining coastal areas in the next few years to fill this major gap in our information on the quality of Ireland's coastal and offshore waters.
- The Geological Survey of Ireland and the Marine Institute is currently undertaking a major study - INFOMAR -to map the physical, chemical and biological features of the Irish seabed

Marine Directive

The Marine Strategy Framework Directive (MSFD) became law on 17th June, 2008. The MSFD (EU Directive 2008/56/EC) is a strategy for marine environmental protection. MSFD will constitute the environmental pillar of the new EU Maritime Policy and requires Europe's Oceans to achieve "good ecological status". MSFD foresees the creation of "European Marine Regions" and "Sub-Regions" to act as "management units" for its implementation and obliges member states to co-operate on developing the marine strategies for their waters that lie within these regions. Measures to "achieve or maintain good environmental status" must be developed by 2015 to enter into operation by 2016 at the latest in order to achieve the 2020 targets. MSFD will embrace the ecosystem based approach to managing all human activities in the marine. It will enable a sustainable use of marine goods and services and promote adaptive management of the oceans. It will undergo a 6 year cycle of revision & review and will seek to ensure cooperation between Member States and regional conventions (e.g. OSPAR). The MSFD states that "The Common Fisheries Policy, including in the future reform, should take into account the environmental impacts of fishing and the objectives of this Directive".

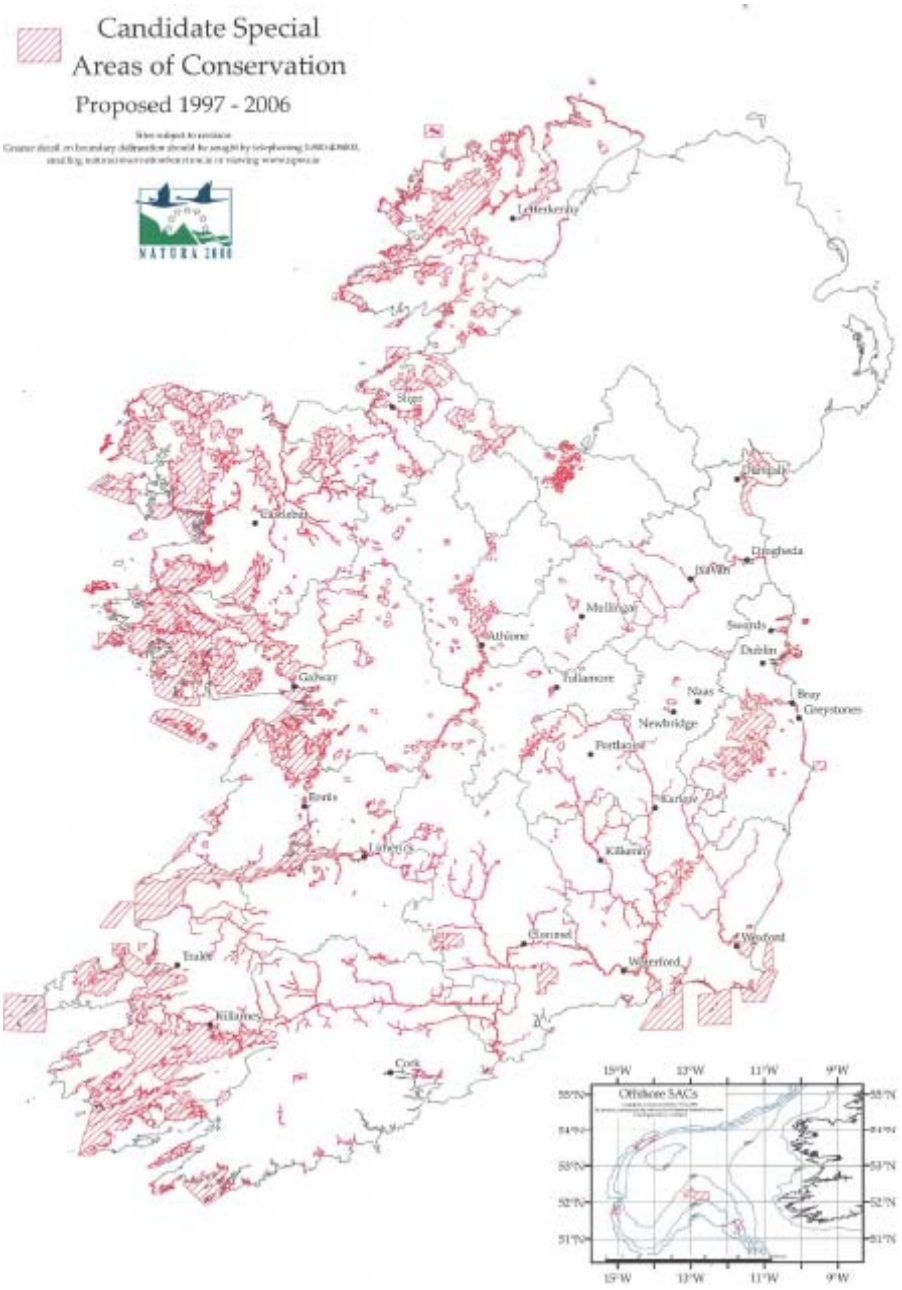
Natura 2000

In its submission to the EU Maritime Green Paper Ireland noted that "*increasing knowledge of both the marine environment and obligations on Member States under the Habitats Directive will lead to an increasing number of designations of Marine Protected Areas. Ireland has identified and submitted 96 such Areas to the Commission for inclusion under the Natura 2000 sites, four of which lie beyond territorial waters. Ireland believes that a European Maritime Policy could usefully address the relationship between these Member State obligations under the Habitats Directive and the common policy management arrangements under the Common Fisheries Policy, for sites proposed outside territorial waters but within Member States EEZs'.*

The legal basis on which SACs are selected and designated is the EU Habitats Directive, transposed into Irish law in the European Union (Natural Habitats) Regulations, 1997 as amended in 1998 and 2005. The Directive lists certain habitats and species that must be protected within SACs.

Irish habitats include raised bogs, blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets. The 25 Irish species which must be afforded protection include Salmon, Otter, Freshwater Pearl Mussel, Bottlenose Dolphin and Killarney Fern.

The areas chosen as SAC in Ireland cover an area of approximately 13,500 square kilometers. Roughly 53% is land, the remainder being marine or large lakes.



Special Protection Areas (SPAs)

Ireland is a special place for wild birds. We are at the end of major flyways of waterfowl migrating south for the winter from North America, Greenland, Iceland and the Arctic. In spring and summer, Ireland provides important breeding grounds for species from the continent of Europe or Africa. Our long coastlines provide safe breeding and wintering grounds for large numbers of seabirds. In addition we have resident species which are scarce or rare in other parts of Europe.

Because birds migrate long distances, it is not sufficient to protect them over just part of their range, so the EU Birds Directive provides for a network of sites in all Member States to protect birds at their breeding, feeding, roosting and wintering areas. It identifies

species which are rare, in danger of extinction or vulnerable to changes in habitat and which need protection.

In Ireland, we have 25 of these species regularly occurring. They include Bewicks and Whooper Swan, Greenland White-Fronted and Barnacle Geese, Corncrake, Golden Plover, Bar-Tailed Godwit, five species of tern, birds of prey including Hen Harrier, Peregrine, Merlin as well as the Nightjar, Kingfisher and Chough.

The EU Birds Directive (79/409/EEC) requires designation of SPAs for:

- Listed rare and vulnerable species such as those mentioned above.
- Regularly occurring migratory species, such as ducks, geese and waders.
- Wetlands, especially those of international importance, which attract large numbers of migratory birds each year. (Internationally important means that 1% of the population of a species uses the site, or more than 20,000 birds regularly use the site.)

In Ireland 121 SPAs have been designated since 1985. Twenty-five other sites enjoy legal protection and will shortly be designated as SPAs. However, further designations are required pursuant to the Birds Directive. The Minister for the Environment will be publishing his proposals for the designation of additional sites on an on-going basis in autumn 2007 and spring 2008. It should be noted that many existing and future SPAs overlap with SACs. The Irish SPAs join a total of around 3,000 sites across the European Union.

Natural Heritage Areas (NHAs)

The basic designation for wildlife is the Natural Heritage Area (NHA). This is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.

To date, 75 raised bogs have been given legal protection, covering some 23,000 hectares. These raised bogs are located mainly in the midlands. A further 73 blanket bogs, covering 37,000ha, mostly in western areas are also designated as NHAs.

In addition, there are 630 proposed NHAs (pNHAs), which were published on a non-statutory basis in 1995. These sites are of significance for wildlife and habitats. Some of the pNHAs are very small, such as a roosting place for rare bats. Others are large - a woodland or a lake, for example. The pNHAs cover approximately 65,000 hectares and designation will proceed on a phased basis over the coming years.

The Geological Survey of Ireland (GSI) is compiling a list of geological/geomorphological sites in need of protection through NHA designation. A committee of expert geologists provides an initial list of sites which then undergo a process of survey, reporting and review, to provide recommendations regarding NHA status or otherwise. The GSI has completed its list of karst (i.e. exposed limestone) and early fossil sites.

Prior to statutory designation, pNHAs are subject to limited protection, in the form of:

- Rural Environment Protection Scheme (REPS) plans which require conservation of pNHAs and operate for a period of 5 years
- Forest Service requirement for NPWS approval before they will pay afforestation grants on pNHA lands
- Recognition of the ecological value of pNHAs by Planning and Licencing Authorities.

Under the Wildlife Amendment Act (2000) NHAs are legally protected from damage from the date they are formally proposed for designation.

Biodiversity action Plan

Ireland's marine and coastal sectors are of great importance. The main threats to biodiversity in the coastal zone occur as a result of pressure from the growth in human population, demographic change, inadequate planning and infrastructure, tourism and overexploitation of resources. The results can involve the loss of habitat, pollution, eutrophication, and the introduction of alien species.

In areas of the North Atlantic, the composition of fish stocks has undergone major change because of over fishing, with a decline in major commercial fish species. Irish waters are among the most important areas in Europe for Cetacea and contain important feeding and breeding areas for those species. In light of the threats to marine biodiversity, there can be little doubt about the need to promote a greater appreciation of the importance of such biodiversity and of its value both in ecological and economic terms.

The concept of Integrated Coastal Zone Management has come to prominence in recent years in the CBD (Convention on Biological Diversity)and other fora as a key means of providing for the conservation and sustainable use of marine biodiversity. Ireland is in the process of developing an integrated coastal zone management strategy. Such a strategy should play a critical role in habitat conservation to maintain biodiversity and have, as a core objective, the conservation of the best remaining areas of importance for biodiversity in the coastal context; the biodiversity in question is an irreplaceable part of Ireland's heritage.

There is a tradition of marine research in Ireland and there are currently a range of biodiversity-related research projects being undertaken by the Marine Institute and third level institutions. Commercial Sea Fisheries have a considerable impact on marine biodiversity. They impact directly on target fish and shellfish stocks, on non-target fish species and on non-fish species as 'by-catch,' and on benthic species and communities. They may also have indirect effects on species and the marine ecosystems. Many commercial fish stocks in waters off Ireland are heavily exploited and several are considered to be outside safe biological limits in some areas. Gaps and deficiencies in fishery statistics (e.g. on discards or in respect of fish landings) are also a problem.

For aquaculture to be successful and sustainable, it requires a high quality environment and clean waters. With regard to the marine finfish sector concerns have been raised regarding possible negative interaction with wild salmonid and benthic impacts. These issues are the subject of mitigating actions on the part of the State regulatory system and there are specific protocols in place to manage these impacts.

In estuarine, coastal and marine areas of Ireland pollution is usually localised and often of short duration. Problems usually arise from land based discharges, mainly of sewage or industrial origin or dumping from ships. Continuation, and where necessary enhancement, of ongoing programmes and measures in relation to direct pollution of the marine environment and to the control of inputs arising from polluted inland will be necessary to ensure pollution does not impact adversely on the biodiversity of coastal and marine ecosystems. There is also a need for adequate and reliable data on inputs and this will require the continuation and extension of existing monitoring programmes and their refinement where necessary to overcome gaps in knowledge.

Ireland's National Biodiversity Plan, published in 2002 and reviewed in 2006, contains seven marine & coastal actions which are being put in place by the relevant authorities. Ireland is currently reviewing the status of this plan and developing its 2nd National Biodiversity Plan for 2008-2012.

BIM, the state's seafood development agency along with the Marine Institute have embarked on a new working partnership with other state departments, particularly the Parks & Wildlife Service of the Department of the Environment in this area.

SWOT Analysis of Irish Seafood Industry from an Environmental Perspective

STRENGTHS	WEAKNESS
Sea fishing: • Indigenous industry using a renewable and highly prized resource • Productive fishing grounds • Irish marine ecosystems are largely in a healthy state. • Strong interest in the catching sector to improve the state of fish stocks and to embrace environmentally direct technical change. **Inshore fishing:** • Productive fishing grounds • Traditional, environmentally friendly methods • Resilient stocks; should respond well to management **Aquaculture:** • Meeting seafood market demand and reducing pressure on fisheries resources	**Sea fishing:** • Lack of historical data on some important stocks • Imbalance between catching capacity and resource supply • Historical lack of buy-in to conservation initiatives • Quality of data from industry • Low share of TAC in Irish fishing grounds • Current poor image in relation to the environment and over-fishing • Initial high cost levels of implementing environmental initiatives • Lack of applied research opportunities in universities, other learning institutions and research communities **Inshore fishing:** • Historically, lack of emphasis on inshore fisheries management

without being subject to TACs and Quotas • Controlled and regulated production process with monitoring requirements as a condition of licence. • Strong interest within the sector to continually improve environmental performance.	• Lack of historical data on some important stocks • The current licensing arrangements do not effectively manage fishing effort levels on inshore stocks. **Aquaculture:** • Negative perception and low public understanding of the sector. • Current reporting rates for monitoring.
OPPORTUNITIES	**THREATS**
Seafood Industry: • Increased demand for ethical food sources from environmentally aware consumers **Sea fishing:** • Through a fundamental restructuring programme of the national fleet, to tackle over capacity in the sector and achieve a balance between catching capacity and resource supply • Industry commitment to and participation in improved conservation practices • Industry commitment to implementing EMS as a first step towards ISO certification and sustainability • To reduce fishing costs through the use of environmental management systems **Inshore fishing:** • Environmentally sound, small scale fishing for high value local market • Strengthen environmental management arrangements for the sustainable exploitation of fisheries within SACs and SPAs. • Work with the sector to increase understanding of the management requirements in Natura 2000 sites **Aquaculture:** • Manage production within the carrying capacity of the growing area, to restore shellfish stocks. • Industry commitment and participation in improved conservation practices • Industry commitment to continuous improvement of environmental performance through the adoption of ECOPACT and eco standards. SMEs producing high quality, environmentally sound seafood products	**Sea fishing:** • The ability to maintain a healthy marine environment • Sustainability of some critical fish stocks • Imbalance between effort and stock sustainability • Currently, low uptake by industry of selective gears to protect marine biodiversity • High turnover of crew may compromise quality of environmental training and impact on a vessels' ability to implement environmentally responsible practices **Inshore fishing:** • Lack of awareness of market opportunities presented by the use of eco-labels • Lack of buy-in to new management arrangements • Lack of awareness of issues surrounding Natura 2000 and the marine environment • Restricting access to Natura 2000 sites is not currently addressed in the licensing arrangements. **Aquaculture:** • Potential excessive nutrient loading, benthic impacts, disease transfer • Lack of awareness of the environmental performance and market opportunities presented by the use of eco-labels • Lack of awareness by operators of issues surrounding Natura 2000 and the marine environment • Limited understanding of aquaculture issues giving rise to poor public perception of aquaculture

Managing Impacts

Notifiable Actions

Currently under Irish law, in SACs, SPAs and NHAs, certain activities or operations that might be damaging can only be carried out with the permission of the Minister for the Environment, Heritage and Local Government. These are called Notifiable Actions and vary depending on the type of habitat that is present on the site.

The activities listed in the Notifiable actions are not prohibited but require the landowner/occupier/etc to consult (in practice with the local Conservation Ranger) in advance. In the case of NHAs, 3 months written prior notice is required before undertaking any notifiable activities.

A list of Notifiable Actions is issued according to habitats present. As an example, the activities for which consultation is needed on an offshore island SPA are:

- Commercial or private recreational activities liable to cause significant disturbance to birds
- Construction or alteration of fences, tracks, paths, roads, embankments, car parks or access routes
- Deliberate scaring of birds
- Dumping, burning, disposal or storing of any materials including wastes
- Introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area
- Planting of trees
- Reclamation, infilling, ploughing or otherwise disturbing the substrate
- Removal of soil, mud, sand, gravel, rock or minerals
- Removing or altering walls or ruined buildings
- Broad-scale application of any pesticide or herbicide

Notifiable Actions do not apply:

- Where a licence or permission is needed from a planning authority (e.g. planning permission) or another Minister (e.g. a fishing licence or planning permission)
- To activities covered in a REPS or NPWS farm plan.

Other Actions

For special areas of conservation generally, and specifically for those marine SACs, SPAs, NHAs and MPAs that fall within the influence of this Operational Programme, Ireland is committed to establishing the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II of the Habitats Directive present on the sites.

Likewise Ireland is committed to taking appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated.

Non Technical Summary of the Strategic Environmental Assessment

Introduction

At the outset of the planning process for the development of the National Seafood Strategy for 2007-2013 Fitzpatrick Associates, in association with *ERM Environmental Resources Management Ireland Ltd*. (ERM Ireland) was commissioned in April 2007 by *Bord Iascaigh Mhara* (BIM) to undertake an Ex-Ante Evaluation and strategic environmental assessment (SEA) of the Irish Seafood Development Operational Programme (Seafood OP) 2007 - 2013. ERM Ireland's role in the project was to provide SEA-related inputs. The requirement to undertake SEA is derived from Article 11 of the SEA Directive. S.I. 435 of 2004 which is the Irish regulation of relevance in regard to the Seafood OP and is referred to as the SEA Regulation hereafter.

ERM Environmental Resources Management Ireland Ltd. (ERM Ireland) was commissioned again in July 2008 by Bord Iascaigh Mhara on behalf of the Department of Agriculture, Fisheries and Food, to undertake a Strategic Environmental Assessment (SEA) of The Irish National Seafood Plan 2007-2013. This requirement arose from amendments which had been agreed between Ireland and the EU Commission to the original draft Seafood Development Operational Programme submitted to the Commission for approval. Following consultation with the Commission, it was agreed that only those measures which were to be co-funded by the European Commission would be included in The Seafood Development Operational Programme 2007-2013. Therefore all remaining measures which were to be funded exclusively by the Exchequer (with no co-funding from the EU) were brought together in a separate Plan, namely the Irish National Seafood Plan 2007-2013 and for which a separate Strategic Environmental Assessment Process was undertaken.; The non technical summary (NTS) which summarises the key points of the Environmental Report is outlined below.

The legal context of SEA is Directive 2001/41/EC, which provides for the assessment of the effects of certain plans and programmes on the environment ("SEA Directive") came into force in Ireland on 21st July 2004. The Directive applies to plans and programmes for which the first formal preparatory action is taken on or after 21 July 2004. The relevant Irish Regulation is European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004). Further information on the SEA process can be found in *Section 3* of the Environmental Report.

National Seafood Plan 2007-2013

The overall objective of the National Seafood Plan is to produce a sustainable, profitable, competitive and market-focused seafood industry. The National Seafood Plan is seeking to make the maximum, long-term, economic and social contribution to coastal communities and Ireland as a whole. The purpose of the National Seafood Plan is to provide a framework and conduit for funding into initiatives aimed at supporting and promoting a sustainable future for the Irish Seafood industry.

The National Seafood Plan is produced by Bord Iascaigh Mhara (BIM) who is the State Agency preparing the Irish Seafood OP, on behalf of the Department of Agriculture, Fisheries and Food (DAFF).

The structure and content of the National Seafood Programme is guided and informed by a series of EU and national-level sectoral plans, as well as a range of EU and national environmental legislation. The EU and national-level sectoral legislation, policies, plans and programmes are:

1. European Fisheries Fund (EC No 1198/2006);
2. National Strategic Plan;
3. Irish-EC Co-Funded Seafood OP;
4. Outcomes of the ex-ante evaluation (referred to in Article 48 of Regulation (EC) No. 1198/2006) of the Irish-EC Co-Funded Seafood OP; and
5. Other environmental protection instruments.

Further information on these other, more strategic, plans and programmes can be found in *Section 2.2* of the Environmental Report.

There are thirteen measures which comprise the National Seafood Programme. Effectively, the measures define a series of objectives of that the National Seafood Programme is trying to achieve. Each of the measures comprises a number of Schemes. *Table 1* below sets out the thirteen Measures and each of their Schemes.

*Table 1 13 Measures of the National Seafood Plan **

Measure	Scheme
1.Category Management	Category Management Scheme
	Domestic Market Quality Scheme
2. Market Development & Promotion	Export Market Promotion
	Domestic Market Promotion
3. Innovation Support	Seafood value-Added
	Collective Investment
	Quality & Environment
	Graduate Placement
4. Step-Up Development	Processing Business Investment
	Collective Investment
5.Business Development	Business Development
	Collective Investment
6. Competitiveness & Performance	Management Development
	Performance Improvement
	Technology Transfer
	Strategic Alliances & Partnerships
7. Fleet Restructuring	Fleet Decommissioning
	Vessel safety and fuel efficiency
	Inshore Diversification
8. Aquaculture Industry Development	Pilot Aquaculture Development Scheme
	Aquaculture Innovation and Technology Scheme
	Seafood Handling Scheme
	Commercial Aquaculture Development Scheme
9. Social & Economic Development (Fisheries)	Human Skills Development
	Infrastructure Development
	Product Development & Innovation
10. Socio-Economic Sustainability (Aquaculture)	Other Sustainability Measures
	Regional development programmes for coastal fishing areas
	Peace and trans-national co-operation
11. Marine Environment Protection (Fisheries)	Environmentally Friendly Fishing Gear
	Collective Actions for Sea Fisheries
	Technical Research Partnership
	Waste Management
	Technical Innovation
12. Marine Environment Protection & QA (Aquaculture)	Development and Implementation of Quality Assurance Programmes for Aquaculture Product Scheme
	Development and Implementation of Environmental Management Programmes for Aquaculture Production Scheme

Measure	Scheme
	Regional Delivery Programme for Aquaculture Development Scheme
	CLAMS Programme
	Pre-commercialisation Technology Transfer
13. Seafood Industry Training	Improving Professional Skills & Safety Training
	Aquaculture Production Lifelong learning
	Measures of Common Interest – upgrade professional skills

Source: BIM (2008)

The list of Schemes has been updated since 2008 to reflect changes in BIM's role in seafood development and transfer of the market promotion function to An Bord Bia.

Relevant environmental protection objectives

The SEA Regulations require a description of "the environmental protection objectives, established at international, European Union or national level, which are relevant to the plan or programme, or modification to a plan or programme, and the way those objectives and any environmental considerations have been taken into account during its preparation". Regarding the Seafood OP, these are:

- EU sustainability Development Strategy;
- Common Fisheries Policy;
- OSPAR Convention;
- Convention on Biological Diversity;
- National Biodiversity Plan;
- Water Framework Directive (2000/60/EC);
- Urban Waste Water Treatment Directive
- EU Birds Directive (Council Directive 79/409/EEC);
- EU Habitats Directive (Council Directive 92/43/EEC);
- ISO 14,000 Environmental Management series.
- European Union Eco-Management and Audit Scheme (EMAS)
- SEA Directive (& associated Regulations);
- EIA Directive (& associated Regulations); and
- Aquaculture (Licence Application)(Amendment) Regulations 2006.

Details of the above environmental protection instruments can be found in *Section 2.2.7* of the Environmental Report.

Alternatives considered

The consideration of alternatives is an important part of SEA. The consideration of alternative ways to achieve a plan or programme's objectives can often result in a minimisation of negative environmental impacts. There is a limited scope of the consideration of alternatives as the scope and requirements of the Seafood Programme are defined and guided by

European Fisheries Fund (EFF) (Council Regulation No. 1198/2006). Thus, measures in the Programme are pre-defined in their scope and specific objectives (*Table 2.1*). The implication of this for the consideration of alternatives is that the Programme cannot consider priorities which are outside eligible EU funding areas and criteria.

In determining the detail and the specifics of the interventions which are included in the Programme, significant attempts were made to ensure that environmental considerations were included, where possible. Furthermore, the implementation of the Programme and its associated intervention has considerable scope for the consideration of alternatives through careful selection of various funding applications and the development of individual projects.

Scoping consultation

Scoping is a key stage in the SEA process and is where the key issues to be addressed in the environmental report are determined. The purpose of scoping is also to determine the level of detail, to be considered in the Environmental Report and the SEA methodology.

The SEA scoping methodology ERM undertook was to outline the environmental issues in a SEA Scoping Report and then consult with the designated environmental authorities (in Ireland) and agencies in Northern Ireland (transboundary consultations). In all consultation-cases, consultees were invited to make submissions on the Scoping Report and a four-week period was allowed for.

The designated environmental authorities (as defined in the Irish Regulation S.I. 435 of 2004) in Ireland who were consulted were:

- Environmental Protection Agency (EPA);
- Department of Environment, Heritage and Local Government (DEHLG); and
- Department of Communications, Energy and Natural Resources (DCENR); formerly DCMNR (Department of Communications, Marine and Natural Resources).

Transboundary scoping consultation was undertaken with three agencies in Northern Ireland. The NI agencies to whom the Scoping Report was submitted were:

- Northern Ireland Environment Agency (NIEA): SEA Section;
- Department of Agriculture & rural Development (DARD); and
- The Loughs Agency.

A four week transboundary consultation period was provided for, which concluded on Friday 12th September 2008.

Responses were received form the EPA and NIEA. All responses were considered and appropriate responses prepared. These were outlined in *Section 4* of the Environmental Report.

Description of the existing environment and identification of existing environmental problems relevant to the Seafood OP

Baseline environmental information is provided in *Section 5* of the Environmental Report. *Table 2* provides a short summary of the key baseline environmental issues.

Table 2 *Summary of baseline environmental issues and environmental problems relevant to the National Seafood Plan*

Environmental topic	Summary of baseline issues
Biodiversity, flora and fauna	**Fish stock levels:** In 2004, an estimated 1.5 million tonnes of fish were harvested from Irish waters. However, over 75% of fish stocks in these waters are outside safe biological limits (i.e. at low stock size or unsustainable levels of exploitation). General trends in fish stocks show that over the period 1999-2003, all significantly fished pelagic (open water fish species) and demersal (bottom-dwelling species) stocks showed decreases (apart from mackerel). Pressure on the marine environment is exacerbated by the non-commercial fish and undersized commercial fish being discarded when brought up with the target fish species. Discarding is largely a repercussion of the management measures in place (in particular TACs and quotas), fishermen must discard so that they land only the species for which they have quotas. Data on the rate and volume of discards is limited. The International Council for Exploration of the Seas notes that North Sea discards corresponds to approximately 22% of total North Sea landings. **Designated sites:** Ireland has formally advertised 424 such conservation sites as proposed candidate SACs (pcSACs), of which 410 have been transmitted and formally adopted by the EU as candidate SACs (cSACs). The remaining 14 pcSACs are either only recently advertised (marine offshore sites) or under appeal (as part of the site designation process) (EPA 2006). Ireland has designated 128 sites as SPAs. An additional seven advertised sites are awaiting formal designation. Of the 59 designated habitat-types (covering all habitats, not just those relevant to the OP), over 45% are classified at being in a bad condition, with an additional 45% being in an inadequate overall state. **Benthic monitoring:** Based on reports submitted by license holders to the former DCMNR (now DAFF), all the sites which reported were fully compliant. However, the level of reporting covers only 66% of the active aquaculture sites in Ireland (an improvement on previous years). The Marine Institute carried out audits at two sites to verify the findings, which the audit confirmed. Non-reporting is due to the fact that some older licenses do not have a monitoring requirement as a licensing condition. In addition when sites are in fallow, the operators often choose not to incur the expense of monitoring as there are no fish. **Sea lice:** There is a national inspection scheme monitoring the average number of ovigerous female sea lice per fish. In 2007 the overall level of inspections for which results were below the trigger levels was 70.03%. This rate of meeting the trigger standard has progressively fallen ('04: 79.5%, '03: 80.7%, '02: 87%, '01: 91%) and the reasons for this are thought to be a combination of increasing infestation pressure because of the higher seawater winter temperatures allowing a greater number of lice to overwinter and increasing difficulty in carrying out effective treatments due to other issues, such as resistance and problems with fish health.

Environmental topic	Summary of baseline issues
Population	Fishing, aquaculture and seafood process activities are primarily based in rural and coastal communities. Thus, the sector provides a vital source of employment in these communities. Fishing activities and seafood processing is concentrated in coastal Counties such as Donegal, Galway, Cork, Kerry, Waterford, Wexford, and Dublin. Ports such as Killybegs (Donegal), Castletownbere (Cork), Dunmore East (Waterford), Rossaveal (Galway), Dingle (Kerry) and their hinterlands are heavily dependent on the seafood processing and services industries. Aquaculture activities are concentrated at coastal locations in Kerry, Cork, Clare, Galway, Mayo, Sligo, Donegal, Louth, Wexford and Waterford. Due to the poor state of most commercial fish stocks landings of the Irish Fleet have been declining in most areas for many years, consequently employment in fishing and related industries has declined. In 1996, there were 2,892 people in Ireland employed in fishing and related works (this does not include aquaculture and seafood processing employment). This fell by almost 26% to 2,142 in 2002 (employment data from Census 2006 was not available at the time of writing). The fall off the fishing and related employment has been somewhat off-set by the increase in the aquaculture industry. Fisheries-related employment pays considerable less than the national average income. Using average earning levels, the national earnings average in Ireland in 2003 was €35,411 (index level = 100), whereas the average income from fisheries was €21,163 (index level = 60), 40% lower than the national income average. Income from fishing was an average of €9,500 (index level = 27). While income from the fisheries sector is considerably lower than Ireland's average income, the sector still provides valuable employment for remote and isolated populations where there is limited alternative employment available.
Human Health	**Microbiological classification of shellfish:** In 2005, 30% of sites were Class A (can be consumed directly), compared to 23% the previous year. However, in 1991 - 1994, 55% of sites were Class A. No class C (can be consumed following relaying for at least two months) sites were reported in 2005. The EPA notes that "overall, Ireland has a proactive approach to the protection of health through monitoring of shellfish waters, but the general decline in class A stocks since 1994 is a cause for concern". Causes of the decline in shellfish quality can usually be attributed to pollution of waters from anthropogenic sources, such as inadequate treatment of wastewater effluent. **Shellfish monitoring:** Annual monitoring data for contaminants in shellfish is undertaken annually by the Marine Institute. During 2005, shellfish samples were taken at 36 locations and analysis was undertaken for metals. Results show that all shellfish samples tested for mercury and lead were well within the standard value limit, set by the European Commission. All samples were within the cadmium limit. No specific area growing shellfish stood out with regards to having elevated levels of zinc, chromium, silver or nickel. However, compliance was not complete with regards to pH and dissolved oxygen. **Designated shellfish areas:** There are currently 14 designated shellfish areas in Ireland. For each of these areas, an action programme is established to ensure good water quality with a view to ensuing good quality production of shellfish food. An additional 54 shellfish water across all the major bays in Ireland are currently undergoing designation.

Environmental topic	Summary of baseline issues
Water	**Water Framework Directive data:** Data relating to the status of Ireland's coastal and transitional water bodies was obtained. The majority of coastal and transitional water bodies are not classed as being 'at risk' of meeting future Water Framework Directive requirements, although six coastal areas were identified as potentially being at risk. Data regarding nutrient loading was obtained. On a national-basis, aquaculture accounts for 0.1% of the total nitrogen input, and 0.3% of the phosphate input
Material assets	**Ireland's polyvalent fishing fleet:** As of September 2007, Ireland has a total of 1,889 vessels, consisting of 66,019 gross tonnes. In excess of 65% of these vessels were inshore vessels, of less than 12m in length.

Identification of likely significant effects on the environment

A series of Environmental Objectives were developed to identify the likely significant effects on the environmental result of the implementation of the National Seafood Plan. These Environmental Objectives were presented in the Scoping Report and comment was invited on them from statutory consultees in Ireland and Northern Ireland (Scoping Consultation: see above). Each of the 13 measures was tested/assessed against the various Environmental Objectives. The results were classified into major (significant) and minor positive impacts; neutral; and minor and major (significant) negative. In some cases, insufficient detail in the National Seafood Plan was available to allow an assessment to be made. However, it should be noted that this is often due to the fact that the OP is a high-level, strategic programme aimed at facilitating further, more specific and often site-based actions. It should be noted that the National Seafood Plan is only focused on a limited portion of Ireland's overall seafood industry and that the National Seafood Plan can only focus on a limited set of fishery measures in relation to the interventions specified in *Table 1* above. The assessment results below should not be taken to be a wider or global assessment of all of the various seafood sector and related activities which are undertaken in Ireland.

A summary of the assessment is provided below. Further detail on the assessment can be found in *Section 6* of the Environmental Report.

Under **biodiversity and flora and fauna**, predominately minor positive are predicted. However, regarding the Aquaculture Measure, neutral to potentially negative effects are predicted for the Aquaculture Measure in relation to biodiversity and flora and fauna. The basis for this assessment is that the increase in total production from aquaculture and an increase in areas utilised for aquaculture has the potential to have some minor negative effects on the environment; although it is too early in the National Seafood Plan implementation programme to determine this issue.

The National Seafood Programme is predicted to have minor to some major positive effects under **population**, which, in the context of the National Seafood Plan, is defined as rural community and coastal-based populations. Such areas have higher than average unemployment and offer limited job and economic opportunities. The National Seafood Plan will greatly increase these population's quality of life and future economic prospects.

Regarding **human health**, major positive effects are predicted for three Measures (Fleet restructuring, Aquaculture and Seafood Training) as these will greatly increase health and safety investment and knowledge in the wider sea fisheries community and sector. Minor positive effects are predicted for other Measures.

Under **soil**, neutral effects are predicted under the Marine Environmental Protection Measure. It should be noted that the biological aspect of soil (i.e. the benthic environment) is addressed under biodiversity, flora and fauna.

Minor positive impacts are predicted for **water** under the majority of Measures, similar to that of biodiversity, flora and fauna. Neutral to minor negative effects are predicted under the Aquaculture Measure. A key consideration is future higher water quality requirements as a consequence of the Shellfish Waters Directive and the Water Framework Directive.

Minor positive and neutral effects are predicted under **air and climate**.

Minor positive effects under **material assets** are predicted as the reductions in the fishing fleet will reduce the amount of boats, all of whom are trying to operate within catch constraints. Thus, the economic yields and conditions for the remaining boars will be improved. However some short-term negative effects will arise for those vessels which are decommissioned. Major positive effects are predicted under Seafood Training Measure given the large investment in training and knowledge sharing across the sea fisheries community.

Neutral to minor negative effects are predicted for **landscape** and **cultural heritage** under the Aquaculture and Socio-Economic Sustainability Measure.

Mitigation measures

Mitigation measures are proposed below to address any likely negative effects as a result of the implementation of the National Seafood Plan. These are:

- The Water Framework Directive (WFD) requires the preparation of River Basin Management Plans (RBMPs) and PoMs for all the identified River Basin Districts (RBDs) within the island of Ireland and these RBMP are to be in place by December

2009. It is recommended that any recommendations in these RBMP and PoMs are fully considered by BIM and other interested parties. It is also recommended that the individual CLAMS Groups specifically consider information in the various WFD Catchment Reports, especially the risk assessment information and data. This mitigation measure will enhance the effectiveness and the potential for positive cumulative impacts with other plans and programmes (*Section 6.12*).

- BIM shall put in place a systematic and transparent scheme implementation assessment and monitoring protocol. The objective of this scheme implementation protocol is to ensure that the implementation of the various schemes (through which the various measures are to be implemented) and projects (where relevant) will be assessed for potential significant environmental effects. Where negative effects are thought to arise, BIM will examine the scheme and amend so as to reduce the potential for negative effects. The proposed mechanism for this protocol is summarised in *Table 3* below. This protocol is based on the one developed as part of the Co-funded Seafood OP following the conclusion of the public consultation stage of that SEA. A key aspect of this 'lower-tier' assessment is that is will be more focused on environmental effects of implementing the National Seafood Plan at a point in the future when the potential effects can be determined with a greater degree of accuracy and knowledge.

- BIM is also confirming its awareness and commitment to the various site-specific assessment and consent protocols that are in existence. These are wider legislative and legal procedures (e.g. planning permission, aquaculture licensing, EIA, appropriate assessment, IPC licensing etc.) which will apply to the future activities which may arise from the National Seafood Plan, such as additional/new aquaculture activities or new sites for aquaculture processing. Through the application of these procedures (by agencies and authorities outside of BIM, such as a local planning authority or a Government department), the majority of the negative effects predicted for the Aquaculture Measure and the Social and Economic Sustainability Measure will not arise.

- BIM are assisting DAFF in the development of a site-specific Appropriate Assessment protocol for aquaculture licensing. Such a tool is essential in ensuring that potential site-specific impacts of aquaculture activities are addressed at this appropriate level. An established working group comprising BIM, DAFF, MI and NPWS officials are compiling and testing the appropriate assessment protocol and it is anticipated that the group will continue to be convened for ongoing and regular review of the process; if new data becomes available to inform assessments; or new practices are recommended that will improve the overall effectiveness of the assessment procedure. This mitigation measure will assist and enhance the effectiveness of the

site-specific AA (required as part of the aquaculture licensing process) in minimising impacts from site-based aquaculture operations.

Monitoring

Monitoring of the environmental effects of the implementation of the Seafood OP is a requirement under the SEA Regulations. The purpose of monitoring is to determine if unforeseen effects have arisen during the implementation of the OP and to take remedial action, if required. BIM, as the plan-making authority, is responsible for this monitoring programme (although BIM is not responsible for generating the monitoring data or undertaking specialist studies to supplement the existing data, unless BIM is listed as a source for the data in *Table 3* below).

It is recommended that the SEA-related monitoring be tied-in with the monitoring of the implementation of the Seafood OP. It is proposed that SEA monitoring results are presented in the Annual Implementation Report of the Seafood OP. Note that it is the authorities with responsibility for the data sources (such as the DAFF or DTM, Marine Institute, EPA, local authorities etc.) to provide up-to-date data. The only responsibility for BIM is to obtain the latest data from these sources and present the results, and comment on emerging trends, in its Annual Implementation Report.

Table 3 Irish Seafood National Programme SEA monitoring programme

Environmental topic	Measure	Monitoring requirement	Source
Material assets	Fleet restructuring	Rate of progress of the decommissioning of the Irish demersal and shellfish fleets	DAFF or DTM
Population	Step-up development; Competitiveness performance	Seafood and related employment	BIM and Census data
Biodiversity, flora & fauna, Water	Aquaculture industry development;	Rate of aquaculture monitoring reporting (currently at 66%) Aquaculture monitoring results and the rate of compliance with license conditions Regional nutrient loading (and other relevant environmental data) from aquaculture and fishing activities Compliance with recommendations in RBMP and PoM NPWS Conservation Status Report (required under Article 17 of the Habitats Directive)	DAFF or DTM DAFF or DTM Water Framework Directive Basin District Reports Relevant RBMP NPWS
Human health	Aquaculture industry development; Seafood industry training	MSSC - biotoxin and microbiological monitoring and rates of compliance Uptake and attendance at training courses	DAFF or DTM BIM
Individual Project Assessment for Grant aid (i.e. application assessment and monitoring protocol)	All measures	**Step 1** Applications for grant aid to be received and evaluated by BIM in the normal manner. An additional protocol whereby the applications would also be assessed to determine the potential for significant environmental impacts not already taken into account in existing processes, would be conducted by both BIM and the M.I. Where judged to have the potential to have significant environmental impact, additional submission(s) may be required from the applicant, to provide whatever extra information is deemed necessary. This additional information would be assessed by both BIM and the M.I. The input of other	BIM MI UNaG

Environmental topic	Measure	Monitoring requirement	Source
		experts may also be brought into the process if necessary. A report would be then be prepared and submitted to the implementing body to take into consideration when finally assessing the project. Project approval may be subject to associated conditions. **Step 2** Annual Audit by Implementing Body to cover compliance with environmental protocol for project selection Results of Audit to be furnished to Department who will present to the OP Monitoring Committee **Step 3** Independent Assessment of impact of the programme from an environmental perspective to be carried out at 2 yearly intervals; Any recommendations from that Assessment to inform future support for projects.	

Statement of the Irish Source: BIM & ERM (2008)

Full details are available in the SEA National Seafood Plan 2007-2013 December 2008 and at www.bim.ie and in hard copy from BIM.

Justification for Adoption Of The Irish Seafood National Programme 2007-2013

The National Seafood Programme 2007-2013 has been subject to SEA procedures, including public, statutory and transboundary consultation with agencies in Northern Ireland. Following the various consultation stages of the SEA process, BIM has addressed the issues raised by the Consultees and has introduced amendments to the mitigation measures and to the monitoring programme. Full details of the proposed monitoring programme for the National Seafood Plan are contained in Section 6 of the SEA Statement. (see www.bim.ie)

Consultees raised the issue of alternatives considered. As noted previously, the scope for the consideration of alternatives within the National Seafood Plan is somewhat limited by European Fisheries Fund (EFF); Council Regulation No. 1198/2006 and the National Strategic Plan, all of which set the scope of the Seafood Operational Programmes and therefore , the measures and schemes in the Programme.

However, this does not imply that there is no scope for the consideration of alternatives during the implementation of the National Seafood Plan. The Plan will be implemented via a series of schemes, themselves subject to post-SEA assessment. BIM will ask for amendments to the scheme application if it is deemed that unwarranted or unacceptable environmental impacts might arise if the specific application under a Scheme is successful.

The development of the application assessment and monitoring protocol will also consider alternatives, in that each application will have to demonstrate that environmental factors and impacts have been considered in the development of the application. Furthermore, BIM shall ask for amendments to the application, if it decides that unwarranted or unacceptable environmental impacts might arise if the application is successful.

The benefits of the Irish National Seafood Programme are to provide a transparent and clear suite of objectives and programmes which are underpinned by sound environmental, nature conservation, social and sustainability principles. The intended result of the implementation of the National Seafood Programme is a number of new and exciting initiatives to assist the Irish seafood industry towards a more sustainable future.

1 (C).2 *Description of Labour Market Conditions*

1(C).2.1 Equality in the Labour Market

Some 10,975 jobs have been generated predominately along the coastal regions of Ireland. The Irish seafood industry is male dominated. However, downstream activities such as fish processing and packaging provide employment opportunities for women living in coastal communities. Therefore, investment in seafood production facilities will provide job opportunities for women and will contribute to greater equality of opportunity between men and women.

Table 1.11: Industry Employment 2006 by Gender

	Male	Female	Total
Fisheries	4985	2	4987
Aquaculture	1696	240	1,936
Processing	1577	1290	2,867
Ancillary	N/A	N/A	1,185
TOTAL	**8258**	**1532**	**10,975**

There is also a wide cultural diversity of personnel involved in both the catching and aquaculture sectors. A number of nationalities contribute to the development of the industry.

Education and training has a vital role to play in ensuring the long-term development of the industry and in promoting equal opportunities for all and particularly for female participation within the sector. There is an ongoing need to develop and provide specific training programmes for the Irish seafood sector and to encourage female participation within training programmes. Training for women in the seafood sector will be an integral part of BIM's training programme for the period 2007 to 2013. Currently, overall participation by the industry in non-statutory education and training programmes is disappointingly low; the contribution that training and education can make to the sector is not fully appreciated. It is envisaged that these training and education objectives will contribute significantly to the overarching goal of this Operational Programme to support the delivery of the highest possible value generation from all sectors of the seafood industry based on environmentally responsible production practices.

It is envisaged that the composition of the monitoring group will include representation of specific interest groups such as "Mna na Mara" i.e. "Women of the Sea", which will promote the participation of women in the seafood industry. State aid support will be made available to Coastal Action Groups into which women will be encouraged to become engaged.

The Employment Equality Act 1998 provides the basis of employment equality law in Ireland and outlaws discrimination on a wide range of grounds. The Act provides that it

should be discriminatory to treat a person less favourably than another would be treated on the basis of their:

- Gender
- Marital status
- Family status
- Sexual Orientation
- Religious belief
- Age
- Disability
- Race, colour, nationality, ethnicity or national origins or
- Membership of the travelling community.

Gender based discrimination is dealt with specifically in Part 3 of the Act.

1(D) Main Outcomes of the Analysis

The analysis outlined in this Chapter shows that the sustainable viability of the industry in commercial and environmental terms can only be secured if action is taken to address fundamental problems facing the sector. Overall, the industry's approach to the market and its performance within the marketplace is well below what exists in other sectors of the Irish food industry. Consequently, the maximum potential value for both fisheries and aquaculture is not being achieved. The fish-processing sector is fragmented, operating at significant over capacity and generating little profit. A declining supply of raw material has contributed to the poor state of the sector. The imbalance that exists between the current catching capacity of the Irish fishing fleet and the resources available to Irish vessels is the key issue facing the industry. The aquaculture sector must build up critical mass in production and become more competitive in the international marketplace and environmental sustainability must be placed at the forefront of the industry's development from now on. These areas are treated in the National Seafood Strategy 2007-2013 and this Seafood Operational programme will specifically focus on adjustment of the fishing fleet, development of the inshore fisheries sector, measure to promote good environmental practice, building scale in aquaculture production and encouragement of small scale activity geared to counteracting the decline of fishing activity and thereby improving the livelihoods in communities in remote coastal areas.

Adjustment of Fishing Effort

The introduction of the decommissioning programme for older whitefish vessels was the first in a series of initiatives aimed at ensuring the long-term sustainability of the sector.

However, there was insufficient uptake on this decommissioning programme and therefore more serious adjustment will be required in the Operational Programme 2007-2013.

At the time of its inception the Fleet Development Measure 2000-2006 supported the introduction of new vessels and modern second hand vessels into the Irish fleet with the aim of reducing the average age from 35 years. This proved successful and the average age now stands at 25 years. Similarly funding was available to modernise vessels within the fleet: this however, in the same way as the replacement of older vessels with modern, more efficient vessels, had the effect of increasing the effective fishing effort of the fleet and was discontinued under the CFP review in 2002.

Over the past eight years the renewal programme has brought about improvement in safety and operational standards of the current fleet while decommissioning has removed some larger, older vessels. The completion of the twin-track approach of renewal and restructuring is vital to the future success of the catching sector as it will deliver a smaller fleet that is modern, efficient and safe.

Aquaculture

With assistance from the FIFG and the National Development Plan over the last decade the aquaculture sector has achieved reasonable success. The sector comprising 25 finfish farming operations and some 300 shellfish farming units has become an increasingly important source of fish and shellfish with an annual output in excess of €100 million. However, in spite of such progress the aquaculture has not yet delivered on its full potential and there are a number of reasons for this, including:

- The emergence of significant competition from countries with low cost/large-scale aquaculture industries competing, sometimes unfairly, on traditional EU markets;
- Increased production costs due to disease outbreaks/stocks health issues
- Difficulty in attracting investment and loan finance for fixed and working capital requirement.

The three areas which must be addressed to enable the aquaculture sector realise its full economic potential are improving efficiency and cost effectiveness, improving environmental impact including visual impact and building up critical mass in production.

Environment

While public perception has hitherto focused on the issue of over-fishing, increasingly the wider environmental issues raised by sea fisheries are beginning to impinge on consumer consciousness and have moved up the agenda of environmental regulators and NGOs alike. Chief among these concerns has been the issue of sustainability and while for some fish stock (primarily those managed by TAC and quota) this is primarily a matter for the CFP; it is not a duty that can be shunned and left for Europe to deal with at a macro-management level.

In the past, insufficient attention was paid to fish conservation, the impacts of fishing practices on the marine environment and ecology, and more general environmental impacts of the industry. Now, with the increased understanding on the part of fisheries operators of the need to provide a high-quality product produced in an environmentally responsible way, this Operational Programme has been developed with these issues at the forefront. This Operational Programme will provide interventions and measures which will focus on the major concerns facing the industry including, managing for resource sustainability, testing into alternative uses for bycatch, implementing environmentally responsible fishing practices on vessels, tackling discarding through testing and development of more selective gear types, decommissioning to reduce effort and improved testing in environmentally sensitive areas to facilitate the development of Natura 2000 conservation management plans.

The Operational Programme will also be looking at ways to engage stakeholders in order to encourage greater uptake of the environmental programmes offered. This work will include education, awareness, the central involvement of stakeholders in management, the development of EMS accreditation including eco-labelling.

It has been recognised by the industry that the progress made in moving towards the sustainable management of inshore fisheries at a national level presents opportunities in the marketplace. Certification and accreditation will facilitate the market differentiation of the products produced in a more environmentally responsible manner and therefore offer fisheries operators the opportunity to consolidate market share and improve their economic performance. Whilst product quality was once a point of differentiation in the marketplace for sea fisheries products, it is now regarded as a given. In the same way 'Responsible Fishing' is now becoming the next given expected by the consumer. This type of market-led innovation presents an opportunity to significantly enhance the seafood industry's environmental performance.

Inshore fishing

The traditional importance of the off-shore sector at a European level and the lack of a clear and coherent resource management policy remains a threat to the sustainable development of the inshore sector. While the majority of inshore stocks are relatively resilient and have not shown radical decreases in recent years, nevertheless many are showing patterns of persistent long term decline mirrored by increasing fishing effort. These fisheries, which hitherto have been managed by a limited suite of Technical Conservation Measures, now need a coherent resource management policy. Nationally, the 2005 'Shellfish Management Framework' (developed during the 2000 -2006 programming period) offers a comprehensive, coherent, stakeholder inclusive approach to this issue through the development of species specific management plans. However for the Inshore Framework to be successful, aspects of current national policy will need strengthening, particularly in the area of effort management and access arrangements for inshore stocks. Such changes will also be necessary if we are to better manage fishing activities in NATURA 2000 sites.

Moving the inshore industry *with local agreement* to species based management plans incorporating managed access to stocks is seen as an important target for the operational programme 2006 – 2013. Species based management plans will also lead to increased profitability for operators while reducing fishing effort and improving the security of supply to market. These new management arrangements will also provide opportunities for the more effective marketing of inshore seafood, as well as increased exploitation of niche markets through the use of restrictive geographic designations or eco-labels.

In conclusion, the balanced development and sustainable management of inshore stocks based on an integrated Inshore Development Strategy needs to be encouraged and enhanced institutional support for inshore fisheries and the communities that it supports must be provided.

Conclusion

It is envisaged that by 2015 the concerted efforts under the National Seafood Strategy and the Operational Programme will collectively lead to a sustainable sea fisheries and aquaculture industry.

The intervention measures to address the challenges and opportunities identified in this Section which will enable the continued viability of the sector and enhance its contribution to the socio economic fabric of remote coastal communities are set out in detail in Section 3 of this Operational Programme.

Section 2 Strategy at Operational Programme Level:

2.1 Overall Objectives of the National Seafood Plan using Impact Indicators

Steering A New Course – the Report of the Seafood Industry Strategy Review Group[2]., which forms the basis of the National Strategic Plan, sets out a vision for a sustainable, profitable and self-reliant seafood industry that will maximise the long-term contribution of the seafood sector to coastal communities. The objective of the National Seafood I Programme is to deliver on this strategy resulting in the emergence of a restructured, commercially-focused, innovative, self-reliant industry with market forces driving success and founded on a well-managed fisheries resource and a sustainable aquaculture industry that are competitive and profitable and operating in a healthy and diverse marine environment. One of the overriding objectives of this Programme is to address certain critical factors along each stage of the industry value chain, that are undermining the industry's competitiveness and ability to command premium prices in the market-place; the resolution of which will result in an industry that has significantly enhanced its performance on all fronts.

There are nine core themes encapsulated in this Operational Programme which contain the Measures and Schemes through which the seafood identity will be supported. These core themes are summarised as follows:

Market Development/ Promotion

To establish a seafood industry that captures the full potential value of Irish seafood through a market focused, customer-led development strategy, supported by enhanced trade and promotional activity.

Business Development / Innovation

The development of a seafood industry with the capability to establish a leading position in delivering market-led innovation with specific focus on R&D, value-added development and application of appropriate technology to remain competitive and profitable into the future.

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[2] "Steering a New Course: Strategy for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-2013", *Report of the Seafood Industry Strategy Review Group* (Dublin, 2006).

Processing Sector Restructuring and Development

The establishment of a strengthened seafood-processing sector with the appropriate scale and operational efficiency to compete in an increasingly cost competitive market and with the capability to invest in value-added development to meet customer demands and take advantage of new market opportunities.

Fleet Restructuring and Development

To eliminate the imbalance between the available resource and catching capacity to ensure the future profitable and sustainable development of the whitefish sector.

Fisheries Management

To deliver a catching sector supporting and operating under a Fisheries Management Regime, comprising both a Quota Management System and a Fleet Management and Licensing policy, that incorporates effective control and enforcement mechanisms, promotes biologically sustainable stocks, economic viability and stability for vessel owners, and generates a greater focus on market needs. The objective is also to ensure the balanced development and sustainable management of inshore stocks based on an integrated Inshore Development Strategy, developed in partnership with key stakeholders.

Aquaculture Development

To significantly develop and expand the aquaculture sector, within the context of clearly defined national policies, output targets and environmental targets. This will be supported by an Aquaculture Development Programme spear-headed by BIM.

Socio-Economic Development

To improve quality of life in communities reliant on fisheries and aquaculture, by supporting them to identify ways to deal with the challenges to their socio-economic stability.

Marine Environment and Conservation

The adoption by the industry of an environmentally conscious, responsible and compliant approach to all their activities. This will require strong policy support at EU and national level. The Irish authorities are committed to taking a leading role at national and EU level in conservation practice and advocacy to ensure strengthened compliance with conservation needs and regulatory requirements.

Education and Training

To increase promotion of and access to education and training in the catching, aquaculture and shore based processing sectors with greater emphasis to be given to initiatives that:

- Improve industry participation in commercially focused training programmes and address profitability, efficiency, environmental responsibility and sustainability across all industry sectors.

- Increase the focus on training and qualifications in the inshore and coastal sectors in order to improve levels of safety, competence and profitability within these sectors and improve crew retention.

- Provide increased training to both the aquaculture and shore-based processing sector with a view to increasing professional skills within these sectors and attracting younger entrants to the industry.

- Provide diversification opportunities for those who wish to remain in the maritime sector and assist those who wish to develop alternative careers with support from other State Agencies.

2.1(a) Impact Indicators

The implementation of the proposed investment programme will result in a sizeable direct and indirect benefit to the seafood industry, the Irish economy and in particular to coastal/rural and island communities where this industry is located, thus making a key contribution to realising the aims for sustainable Regional Development central to Ireland's National Development Plan 2007-2013 of which this OP forms a part. As a result of this investment, by 2015 the Irish seafood industry will have:

- Evolved to become a market led, sustainable, self-reliant and commercially aware industry

- A Secure position across a range of target markets, both within Ireland and internationally, with Irish seafood clearly identified within the market place and recognised for a range of positive attributes;

- Undergone substantial restructuring to the point where the catching capacity of the national fleet is aligned with the available resource.

- A competitive, profitable processing sector has been established;

- Established a leading role in terms of environmental performance across all seafood sectors and will be recognised as a key advocate and practitioner of conservation measures and regulatory compliance at EU level;

- Secured its position as a key contributor to balanced economic growth ensuring that the industry continues to be recognised as a vital indigenous industry and an essential part of the fabric of coastal/rural communities;

The proposed restructuring and investment programme will have a considerable impact on output from both the sea fisheries and aquaculture sectors by 2015 as set out in Table 2.1. Fleet decommissioning, improved fisheries management, better conservation practices including stock recovery measures and strict compliance with quotas and other regulations should collectively lead to higher catches of certain whitefish stocks. Landings of pelagic stocks are expected to reach 237,000 tonnes by 2015. Increases are also projected over a range of demersal species with an estimated value of 34,450 tonnes by 2015, including nephrops. The major impact in terms of output will arise from an increased capacity in the aquaculture sector with farmed shellfish projected to reach 70,800 tonnes in 2015 while farmed finfish species ^ are projected to reach 35,300 tonnes on completion of the investment programme. Cumulatively the impact is expected to result in a supply of fish in the region of 404,370 tonnes, which is a 17% increase on 2005 seafood supplies from aquaculture and fisheries.

Table 2.1 Actual and Projected Supplies and Sales of Seafood		
	2005	2015
Supplies from Aquaculture and Fisheries	345,155 (tonnes)	404,370 (tonnes)* ^
Irish sales of seafood	702,466 (€'000)	911,040 (€'000)

* Due to the lead times the full benefits of the new NDP 2007-2013 in terms of increased output will not be fully realised until 2015.

^ **The targets for increased productive capacity for salmon will now have to be deferred until after 2013 arising from the amendments made to this Programme as a result of comments received during the SEA process. (See Pages 98 and 99)**

In addition, as a result of targeting the proposed investment at a range of 'value generating activities' there will be a significant uplift in the value of output from the industry. This will be achieved through a combination of a shift away from the bulk/commodity category of trade towards the more prepared/fresh seafood category and also through increasing the unit value of trade within all output categories.

Fleet Indicators

The future profitability and sustainability of the whitefish sector can only be achieved when the imbalance between the available resources and catching capacity has been eliminated.

Therefore, by 2015 the current decommissioning programme will have brought about, a better alignment between fleet capacity and resources available through the permanent removal 45% of the capacity of the demersal fleet of 18 metres in length and over.

Employment Indicators

In 2006, the seafood industry employed some 11,000 people predominantly in coastal communities and makes an important contribution to the national economy. While employment in the fisheries sector has been declining, these jobs are significantly important to sustaining communities and balanced regional development in coastal regions.

Going forward, the main focus for the industry will be on enhancing the value of the seafood sector and on sustaining jobs. The greater use of modern technology may render the fishing sector less labour intensive than heretofore. However, aquaculture is well positioned to grow and the aquaculture sector is likely to generate additional employment opportunities. Given the required consolidation and rationalisation in the processing sector, the focus will be on improving productivity per capita, as distinct from creating additional jobs.

Table 2.2 Industry Employment 2006

	Full time	Part time// Casual	Total
Fisheries	3,924	1,063	4,987
Aquaculture	718	1,218	1,936
Processing	2,205	662	2,867
Ancillary	1,185		1,185
TOTAL	8,032	2,943	10,975

Competitiveness

Given that the seafood industry is operating in an increasingly competitive market, there is a critical requirement to ensure that the industry is operating to maximum efficiency. Significant scope for improvement exists. Going forward focussing on the following areas:

- Enhancing the competitiveness and attractiveness of landing fish in Irish ports, however significant operational, infrastructure and cost issues need to be addressed to bring Ireland in line with best-of-class. In addition the industry will work to identify efficient and effective distribution solutions for the domestic and international markets.

- Supporting cost reduction, performance improvement and technology transfer. Where possible this will be facilitated through the provision of benchmarks allowing fishermen to compare their performance with best in class.

- Supporting cost reduction, performance improvement and technology transfer within the processing and marketing sectors based on the findings of a benchmarking study.

2.2. Specific Objectives, which the Operational Programme aims to achieve using Result Indicators.

The following analysis identifies the specific objectives that the Operational Programme aims to achieve. The expected direct and immediate effects of the 13 measures on the industry and its' beneficiaries are outlined below.

The Category Management Measure,

This Measure is aimed directly at enhancing and strengthening industry knowledge and understanding of the market. This Measure encompasses two schemes designed to assist collective initiatives and actions within the industry.

Specific Targets/Objectives of the Measures Include:

- The prioritisation of support for projects under the Step-Up Development Measure
- To achieve a projected increase in value of €209 million by 2015:
- To achieve a projected increase of 40% in current exports from €354 million in 2005 to €495 million by 2015:
- To achieve a projected increase of 22% in domestic sales from €311 million in 2005 to €379 million in 2015.

The Market Development and Promotion Measure

The Market Development & Promotion Measure seeks to capture the full potential value of Irish seafood through a market-focused, customer-led development strategy supported by enhanced trade and promotional activity in key existing and target markets.
(Note: this Measure will not be undertaken by BIM)

Specific Targets/Objectives of the Measures Include:

- To prioritise projects and initiatives to support investment through the Step-Up Development Measure;
- To prioritise support for projects under the Seafood Processing Investment Scheme.
- To achieve an overall increase in value generation of €209 million by 2015;
- To achieve the projected increase of 40% in current export value from €354 million in 2005 to €495 million by 2015;
- To achieve the projected increase of 22% in domestic sales from €311 million in 2005 to €379 million in 2015;

The Business Development and Innovation Measure

The Business Development and Innovation Measure is aimed directly at developing the seafood industry's capability of establish a leading position in delivering market-led innovation, with specific focus on R&D, value-added development and the application of appropriate technology to remain competitive and profitable into the future.

Specific Targets/Objectives of the Measure Include:

- The provision of public investment over the 2007-2013 period to support the development of initiatives and projects for the benefit of the seafood processing sector in the areas of performance improvement, innovation, quality & environment and pelagic development:
- The successful development of BIM's Seafood Development Centre as a central gateway structure to facilitate industry access to state supported services;
- Achieving economies of scale in the processing and marketing of pelagic products with a concerted drive to enhance higher added value processing in the sector
- The prioritisation of projects and initiatives to support investment through the Step-Up Development and Competitiveness & Performance Measures;
- Achieving the overall increase in value generation of €209 million by 2015;
- Achieving the projected increase of 40% in current export value from €354 million in 2005 to €495 million by 2015;
- Achieving the projected increase of 22% in domestic sales from €311 million in 2005 to €379 million in 2015.

The Step-Up Development Measure

The Step-Up Development Measure seeks to create a strengthened seafood-processing sector with appropriate scale and operational efficiency to compete in an increasingly cost competitive market, and with the capability to invest in technology and value-added development to meet customer demands and take advantage of new market opportunities. This Measure contains the Seafood Processing Business Investment Scheme

Specific Objectives/Targets of the Measure include:

- The utilisation of public investment to unlock industry investment in the sector over the period;
- Achieving the projected increase in value generation of €209 million for 2015;
- Achieving a minimum of five consolidated operations through a combination of strategic alliances and partnerships;
- Achieving a significant uplift in the successful launch and marketing of new products and product extensions arising from the investment made under the Measure;
- Demonstrating increased levels of profitability over the current situation by the end of the plan period.

The Competitiveness and Performance Measure

The Competitiveness & Performance Measure is aimed at improving the overall competitiveness and performance of the seafood-processing sector and encompasses two schemes designed to assist collective initiatives and actions within the sector.

Specific Targets/Objectives of the Measure Include:

The provision of public investment for the processing sector over the 2007-2013 period and to support the development of collective initiatives and projects for the wider benefit of the processing sector.

- The utilisation of public investment to undertake a benchmark study of the processing sector to develop optimum levels of performance and establish a baseline benchmark from which progress can be tracked alongside investment support through the Step-Up Development Measure.
- The establishment of a comprehensive business and financial management up-skilling initiative and to achieve full mandatory participation for companies supported under the Step-Up Development Measure.
- Undertaking collective projects/initiatives aimed at tackling the spectrum of issues and obstacles confronting the processing sector.
- Increasing the level of expertise and knowledge of the global seafood-processing sector for the benefit of the Irish seafood industry.

The Fleet Restructuring Measure

This measure provides funding to redress the significant imbalance that exists between the available fish resources, fish quotas and catching capacity, through the introduction of a whitefish fleet decommissioning scheme, while at the same time providing grant aid to eligible vessels to improve safety standards, fish quality and fuel efficiency on board. The measure also provides grant aid for the purchase of vessels for young fishermen.

Specific Objectives/Targets of the Measure Include:

- The removal up to 3,660 GT's from the over 18 metre whitefish segment;
- The introduction up to 15 new marine tourism/sea-angling vessels;
- Assistance for up to 40 young skippers (under 40) to purchase their first vessel;
- Assistance for the upgrading of safety and quality standards on up to 600 vessels;
- Assistance for the upgrading of the fuel efficiency systems on up to 100 vessels.

The Aquaculture Industry Development Measure

This Measure is aimed at providing grant assistance to small and medium sized aquaculture enterprises in the sector. In certain high-risk areas, BIM will undertake pilot or prototype projects in conjunction with industry players to assess the feasibility of innovative technology.

Specific Objectives/Targets of the Measure Include:

The targeted increases in production for the main aquaculture species are set out in the Table hereunder:

Table 2.4 Aquaculture Production Capacity 2005, 2010 and 2015

	2005	2015	Incremental Increase in Capacity 2015 vis-à-vis 2005	
	Tonnes	Tonnes	Tonnes	
Finfish				
Salmon *	13,711	30,000	16,289	
Trout Sea farmed	717	1,150	433	
Trout Fresh water	897	1,680	783	
Other Finfish	6	2,470	2,464	
Total Finfish	**15,331**	**35,300**	**19,969**	
Shellfish				
Mussels - Bottom Cultivated	29,510	44,000	14,490	
Mussels - Rope Cultivated	9,948	16,400	6,452	
Oysters C.gigas	5,812	9,000	3,188	
Other Shellfish	643	1,400	757	
Total Shellfish	**45,913**	**70,800**	**24,887**	
Total Aquaculture	**61,244**	**106,100**	**44,856**	

**** Note: The targets for increased productive capacity for salmon will now have to be deferred until after 2013 at the earliest arising from the amendments made to this Programme as a result of comments received during the SEA process.*** **(See Pages 98 & 99)**

The Social & Economic Development Measure – Fisheries

This measure will target projects of common interest that provide for economic or social development and which help to meet the objectives of the Common Fisheries Policy

Specific Targets/Objects of the Measure:

- That scheme components achieve a subscription rate, which ensures the proportional allocation of grant-aid over the period of the NDP;
- That fishermen diversifying into other sectors outside the fishing industry are supported;
- That the services offered and the conditions, under which fish are landed, processed, stored and auctioned in existing public or private fishing ports achieve a recognised level of improvement, modernisation and environmental responsibility;
- That industry requests for assistance in the development of innovative products, technologies and production methods, improving the use of little-used species, particularly species which have been hitherto discarded, by-products and waste and producing or marketing new products constitute 10% of all funding applications.
- That competitiveness of coastal fisheries areas is evidenced by an increase in the pre-qualifying baseline of social and economic indicators related to fishing and supporting services.

The Socio- Economic Sustainability Measure - Aquaculture

This measure is aimed at reducing the number of production risks to Irish aquaculture through improved contingency planning, risk assessment and preventative measures.

Specific Objectives/Targets of the Measure Include:

-
- The integration a minimum of three CLAMS groups, under the aegis of the Coastal Fishing Areas, with complementary inshore fishing groups;
- The development of a National Carrying Capacity Model covering the major areas of production;
- The creation of a minimum of three strategically located depuration/relaying facilities, operated by private interests, to address the infrastructure deficits currently constraining the expansion of the farmed mollusc sector in a manner consistent with the protection of consumer health
- The promotion of trans-national cooperation between the fisheries/aquaculture

The Marine Environment Protection Measure Fisheries

This measure provides grant-aid support for projects implemented with the active support of the fishing industry or by organisations acting on behalf of producers or other organisations

recognised by BIM. The Measure facilitates projects to address issues of environmental concern, particularly those intended to protect and develop aquatic flora and fauna while enhancing the aquatic environment.

Specific Targets/Objectives of Measure Includes:

- That scheme components achieve a subscription rate, which ensures the proportional allocation of grant-aid over the period of the NDP;
- That the value of output from the fisheries sector is increased through recognised environmental provenance and accreditation of seafood products and production methods;
- That public perception of the fisheries sector as an environmentally responsible industry is achieved.

The Marine Environment Protection and Product Quality Assurance Measure - Aquaculture

This measure is aimed at promoting the highest quality and environmental standard through the widespread adoption by the sector of accredited Quality Assurance Schemes and Environmental Management Systems (EMS's).

Specific Objectives/Targets of the Measure include:

- That the eleven existing CLAMS groups are maintained as active organisations and that eleven further groups are created to achieve full coverage around the coastline;
- That 75 percent of the capacity of the Irish aquaculture industry is farmed in conformity with the *ECOPACT** EMS;
- Environmental Codes of Practice for Aquaculture Companies and Traders
- That EN45011[3] accredited quality schemes are created and provide assurance in the 'eco-friendly' and 'organic' sectors for the main volume aquaculture species;
- That 75 % of the output from the Irish aquaculture industry is quality assured to an EN45011 standard scheme by 2013.
- To independently audit quality standards

The Seafood Industry Training Measure

The Seafood Industry Training Measure consists of three training schemes for the catching, aquaculture and shore based processing sectors with the addition of a fourth diversification scheme for those who wish to remain working in a maritime occupation or alternatively retraining of those wishing to follow new careers outside the seafood industry.

[3] EN45011 is the standard for the European accreditation of bodies involved in product certification. The Food Safety Authority of Ireland has endorsed the EN45011 quality assurance standards as the most appropriate means of quality assurance for the food sector.

Specific Objectives/Targets of the Measure:

In recent years, BIM's training delivery has been modified to accommodate the lifelong learning needs of an increased number of full and part-time seafood industry personnel requiring skills training, through modularisation and the provision of a wide range of nationally accredited courses. The following Table outlines details of training places for the period 2007 – 2013.

Table 2.3 Training Attendance by Sector 2007 – 2013

	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2007-2013**
Catching Sector	1,230	1,160	1,130	1,100	1,070	1,010	1,000	**7,700**
Aquaculture Sector	320	330	340	360	370	380	400	**2,500**
Shore Based Sector	70	120	130	140	160	180	200	**1,000**
Diversification Training	40	60	80	100	120	190	210	**800**
TOTALS	**1,660**	**1,670**	**1,680**	**1,700**	**1,720**	**1,760**	**1,810**	**12,000**
Training Hours	80,000	85,000	90,000	99,000	106,000	115,000	125,000	**700,000**

The above table is predicated on an anticipated gradual decline in fisheries training and an increase in aquaculture and shore-based training, with a new category of diversification training for those who wish to diversify within the maritime sphere or seek an alternative career outside fisheries.

Section 3: Core Themes and Measures in the National Programme

Introduction:

The Irish Seafood National Programme, 2007-2013 contains 13 Measures which are grouped around nine core themes from the Report of the Seafood Industry Strategy Review Group, *Steering a New Course*, which was reflected in the National Seafood Strategy 2007-2013 and in the National Development Plan 2007-2013. As stated in the introduction to this Programme, the legal basis for all of the schemes contained therein is found in the European Fisheries Fund, Council Regulation EC No 1198/2006 of 27 July 2006.

This Chapter is the core of the Irish Seafood National Programme 2007-2013 and contains the detailed strategy and schemes to be put in place to assist the seafood industry to advance towards the vision set out in the Report of the Seafood Industry Strategy Review Group. Section 3 details the 13 Measures and Schemes each of which is based on a specific Article(s) in the European Fisheries Fund Regulation. Each Scheme will be limited to what is permissible under the EFF, Council Regulation EC No 1198/2006 of 27 July 2006.

The Measures and Core Themes may be summarised as follows;

Core Themes 1, 2 and 3 are concerned with Market Development and Promotion and Seafood Processing, Business Development and Innovation. Within the Core Themes there are five Measures each containing a number of schemes which are geared to promoting business development throughout the seafood sector. The Fleet Restructuring Measure contains three schemes. The fleet decommissioning scheme is largely dealt with in the EU co-financed *Irish Seafood Operational Programme, 2007-2013*, but a further element of the scheme will be addressed in this National Programme together with initiatives in support of Ssfety, fuel efficiency and inshore diversification.

The Aquaculture Industry Development Measure contains four schemes which are aimed at promoting development in the sector. The Socio-Economic Development core theme, contains two Measures, one of which is co-financed by the EU and

the other two are part of this Programme. For the Fisheries sector there is the Sea Fisheries Economic Enhancement and Development Measure in which there are three schemes. For the Aquaculture sector there is the Socio Economic Sustainability Measure for Aquaculture, which contains one scheme.

The Core theme of Marine Environment and Conservation has two Measures each of which contain five schemes. One of these is a Marine Environment Protection Measures for Fisheries and the other is a Marine Environment Protection and Quality Assurance Measure for Aquaculture. Finally, there are three schemes under the Seafood Industry Training Measure

The targets set out in this Irish Seafood National Programme 2007-2013 are based on the Cawley Report *"Steering a New Course: Strategy for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-2013", Report of the Seafood Industry Strategy Review Group* (Dublin, 2006).

These targets are now only obtainable within a timeframe to 2020 due to the delay in the approval of this Seafood National Programme and the need for greater prioritising of the expenditure of scarce Exchequer resources to obtain value for money. All of the targets in this document are subject to this proviso.

Furthermore, the projected value of seafood output attributable to aquaculture investment, will depend on the species composition of the additional capacity generated from public and private investment in the sector.

In the following pages a description of the Measures is set out with the priorities, objectives and targets attaching to each of these. The Measures and Schemes are summarised under the nine Core Themes and the relevant Article(s) of Council Regulation EC No 1198/2006 of 27 July 2006 which provides the legal basis for the Scheme is cited alongside the Schemes in the Table on Page 83

The Irish Seafod National Programme 2007 - 2013
Core Themes, Measures and Schemes

Core Themes		Objective/Measure	Scheme	Legal Basis EFF Article	EFF Priority Axis
1	**Market Development and Promotion**	Market Development and Promotion Measure	Expot Market Promotion Scheme	37/40	3
			Domestic Market Promotion Scheme	37/40	3
	Category Management	Category Management Measure	Category Management Scheme	37/40/41	3
			Domestic Market Quality Scheme	37/40	3
2 & 3	**Processing, Business Development and Innovation**	Step-up Development Measure	Seafood Processing Business Investment Scheme	35	2
			Collective Investment Scheme	37/40/41	3
		Business Development and Innovation Measure	Business Investment Scheme	35	2
			Graduate Placement Scheme	34/35/37	2,3
			Seafood Value-Added Scheme	35	2
			Technology Transfer Scheme	37/40/41	3
		Competitiveness and Performance Measure	Performance Improvement Scheme	37/41	3
			Strategic Alliances/Partnerships and Distribution Scheme	37/40/41	3
4	**Fleet Restructuring and Development**	Fleet Restructuring Measure	Fleet Decommissioning CF	23-25	1
			Fleet Decommissioning	23-25	1
			Vessel safety and fuel efficiency	25/26/27	1
			Inshore Diversification Scheme	26/27	1
5	**Fisheries Management**	Marine Environment Protection Measure (Fisheries)	Inshore Management CF	37/38	3
6	**Aquaculture Development**	Aquaculture Industry Development Measure	Pilot Aquaculture Development Scheme	29	2
			Aquaculture Innovation & Technology Scheme	29	2
			Seafood Handling Scheme	29	2
			Commerical Aquaculture Development Scheme	29	2
7	**Socio-Economic Development**	Sea-fisheries Economic Enhancement and Development Measure	Human Skills Development	37/44/26	3
			Infrastructure Development	37/26	3
			Product Development & Innovation	37/40/41	3
		Sustainable Development of Coastal Fishing Areas	Development of Coastal Fishing Areas	44	4
		Socio-economic Sustainability Measure-Aquaculture	Regional Devlopment & Peace and transnational co-operation	43/44	4
8	**Marine Environment and Conservation**	Marine Environment Protection Measure - Fisheries	Environmentally Friendly Fishing Gear	25/26	1
			Collective Actions for Sea Fisheries	37/38	3
			Environmental Management Systems CF	37/38	3
			Technical Research Partnership	26/37/38/41	3
			Waste Management	36/37/39/42	3
			Technical Innovation	37	3
		Marine Environment Protection and Quality Assurance Measure - Aquaculture	Development and Implementation of Quality Assurance Programmes for Aquaculture Product Scheme	37	3
			Development and Implementation of Environmental Management Programmes for Aquaculture Production Scheme	37	3
			Regional Delivery Programme for Aquaculture Development Scheme	37	3
			CLAMS and Aquaculture Technical Support Programme	37	3
			Pre-commercialisation Technology Transfer Scheme	37	3
9	**Education and Training**	Seafood industry Training Measure	Improving Professional Skills & Safety Training	26/27	1
			Aquaculture Production Lifelong learning	26/27/29	2
			Measures of Common interest - upgrade professional skills	37	3

Core Theme 1 Market Development & Promotion

Under Core theme 1 there are two Measures namely the Market Development and Promotion Measure and the Category Management Measure. Within each of these two Measures there are two Schemes as presented in the Table below.

Core Theme 1 – Market Development and Promotion

Core Themes		Objective/Measure	Scheme	Legal Basis - EFF Article	EFF Priority Axis
1	**Market Development and Promotion**	Market Development and Promotion Measure	Expot Market Promotion Scheme Domestic Market Promotion Scheme	37/40 37/40	3 3
	Category Management	Category Management Measure	Category Management Scheme Domestic Market Quality Scheme	37/40/41 37/40	3 3

;

The Market Development and Promotion Measure was included in this National Seafood Plan prior to the Government's transfer of responsibility for the market promotion of seafood to An Bord Bia. Therefore, BIM will not be implementing the specific schemes originally drawn up for export and home market promotion, but will implement the Category Management Measure.

Category Management Measure

Description of Measure

- This Measure falls under Articles 37 and 40 of the EFF relating to Collective Actions and Development of New Markets and Promotional Campaigns. Category Management, is aimed directly at enhancing and strengthening industry knowledge and understanding of the market and supply chain of the various seafood categories. The Measure encompasses two schemes designed to assist collective actions within the industry; the *Seafood Category Management Scheme* and the *Domestic Market Quality Scheme*.

The strategy to achieve domestic and international sales growth will be founded on the basis of relevant commercially focused and robust market research and intelligence. The rationale for this Measure is based on the need to further develop detailed understanding of the seafood value chains and resolve the critical drivers and barriers that will ensure a sustainable and progressive seafood sector. Equally, trade and promotional activity within

defined European markets will require further investment in understanding of market trends at both trade and consumer level. With a gradual shift away from commodity trading, it will become increasingly important to gain up to date relevant intelligence on the retail and foodservice sectors in addition to fully understanding the competition within these sectors.

A strong focus will be given to exploring the means of improving supply chain practices and distribution infrastructure and will be closely aligned with initiatives and projects undertaken through the Competitiveness & Performance Measure. Through the projects and initiatives proposed under this Measure, the industry's ability to take advantage of market opportunities and position seafood products competitively will be strengthened. The Measure will seek to develop a range of projects and initiatives, in consultation with industry with the objective of driving value generation and competitiveness within the sector.

Priorities & Objectives

The key objective of the Category Management Measure is to significantly strengthen industry intelligence and identify drivers and barriers in the seafood value chains through undertaking a range of collective initiatives and projects for the benefit of the sector.

In this respect, the key priorities and sub-objectives are as follows:

- Support the achievement of value generation targets for 2015 through the establishment of a comprehensive category management programme with particular focus on species groups with good growth potential
- Concentrate resources on developing insightful intelligence capability with industry mainly within key European and Asian markets as well as the domestic market
- Collaborate on the development of a customer-focused strategy through building a comprehensive understanding and knowledge of key existing and potential customer accounts in target markets
- Undertake research to support the shift away from bulk/commodity trading to higher value channels with a focus on understanding the retail and food service channels.
- Support the improvement of supply chain management practices and reduction in the number of intermediaries and generate higher returns for the seafood sector
- Provide support to the increased level of new product development (NPD) activity supported through the Step-Up Development Measure
- Support the development of fisheries and aquaculture products through providing analysis of trends and market dynamics to the sector.

- Support the development of seafood retail and food service outlets which provide excellence in seafood quality, service and presentation with the objective of building up sales of seafood in the domestic market.

Targets

In tandem with the other Measures in Core themes one to three, the key targets for the Category Management Measure are as follows:

- Achieve the projected increase in value of €209 million by 2015.
- Achieve the projected increase of 40% in current exports from €354 million in 2005 to €495 million by 2015.
- Achieve the projected increase of 22% in domestic sales from €311 million in 2005 to €379 million in 2015.

Market Development and Promotion Measure

Description of Measure

- The **Market Development & Promotion Measure** seeks to capture the full potential value of Irish seafood through a market-focussed, customer-led development strategy supported by enhanced trade and promotional activity through two schemes; the *Export Market Promotion Scheme* and the *Domestic Market Promotion Scheme.*

(**This Measure will not now be implemented by BIM)**

The Measure will be developed to give effect to this strategy and achieve a strong competitive position for Irish seafood in key markets in order to achieve the projected value generation targets set for 2015.

This Measure falls under Article 37 and 40, of the EFF, relating to Collective Actions and Development of New Markets and Promotional Campaigns. In this context, projects and initiatives undertaken will be on a collective basis for the wider benefit of the industry.

Growing consumer concern regarding the role of diet in health and the desire to take a more pro-active role in optimising personal well-being is a key driver in shaping food demands internationally. Equally, demand for convenient, easy-to-prepare meal options continues to grow to meet the need for shorter preparation times.

While overall per capita consumption is not projected to increase across Europe over the coming decade, recent trends show a positive trend towards the consumption of pre-packed, pre-prepared and convenience seafood products. This trend will continue to grow in line with the rate of population growth declining and a growing ageing population with greater levels of disposable income and a keen interest in health.

It is against this backdrop that the Market Development & Promotion Measure seeks to position Irish seafood favourably in European markets and in the domestic market. Supporting developments and improvements through investments made in the Step-Up Development, Competitiveness & Performance and Market Investment Measures, this Measure is aimed directly at strengthening Ireland's market position and generating the highest possible market value for Irish seafood.

Priorities & Objectives

The key objective of the Market Development & Promotion Measure is to strengthen the promotion and marketing of Irish seafood in key existing and target markets in order to achieve a strong competitive market position and generate the highest possible market returns for the industry.

This overall objective breaks down into a number of priorities and sub-objectives as follows:

- Concentrate the focus of marketing and promotional activity mainly to support the domestic market and Ireland's five premier export markets – France, UK, Spain, Germany and Italy.
- Prioritise support to capture retail, foodservice and ingredients customers in these markets to support the shift away from bulk/commodity trading and the development and launch of new products developed under the Step-Up Development Measure.
- Develop detailed marketing plans for each market to support the growth in sales and value of Irish seafood amongst key existing and potential customers.
- Prioritise the development of marketing and promotional campaigns to support growth targets set out within these marketing plans and ensure that such campaigns are monitored and evaluated in terms of their effectiveness .
- Support an enhanced level of trade marketing and promotional activity to position Ireland favourably vis-à-vis competitors and communicate the developments and progress being made by the industry in meeting market requirements.
- Provide support to assist in the promotion of fisheries and aquaculture products and in particular seafood originating from local landings and aquaculture operations.
- Provide support for quality certification, label creation and the certification of products caught or farmed using environmentally friendly production methods.
- Support initiatives to educate both trade and consumers on the health and nutritional benefits of seafood in addition to the ease of preparation and convenience of seafood products.

Targets

The key targets for the Market Development & Promotion Measure are as follows:

- Prioritise projects and initiatives to support investment through the Step-Up Development Measure.
- And In tandem with the other Measures
- Achieve the overall increase in value generation of €209 million by 2015.
- Achieve the projected increase of 40% in current export value from €354 million in 2005 to €495 million by 2015.
- Achieve the projected increase of 22% in domestic sales from €311 million in 2005 to €379 million in 2015.

Core Themes 2 & 3: Processing, Business Development & Innovation

Under Core themes 2 and 3 there are three distinct Measures geared to support business development in the seafood sector. These are the Step-Up Development Measure, the Business Development & Innovation Measure and the Competitiveness & Performance Measure. Within these three Measures there are eight Schemes. These are shown in the Table below and a description of the Measures follows.

Core Themes 2 & 3 - Processing /Business Development & Innovation

Core Themes		Objective/Measure	Intervention/Scheme	Legal Basis - EFF Article	EFF Priority Axis
2 & 3	Processing , Business Development & Innovation Measure	Step-up Development Measure	Seafood Processing Business Investment Scheme	35	2
			Collective Investment Scheme	37/40/41	2
		Business Development & Innovation Measure	Business Investment Scheme	35	2
			Graduate Placement Scheme	34/35/37	2,3
			Seafood Value-Added Scheme	35	2
			Technology Transfer Scheme	37/40/41	3
		Competitiveness & Performance Measure		37	3
			Performance Improvement Scheme	37/41	3
			Strategic Alliances & Partnerships Scheme	37/41	3

Step-Up Development Measure

Description of Measure

The Step-Up Development Measure falls under Priority Article 35, of the EFF, relating to Eligible Measures in Processing and Marketing. The Measure seeks to create a restructured seafood processing sector with the appropriate scale and operational efficiency to compete in an increasingly cost competitive market and with the capability to invest in R&D and value-added development to meet customer demands and take advantage of new market opportunities. The Measure encompasses two schemes designed to support investment in industry-led development; the *Seafood Processing Business Investment Scheme* and the *Collective Investment Scheme*.

The rationale for the Measure is based on the recognition that there is a declining supply of raw material and the industry is fragmented thus highlighting the need for increasing operational efficiency and capacity utilization in processing, increased investment in new product development (NPD) and technology are all required to survive in an a competitive, modern processing sector and to ensure its development for the future.

The Measure recognises the need for a sustained action to overcome the major obstacles impeding the sector's development and to maximise returns from available supplies. Equally, and notwithstanding the increased pressure from low cost producing countries such as China and Chile, the sector requires a continuous improvement in productivity, capacity utilization, operational efficiency and technology transfer to compete internationally. The fragmented structure of the sector is a challenge and there will be a focus on developing strategic alliances and partnerships to develop economies of scale and help strengthen the performance of the sector.

From a positive perspective, the sector possesses excellent knowledge and experience of seafood processing and a good track record in producing high quality seafood products for both domestic and international markets. There are a number of innovative, well-performing businesses within the sector that have achieved international success demonstrating the potential to create a viable, more profitable and competitive sector for the future.

Priorities & Objectives

The key objective of the Step-Up Development Measure is to harness this potential by strengthening the processing sector so that it is capable of competing internationally and delivering high quality and innovative products to meet market requirements. This essentially entails supporting the establishment of a small number of medium scale processors in addition to providing appropriate support to small, niche, speciality processing businesses, which equally provide an important contribution to the sector. Support will be channelled through the Seafood Processing Business Investment Scheme.

This overall objective encompasses a number of priorities and sub-objectives:

- Prioritise support for businesses demonstrating strong potential and good market prospects.
- Provide support for strategic alliances and partnerships to promote consolidation within the sector.
- Prioritise support for investment to improve competitiveness and performance levels within the sector.
- Prioritise support for investment in New Product Development and technology transfer within the sector.
- Provide support to initiatives that seek to improve quality and food safety assurance.
- Support investment in projects that seek to reduce environmental impact and introduce new environmentally friendly methods.

Targets

The key targets for the Step-Up Development Measure are as follows:

- Provide support to unlock industry investment in the processing sector over the 2007-2013 period,
- Create a robust seafood processing sector by 2013 and support the profitable development of the companies therein.
- Achieve the projected increase in value generation of €209 million for 2015
- Achieve a significant uplift in the successful launch and marketing of new products and product extensions arising from the investment made under the Measure.

Business Development and Innovation Measure

Description of the Measure

The Business Development and Innovation Support Measure, is aimed directly at developing the seafood industry's capability to establish a leading position in delivering market-led innovation with specific focus on value-added development and the application of appropriate new technology to remain competitive and profitable into the future. Business planning and mentoring will engender a sharper commercial focus and underpin development and growth of individual seafood businesses. In tandem, seafood businesses will need to differentiate their product range through branding, quality programmes and clearly defining target markets. In addition, companies will be encouraged to implement new route to market structures and partnering arrangement to fully exploit opportunities. The Measure is comprised of four schemes; the *Seafood* Value-Added *Scheme,* the *Technology Transfer Scheme*, the *Graduate Placement Scheme* and the *Business Investment Scheme.*

The performance of the seafood industry in the area of innovation, technology transfer, performance improvement and new product development (NPD) has historically been low and not sufficient to have a meaningful impact on the market value generated. This position is further weakened by the low level of investment in seafood-related innovation, technology transfer and NPD activity within publicly funded research and development institutions. In addition, where such activity does occur, it lacks co-ordination and well informed market direction.

This lack of focused investment and co-ordination forms the basis and rationale for the Business Development and Innovation Measure, which is designed to take a commercially focussed approach, combining business development and innovation, to shape and ensure successful development of new product development and technology application in the seafood sector. The Measure will run in parallel with the Step-Up Development and Competitiveness & Performance Measures and will focus on practical implementation of new technologies, innovation and NPD, together with increasing the number of Graduates entering the seafood sector, to improve overall quality, competitiveness and performance with specific focus on the seafood processing sector.

Recognising that there are a number of relevant State authorities with roles in innovation, R&D and NPD, the Measure will be publicly funded with projects and initiatives channelled through a central gateway structure to facilitate ease of access for outcomes and results for the industry. The Seafood Development Centre, (SDC) located within Bord Iascaigh Mhara, will be the gateway for managing investment under this Measure.

Priorities & Objectives

The overall objective of the Business Development and Innovation Measure is to support the industry's development through a series of initiatives and projects aimed at significantly strengthening the processing sector in particular, by improvements in innovation, technology transfer and new product development (NPD), quality, branding, differentiation and route to market structures.

There are a number of priorities and sub-objectives in this respect:

- Establishment of BIM's Seafood Innovation Initiative to facilitate access to services by the relevant national authorities and to best-in-class international service providers.
- Prioritise the development of projects directly aimed at overcoming the obstacles currently facing the industry and at developing capability, industry specific knowledge, technological advancement, innovation and NPD within the processing sector.
- Prioritise initiatives and pilot projects that seek to improve energy efficiencies, reduce environmental impact and deal with the issues of waste disposal and treatment.

- Encourage entry of new graduates particularly in the areas of food technology and food business to ensure ongoing and progressive development of the sector.
- Prioritise support for implementing quality and environmentally friendly projects for fisheries and aquaculture products.
- Provide support for quality certification, label creation and the certification of eco-friendly products within the aquaculture and processing sectors.
- Support the development of products utilising surplus or under-exploited species.
- Adopt a twin-track approach for the pelagic sector to achieve economies of scale and cost efficiencies in the processing of bulk seafood products, in conjunction with a concerted drive to identify alternative market opportunities for pelagic products.

Targets

The targets for the Business Development and Innovation Measure are as follows:

- Provide public investment over the Plan period to support the development of initiatives and projects for the benefit of the seafood processing sector in the areas of seafood value adding, new product development/ innovation, quality and environment and pelagic development.
- Successful development of BIM's Seafood Innovation Initiative as a central gateway structure to facilitate industry access to state supported services.
- Prioritise projects and initiatives to support investment through the Step-Up Development and Competitiveness & Performance Measures.
- Implement Customer Relationship Management, (CRM) and Key Account Approach to provide a well co-ordinated and cohesive service delivery to the sector by all of the Agencies.
- Engender a strategic business planning approach within seafood companies to ensure both short term and long term viability
- Provide support for quality certification, label creation and the certification of products caught or farmed using environmentally friendly production methods
- Prioritise support for investment in improved supply chain management and direct sales to the market
- Support the development of new packaging and technological advances to meet customer and consumer requirements
- In tandem with the other Development Measures to achieve the value increases in output and sales by 2015.

Competitiveness & Performance Measure

Description of Measure

This Measure is aimed at improving the overall competitiveness and performance of the seafood processing sector and encompasses two schemes designed to assist collective initiatives and actions within the sector. These are*; the Performance Improvement Scheme - Processing*, and the *Strategic Alliances & Partnerships Scheme.*

The Measure will entail public projects only and is developed specifically to support the Step-Up Development Measure and Seafood Processing Investment Scheme in strengthening capability and knowledge within the processing sector in addition to securing a competitive position for the sector in the global context.

The Measure falls under Articles 37, 40 and 41, of the EFF, relating to Collective Actions, Development of New Markets and Promotional Campaigns and Pilot Projects.

The development of the Competitiveness & Performance Measure has emerged from the consensus among the implementing agencies on the need to adopt a national perspective on the development of the sector within the global context and with particular reference to the emergence of low cost producing countries as strong competitors in the European market.
The implementing agencies recognise that there are a number of major obstacles affecting the future development of the sector that are more closely aligned with the requirement for collective action than those specifically aimed at a particular enterprise or group of enterprises within the sector.

These projects will, therefore, be carried out on a cohesive basis by the implementing agencies in partnership with the industry for the benefit of the sector and will fall under a number of themes as reflected in the schemes broadly covering the areas of: Performance Improvement (processing) and Strategic Alliances & Partnerships.

Priorities & Objectives

The key objective of the Competitiveness & Performance Measure is to undertake specific initiatives and projects to address the main obstacles affecting the future development of the seafood-processing sector and to contribute to the sector's long-term development.

In this respect, the key priorities and sub-objectives of the Measure can be summarised as follows:

- Encourage business partnerships that will achieve scale and financial stability, with capacity to invest in efficient processing, business development and route to market structures.
- Provide support and assistance to businesses in resolving key development obstacles to ensure their long-term survival and profitability.
- Prioritise initiatives and projects that seek to develop capability, industry specific knowledge, technological advancement and innovation for the benefit of the sector.
- Prioritise initiatives and pilot projects aimed at improving energy efficiencies, reducing environmental impact and address waste disposal and treatment issues.
- Support the achievement of the value generation targets set out for 2015 with specific focus on the shift away from bulk/commodity processing to the production and sale of high value fresh and prepared seafood products.

Targets

The key targets for the Competitiveness & Performance Measure are as follows:

- Provide public investment for the processing sector over the 2007-2013 period, to support the development of collective initiatives and projects for the wider benefit of the processing sector.
- Utilise this public investment to undertake a benchmark study of the processing sector to develop optimum levels of performance and establish a baseline benchmark from which progress can be tracked alongside investment support through the Step-Up Development Measure.
- Establish a comprehensive business and financial management up-skilling initiative and achieve full participation for companies supported under the Step-Up Development Measure.

SEA Monitoring

Environmental topic	Measure	Monitoring requirement	Source
Population	Step-up development; Competitiveness performance	Seafood output and related employment	BIM and CSO data

Core Theme 4: Fleet Restructuring and Development

Core Theme 4 – Fleet Restructuring and Development

While the major part of the fleet restructuring measure is funded through the EU Co-financed Seafood Operational Programme, a further €19.6 million is to be funded directly though the Exchequer under this National Programme with an additional €8.4 million being allocated to support private investment in safety, fuel efficiency and inshore diversification schemes. .

The Fleet Restructuring Measure contains three schemes, namely fleet decommissioning, vessel safety and fuel efficiency and inshore diversification scheme. These are outlined in the Table below.

:

Core Themes		Objective/Measure	Intervention/Scheme	Legal Basis - EFF Article	EFF Priority Axis
4	**Fleet Restructuring and Development**	Fleet Restructuring Measure	Fleet Decommissioning	23-25	1
			Fleet Decommissioning	23-25	1
			Vessel safety and fuel efficiency	25/26/27	1
			Inshore Diversification Scheme	26/27	1

Description of Fleet Restructuring Measure

The catching capacity of the Irish Fleet currently matches or, more generally, exceeds the available resources. Reductions in the quotas of key traditional and deepwater stocks, increasing fuel costs and a relatively static financial return for landings have affected profitability throughout the sector but most significantly in the whitefish fleet.

The measure provides funding to redress the significant imbalance that exists between the available resource of fishing quota and catching capacity of the Irish fishing fleet, through the introduction of a whitefish decommissioning scheme, while at the same time providing grant aid to those vessels remaining to improve safety standards, fish quality and fuel efficiency on board.

The Measure also provides assistance to young fishermen (under 40 years) to acquire their first vessel through the provision of a premium of up to €50,000 while also providing grant aid for members of the catching sector to diversify into marine tourism activities.

Strategy

The measure provides a suite of grant aid schemes to:

- Substantially restructure the national fleet to the point where catching capacity is aligned with available resources;

- Maximise the value-added potential of fish landed;
- Improve safety standards and working facilities on board fishing vessels;
- Increase the profitability of fishing vessels through the improvement of onboard fish handling;
- Increase fuel efficiency through the introduction of new engines and conversion to more fuel -efficient and environmentally friendly fishing techniques;
- Increase additional income for the coastal fishing communities through diversification into marine tourism opportunities.

Priorities & Objectives

- To restructure the national fleet through decommissioning;
- To provide entry level assistance to young fishermen under 40 years of age;
- To increase the operational efficiency and safety of the fleet;
- To maximise the financial return for landings.
-

This National Programme has the following targets:

- To remove up to (3,660) GT's from the over 18 metre whitefish segment;
- To Introduce up to 30 new Marine Tourism/sea-angling vessels;
- To assist up to 50 Young Skippers (under 40) to purchase their first vessel;
- To assist the upgrading of safety and quality standards on up to 600 vessels; to assist the upgrading of the fuel efficiency systems on up to 100 vessels.

SEA Monitoring

Environmental topic	**Measure**	**Monitoring requirement**	**Source**
Material assets	Fleet restructuring	Rate of progress of the decommissioning of the Irish demersal and shellfish fleets	DAFF or DTM

Core Theme 5: Fisheries Management

Core Theme 5 – Fisheries Management

Core Theme 5: Fisheries Management is dealt with entirely under the EFF Co-*Financed Irish Seafood Operational Programme 2007-2013.*

Core Theme 6: Aquaculture Development

Core Theme 6 – Aquaculture Development

Aquaculture Industry Development Measure

Core theme 6 is concerned with development of the Aquaculture sector. The Aquaculture Industry Development Measure contains four schemes. These are the "Commercial Aquaculture Development Scheme" aimed at promoting investment in the sustainable development and modernisation of aquaculture SME'S , the "Pilot Aquaculture Development Scheme" which aims to promote investment in small scale investment projects in aquaculture; the "Aquaculture Innovation and Technology Scheme" which seeks to promote investment in innovative technology, new species and sites and the "Seafood Handling Scheme" which will promote investment in fish and shellfish handling facilities to promote quality and efficiency..

The Measure and Schemes are set out in the table below

Core Themes		Objective/Measure	Intervention/Scheme	Legal Basis - EFF Article	EFF Priority Axis
6	**Aquaculture Development**	Aquaculture Industry Development Measure	Pilot Aquacultlure Development Scheme	29	2
			Aquaculture Innovation and Technology Scheme	29	2
			Seafood Handling Scheme	29	2
			Commerical Aquaculture Development Scheme	29	2

:

The Measure is aimed at providing grant assistance to small and medium aquaculture enterprises in the sector. To qualify for assistance under this Measure, all aquaculture projects have to be, inter alia, licensed under the Fisheries and Foreshore Acts. This process is subject to a high level of public consultation. In the context of the Natura 2000 Directive and consequent designations, the licensing process ensures that all aquaculture investment projects will be carefully assessed wit regard to environmental impact as the process deals with the necessary appropriate assessments required.

Amendment to the Aquaculture Industry Development Measure arising from the Strategic Environmental Assessment (SEA) of the Irish Seafood National Programme 2007-2013.

Following the consultation process associated with the SEA of this National Programme, concerns were raised by the Department of Environment, Heritage and Local Government (DEHLG) with regard to compliance with the Birds and Habitats Directives in the context of aquaculture licensing and the management of certain inshore fisheries. To address these concerns, DAFF together with DEHLG/NPWS established a working group in January 2008 which also involves BIM and the Marine Institute. The inter-departmental/agency group has been working on arrangements (a roadmap) to manage fisheries and aquaculture licensing within Natura 2000 sites in full compliance with the Birds & Habitats Directives. The roadmap, which involves collecting baseline data and building towards full appropriate assessment as required by the Directives, was submitted to DG Environment in March 2009. The group has engaged in extensive detailed discussions on the issues and the collection of baseline data has already been undertaken in a number of sites. To ensure that the process continues to receive top priority DAFF has also convened a further senior level oversight group at agency CEO and Assistant Secretary General level, interacting with DEHLG and NPWS, to drive forward progress in implementing the roadmap. DG Environment will be kept fully appraised of developments as the appropriate assessments progress in the designated bays around the coast.

DAFF spent €1.4m on the data collection exercise in 2009 and committed a further €750,000 in 2010. The data collection process is well progressed and the establishment of conservation objectives by NPWS is now being undertaken.

In the context of this National Programme, no financial assistance will be given to aquaculture licence holders whose sites are located in Natura 2000 designated areas until those sites have been assessed in line with the Birds & Habitats Directives and any necessary mitigating measures (up to and including revocation, where necessary) have been taken.

Individual Projects submitted for grant aid will be assessed for their potential environmental impact as part of the approval process and analysis of these assessments used to monitor compliance with the OP Measure set out. This will be carried out using the following steps

Step 1

• Applications for grant aid to be received and evaluated by BIM in the normal manner.
• An additional protocol whereby the applications will also be assessed to determine the potential for significant environmental impacts not already taken into account in existing processes, will be conducted by both BIM and the Marine Institute.
• Where it is judged to have the potential to have significant environmental impact, additional submission(s) may be required from the applicant, to provide whatever extra information is deemed necessary.
• This additional information will be assessed by both BIM and the M.I. The input of other experts may also be brought into the process if necessary.• A report will be then be prepared and submitted to the implementing body to take into consideration when finally assessing the project.

• Project approval may be subject to associated conditions.

Step 2

• Annual Audit by Implementing Body to cover compliance with environmental protocol for project selection

• Results of Audit to be furnished to the Department who will present to the OP Monitoring Committee

Step 3

• An Independent Assessment of impact of the programme from an environmental perspective to be carried out at two yearly intervals;

• Any recommendations from that Assessment to inform future support for projects.

Concerns, arising from the public and statutory consultation process of the SEA of this Plan were also raised by the Central and Regional Fisheries Boards and supported by the Department of Communication, Energy and Natural Resources (DCENR) with regard to the negative impact that sea lice emanating from salmon farms could be having on migratory wild salmonids. To address these concerns, it has been decided that no financial assistance will be given to marine salmon aquaculture licence holders during the course of this National Programme until such time as the sea lice issue has been satisfactorily resolved.

Strategy

The Aquaculture Industry Development Measure is aimed at providing a suite of grant aid schemes to assist, on a commercial basis, privately owned aquaculture companies to:

- Accelerate the pace of investment in the sector;
- Increase the output of those species for which there is a market demand,
- Improve the competitiveness and profitability of the aquaculture sector through technology transfer and innovation;
- Promote the commercial development of new species;
- Open up new offshore sites for aquaculture and
- Improve competitiveness through enhanced quality assurance, efficiency and innovation.

Priority Objectives

- Build a critical mass in the production of key species with higher added value potential, particularly salmon and mussels.
- To facilitate the entrance into the sector of new actors initially at a pilot scale
- Create additional income and employment in peripheral coastal regions by promoting the production of those species with the potential for added value.

- Support innovation and other structural initiatives to improve the efficiency/competitiveness, safety, product quality/fish health and welfare and environmental impact of aquaculture .
- Promote the diversification of the aquaculture industry by encouraging the commercial development of new species.
- Promote the introduction of new technology to open up offshore locations for aquaculture and to improve infrastructural support for the sector.

Targets

The targeted increases in production capacity for the main aquaculture species are set out in the Table 2.4 in Section 2 of this document.

- That the volume and value of output from the shellfish and farmed finfish sectors grows in accordance with the 2013 capacity targets

(Note: The targets for increased productive capacity for salmon will now have to be deferred until after 2013 as a result of the amendments made to this Programme arising from comments received during the SEA process).

SEA Monitoring

Environmental topic	Measure	Monitoring requirement	Source

Environmental topic	Measure	Monitoring requirement	Source
Biodiversity, flora & fauna, Water	Aquaculture industry development;	Rate of aquaculture monitoring reporting (currently at 66%)	DAFF
		Aquaculture monitoring results and the rate of compliance with license conditions	DAFF
		Regional nutrient loading (and other relevant environmental data) from aquaculture and fishing activities	Water Framework Directive Basin District Reports
		Compliance with recommendations in RBMP and PoM	Relevant RBMP
		NPWS Conservation Status Report (required under Article 17 of the Habitats Directive)	NPWS
		Northern Ireland's Conservation Status Reports for aquatic Natura 2000 sites (only those with a transboundary dimension)	NIEA (Natural heritage)
Human health	Aquaculture industry development;	MSSC - biotoxin and microbiological monitoring and rates of compliance	DAFF
Individual Project Assessment for Grant aid (i.e. application assessment and monitoring protocol)	All measures	**Step 1** • Applications for grant aid to be received and evaluated by BIM in the normal manner. • An additional protocol whereby the applications would also be assessed to determine the potential for significant environmental impacts not already taken into account in existing processes, would be conducted by both BIM and the M.I. • Where judged to have the potential to have significant environmental impact, additional submission(s) may be required from the applicant, to provide whatever extra information is deemed necessary. • This additional information would be assessed by both BIM and the M.I. The input of other experts may also be brought into the process if necessary.	BIM MI UNaG

Environmental topic	Measure	Monitoring requirement	Source
		• A report would be then be prepared and submitted to the implementing body to take into consideration when finally assessing the project. • Project approval may be subject to associated conditions. **Step 2** • Annual Audit by Implementing Body to cover compliance with environmental protocol for project selection • Results of Audit to be furnished to Department who will present to the OP Monitoring Committee **Step 3** o Independent Assessment of impact of the Programme from an environmental perspective to be carried out at two yearly intervals; o Any recommendations from that Assessment to inform future support for projects.	

CORE THEME 7: Socio-Economic Development

CORE THEME 7 Socio Economic Development Measure

Under Core Theme 7, Socio-Economic Development, there are three Measures. One of these, namely the Sustainable Development of Coastal Fishing Areas is part of the EU co-financed seafood development Operational Programme 2007-2013 and is not dealt with here. These Measures and Schemes are outlined in the Table below.

Core Themes		Objective/Measure	Intervention/Scheme	Legal Basis - EFF Article	EFF Priority Axis
7	Socio-Economic Development	Sea-fisheries Economic Enhancement & Development Measure	Human Skills Development	37/44/26	3
			Infrastructure Development	37/26	3
			Product Development & Innovation	37/40/41	3
		Sustainable Development of Coastal Fishing Areas	Development of Coastal Fishing Areas	44	4
		Socio-Economic Sustainability Measure - Aquaculture	Regional Devlopment & Peace and transnational co-operation	43/44	4

The two Measures specific to this National Operational Programme 2007-2013 are (1) the Sea-fisheries Economic Enhancement and Development Measure which contains three schemes namely, Human skills Development, Infrastructure Development and Product Development and Innovation and (2) the Socio Economic Sustainability Measure for Aquaculture. This contains one scheme namely the Regional Development and Peace and transnational co-operation.

Sea-Fisheries Economic Enhancement and Development Measure

Strategy, Priorities & Objectives

Addressing critical factors along each stage of the industry value chain that are undermining competitiveness and the ability to command a premium price in the marketplace is a critical objective of this National Programme for Sea Fisheries. This measure, the Sea-fisheries Economic Enhancement & Development Scheme, is introduced with the specific intention of tackling these factors. In particular it is targeted at the catching sector both at sea and ashore and will compliment the whitefish fleet decommissioning programme already underway.

In its report the Seafood Strategy Review Group noted that at every stage in the seafood supply chain significant scope exists to greatly improve the industry's performance. In particular it highlighted the following areas for action under this programme:

1. Improving operational efficiency/reducing costs.
2. Product Quality.
3. First-point-of-sale for whitefish species and first-point-of-sale auction system for pelagic species.
4. Product distribution.
5. Succession planning and attracting/retaining young entrants.
6. Ports and landing infrastructure.

While some of these themes (for example, ports and landing infrastructure, succession planning and attracting/retaining young entrants and product distribution), are also dealt with in part or fully in other areas of the National Programme and/or the EU co-financed Operation Programme for sea-fisheries all of these areas and the first three in particular - Improving operational efficiency/reducing costs, Product Quality and First-point-of-sale for whitefish - are the major focus of this Measure.

Improving operational efficiency/reducing costs

In the context of static/declining quotas and faced with increasingly competitive markets with growing pressures from large-scale buyers, it is of vital importance that at every stage in the supply chain the industry is operating at maximum efficiency. This will require fishermen and processors to examine how they operate their business with a view to reducing costs and improving performance. On an ongoing basis, there will be a need to keep abreast with technology developments in order to ensure that the industry is operating at least in-line with competitors. It is evident that significant scope for improvement exists in the area of cost control/operational efficiency. Whilst success in the long-term may result in less employment in the industry per unit of output, nevertheless this is a vital area for improvement in the light of increasing the industry's overall competitiveness.

Product Quality

Significant opportunity exists to improve the quality of Irish seafood at every stage of the supply chain and for all industry sectors and species types. It is of vital importance that the need for quality improvement is recognised and addressed, whether aboard the vessel, at ports where the product is landed, in the co-ops and other intermediaries where product is dispatched; in the factory where the fish is processed and in the transport/storage system used to deliver the product to the market.

It is of the utmost importance that all involved in the industry achieve excellence in quality and accept that this will not necessarily deliver a market premium – in most cases it will simply allow the product in question to enter the market, as is the case with all the large scale retail

outlets. In fact, the converse is true i.e. a failure to achieve excellence in quality will result in a significant price discount and possible exclusion from key market channels.

With this in mind, every effort will be made to assist the industry improve quality standards and to engage in accredited quality programmes. Particular attention will also be paid to identifying how quality standards can be maintained onboard vessels: the difficulty associated with attracting and retaining skilled crews was identified as a major obstacle to improving quality standards. This is a major concern given that quality failures at the first point in the supply chain impacts the entire supply chain.

First-point-of-sale for whitefish species

The Seafood Strategy Review Group has noted that a radical overhaul and development of the first-point-of-sale for the whitefish sector is required – particularly with respect to the role and operations of the co-ops. In this context, the Group spelt out that such a radical overhaul would mean:

- Fewer but larger scale co-ops – potentially achieved through the amalgamation of existing co-ops;
- Within each co-op, a well functioning Board and professional management structure;
- The establishment of an independent pricing policy with payment based on well defined quality-related criteria and not on an average price approach, which is totally at odds with the market-led development of the industry;
- A management approach which would see the organisation's executive(s) determining the prices to be paid to suppliers for their fish based on market realities/quality related criteria and not based on the influence of individual fishermen;
- An efficient and effective operating structure which will ensure that fish is handled, graded, stored etc. in a manner required by the marketplace. The Strategy Review Group is of the view that substantial room for improvement exists in this area across the co-ops;
- A more professional approach to sales and marketing – with the long-term objective of achieving direct access to customers and reducing the reliance on intermediaries.

Essentially, the Strategy Review Group was of the view that a more conjoined and commercial market focus needs to be brought to the first-point-of-sale for whitefish.

Eligible measures:

To help achieve these aims the Sea-fisheries Economic Enhancement & Development Scheme will support the following:

Measures of common interest[4]

Measures of common interest which are implemented with the active support of operators or by organisations acting on behalf of producers or other recognised organisations which aim, in particular, to:

(a) Improve working conditions and safety;

(b) Contribute to the transparency of markets in fisheries products including traceability;

(c) Improve product quality;

(d) Upgrade professional skills, or develop new training methods and tools;

(e) Networking and exchange of experience and best practice among organisations promoting equal opportunities between men and women and other stakeholders;

(f) Create producer organisations recognised under Council Regulation (EC) No 104/2000 of 17 December 1999 on the common organisation of the markets in fishery and aquaculture products, their restructuring and the implementation of their plans to improve quality;

(g) Contribute to the development of small-scale coastal fishing.

Quality and value enhancement[5]

Measures of common interest intended to implement a policy of quality and value enhancement, development of new markets and promotional campaigns for fisheries products[6]. The measure intended shall, in particular, relate to:

(a) Conducting regional, national or transnational promotion campaigns for fisheries products;

(b) The supply to the market of surplus or underexploited species which are normally discarded or of no commercial interest;

(c) Implementation of a quality policy for fisheries products;

(d) Promotion of products obtained using methods with low impact on the environment;

(e) Promotion of products recognised under the terms of Regulation (EC) No 510/2006;

(f) Quality certification, including label creation and the certification of products caught using environmentally friendly production methods;

(g) Campaigns to improve the image of fisheries products and the image of the fisheries sector;

Pilot projects[7]

Pilot projects, including the experimental use of more selective fishing techniques, aimed at acquiring and disseminating new technical knowledge and carried out in conjunction with an

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[4] Article 37 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[5] Article 40 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[6] Note: the scheme is not be aimed at commercial brands nor will it make reference to specific counties or to Ireland, or geographical areas, except in case of products recognised under the terms of Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs.

[7] Article 41 of Council Regulation (EC) No 1198/2006 of 27 July 2006

economic operator, a recognised trade association or any other competent body designated for that purpose, except that in every case such pilot projects must be carried out in partnership with an approved scientific or technical body. Pilot projects may:

(a) Test, under near-actual conditions in the production sector, the technical or economic viability of an innovative technology with the aim of acquiring and disseminating technical or economic knowledge of the technology tested.

Note: 1) A pilot project shall always include adequate scientific follow-up in order to yield significant results and 2) the results of pilot projects financed under this measure must be the subject of technical reports available to the public.

Fishing ports, landing sites and shelters[8]

The Measure may support investments in existing public fishing ports, which are of interest to fish producers using them, with the aim of improving the services offered to improve the conditions for fish landed by coastal fishermen in existing designated fish landing sites. The investments shall relate, in particular, to:

(a) Improving the conditions under which fisheries products are landed, processed, stored in the ports and auctioned;

(b) The provision of fuel, ice, water and electricity;

(c) Improving safety and working conditions;

Small-scale coastal fishing[9]

For the purpose of this Measure, small-scale coastal fishing means fishing carried out by fishing vessels of an overall length of less than 12 metres and not using towed gear[10]. Specifically the measure will contribute to the financing of socio-economic measures in order to:

(a) Promote the organisation of the production, processing and marketing chain of fisheries products;

(b) Improve professional skills and safety training.

Specific Targets of the Measure Include:

This measure will target projects of common interest that provide for economic or social development and which help to meet the objectives of the Common Fisheries Policy.

[8] Article 39 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[9] Article 26 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[10] As listed in Table 3 in Annex I of Commission Regulation (EC) No 26/2004 of 30 December 2003.

- That Exchequer and industry investment be put forward to support the three schemes within this Measure between 2007 and 2013 ;
- That scheme components achieve a subscription rate, which ensures the proportional allocation of grant-aid over the period of the NDP;
- That fishers diversifying into other sectors outside the fishing industry are supported;
- That the services offered and the conditions, under which fish are landed, processed, stored and auctioned in existing public or private fishing ports achieve a recognised level of improvement, modernisation and environmental responsibility;
- That industry requests for assistance in the development of innovative products, technologies and production methods, improving the use of little-used species, particularly species which have been hitherto discarded, by-products and waste and producing or marketing new products constitute 10% of all funding applications.
- That competitiveness of coastal fisheries areas is evidenced by an increase in the pre-qualifying baseline of social and economic indicators related to fishing and supporting services

Socio-Economic Sustainability Measure - Aquaculture

Description of Measure

Aquaculture is susceptible to the effects of other forms of human activity inland and as such it acts as a form of biological indicator, generating information as to the relative health and purity of the local environment. Microbiological contamination of oysters, for example, can only occur as a result of inadequately treated human or agricultural effluents finding their way into the sea close by their growing areas. As a result of these unique characteristics, which have been recognised and specifically permitted under the EFF, and as a means of assisting the Irish aquaculture sector to slot into the process of Integrated Coastal Zone Management, a number of novel schemes are included in the Socio-economic Sustainability Measure.

The strategy underlying the Measure is focussed on the provision of shellfish purification facilities to deal with the risk of contamination from human or agricultural effluents escaping into the environment

This Measure will also be used to fund socio-economic initiatives, including the development of local bay carrying capacity models for shellfish production. It is further envisaged that there will be enhanced co-ordination between the inshore fishing and aquaculture sectors in terms of the creation of appropriate Coastal Fishing Areas. The CLAMS process and the Inshore Fisheries Management Process will be developed and administered in a complementary fashion, contributing a major building block in the development of the ICZM architecture for Ireland's coastline. Existing models for the local integration of aquaculture with inshore

fisheries (such as The Clew Bay Marine Forum) will be built upon and an enhanced paradigm created taking account of the lessons learned so far.

The Measure will fund the continued operation of the Aquaculture Initiative EEIG so as to promote aquaculture development in the cross-border region as a contribution to reconciling the damage done by the conflict in Northern Ireland and border regions. An 'all-island' approach to the environmental and quality assurance initiatives will also be fostered to ensure that the reputation and image of Irish farmed seafood is maintained in the international marketplace.

Priorities & Objectives

The key priorities and objectives are as follows:

- To support the ongoing local environmental amelioration projects and local and nationally based shellfish carrying capacity work programmes;
- To promote transnational cooperation between the fisheries/aquaculture communities in Ireland and Northern Ireland with a view to mitigating the effects of the historic conflict.

Targets

Specific Objectives/Targets

- To create the necessary local structures to integrate, by way of an overarching communications mechanism, a minimum of three CLAMS groups with their mirror local inshore fishing groups.
- To create Carrying Capacity Models for a minimum of five shellfish aquaculture bays
- To create a minimum of three strategically located depuration/relaying facilities to address the infrastructure deficits currently constraining the expansion of the farmed mollusc sector in a manner consistent with the protection of consumer health..

Core Theme 8: Marine Environment and Conservation

Core Theme 8 - Marine Environment & Conservation

Under Core Theme 8, Marine Environment and Conservation there are two separate Measures, One for Fisheries, namely Marine Environment Protection Measure and one for Aquaculture namely Marine Environment Protection and Quality Assurance Measure.

Within the Fisheries Measure, one of the schemes namely, the Environment Management Systems scheme is supported under the EU co-funded Irish Seafood Operational Programme 2007-2013. The remaining five Schemes relating to the Fisheries sector are part of this National Programme. Within the Aquaculture Measure, there are also five schemes and all of the schemes are listed in the Table below.

Core Themes		Objective/Measure	Intervention/Scheme	Legal Basis - EFF Article	EFF Priority Axis
8	Marine Environment and Conservation	Marine Environment Protection Measure (Fisheries)	Environmentally Friendly Fishing Gear	25/26	1
			Collective Actions for Sea Fisheries	37/38	3
			Environmental Management Systems CF	37/38	3
			Technical Research Partnership	26/37/38/41	3
			Waste Management	36/37/39/42	3
			Technical Innovation	37	3
		Marine Environment Protection & Quality Assurance Measure - Aquaculture	Development and Implementation of Quality Assurance Programmes for Aquaculture Product Scheme	37	3
			Development and Implementation of Environmental Management Programmes for Aquaculture Production Scheme	37	3
			Regional Delivery Programme for Aquaculture Development Scheme	37	3
			CLAMS and Aquaculture Technical Support Programme	37	3
			Pre-commercialisation Technology Transfer Scheme	37	3

Marine Environment Protection Measure - Fisheries

Strategy, Priorities & Objectives

At EU and at national policy level, at local level within coastal communities and indeed increasingly as a core driver of consumer choice, the environment has become a key consideration for fisheries. In the case of the seafood industry, it is increasingly apparent that a failure to adhere to sound environmental practices will result in major developmental difficulties.

Progressively, environmental considerations will dictate where the industry can operate, the level and intensity of its operation and the market channels into which the industry can sell. Despite these very serious realities, because the industry is very much distracted by supply related issues, not enough attention has been paid to developments in environmental policies and their potential impact on the industry. There is, therefore, an onus on industry regulators,

Development Agencies and industry representative organisations to ensure that the industry is informed in good time of environmental-related policies/developments and is positioned to respond.

Developments in environmental policy, however, should not be regarded as simply an extra burden for the industry. Instead, the industry should set itself the objective of 'turning the environment into a positive'. In this context, a range of positive environmental attributes associated with Irish seafood should be identified and exploited as points of differentiation within key markets. Furthermore, there is a need for all industry stakeholders to be conscious of the impact of the industry on the environment on a local basis – and engage in a comprehensive fashion with interested parties in these areas.

It is against this backdrop that the following specific objectives are set for this Measure:

- Increase awareness and response to environmental policies.
- Promote local area management strategies and the Coastal Zone Management approach.
- Promote the introduction of Environmental Management Systems.
- Develop management strategies that specifically aim to reduce discarding in fisheries.
- Promote the development and uptake of environmentally friendly and fuel-efficient fishing gear.

While some of these themes are also dealt with in part or fully in other areas of the National Programme and/or the EU co-financed Operation Programme for sea-fisheries all of these areas are the major focus of this measure.

Eligible measures:

To help achieve these aims the Marine Environment Protection Scheme will support the following:

Investments on board fishing vessels and selectivity[11]

The Measure will contribute to the financing of equipment and the modernisation of fishing vessels of five years of age (under the conditions of Article 25 of Regulation (EC) 1198/2006 and in accordance with the provisions of Chapter III of Regulation (EC) 2371/2002). Such investments will specifically concern improvements of safety on board, working conditions, hygiene, product quality, energy efficiency and selectivity, provided that it does not increase the ability of the vessels to catch fish. In this regard the measure will contribute to the financing of equipment and modernisation works:

[11] Article 25 of Council Regulation (EC) No 1198/2006 of 27 July 2006

(a) Making it possible for catches the discarding of which is no longer authorised to be kept on board.
(b) As part of projects covering the preparation or trial of new technical measures for a limited period.
(c) For reducing the impact of fishing on non-commercial species;
(d) For reducing the impact of fishing on ecosystems and the sea bottom;
(e) For the protection of catches and gear from wild predators, including through changes to the material of parts of fishing gear, provided that it does not increase fishing effort or undermine the selectivity of the fishing gear and that all appropriate measures are introduced to avoid physically damaging the predators.
(f) Investments to achieve the selectivity of fishing gear, including up to two replacements of fishing gear over the entire period 2007 to 2013.
(g) Funding of the first replacement of fishing gear.

Measures of common interest[12]

Measures of common interest which are implemented with the active support of operators or by organisations acting on behalf of producers or other recognised organisations which aim, in particular, to:

(a) Contribute to better, sustainable, management and/or conservation of resources.
(b) Promote selective fishing methods or gears and reduction of by-catches.
(c) Remove lost fishing gear from the sea bed in order to combat ghost fishing.
(d) Investments concerning production in particular infrastructure directed at waste treatment.
(e) Promote partnership between scientists and operators in the fisheries sector.
(f) Networking and exchange of experience and best practice among organisations promoting equal opportunities between men and women and other stakeholders.
(g) Improve management and control of access conditions to fishing areas, in particular through the drawing up of local management plans approved by the competent national authorities.

Measures intended to protect and develop aquatic fauna and flora[13]**.**

Measures of common interest intended to protect and develop aquatic fauna and flora while enhancing the aquatic environment with specific reference to the protection and enhancement

[12] Article 37 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[13] Article 38 of Council Regulation (EC) No 1198/2006 of 27 July 2006

of the environment in the framework of NATURA 2000 where its areas directly concern fishing activities, excluding operational costs.

Fishing ports, landing sites and shelters[14]

The Measure will support investments in existing public fishing ports, which are of interest to fish producers using them, with the aim of improving the services offered to improve the conditions for fish landed by coastal fishermen in existing designated fish landing sites. The investments shall relate to:

(d) Computerised management of fishing activities;

(e) The storage and treatment of waste;

(f) Measures to reduce discards.

Pilot projects[15]

Pilot projects, including the experimental use of more selective fishing techniques, aimed at acquiring and disseminating new technical knowledge and carried out in conjunction with an economic operator, a recognised trade association or any other competent body designated for that purpose, except that in every case such pilot projects must be carried out in partnership with an approved scientific or technical body. Pilot projects may:

(a) Test, under near-actual conditions in the production sector, the technical or economic viability of an innovative technology with the aim of acquiring and disseminating technical or economic knowledge of the technology tested.

(b) Enable tests to be carried out on management plans and fishing effort allocation plans, including, if necessary, the establishment of no-fishing zones, in order to evaluate the biological and financial consequences.

(c) Develop and test methods to improve gear selectivity reduce by-catches, discards or the impact on the environment, in particular on the sea bottom.

(d) Test alternative types of fishing management techniques.

Note: 1) A pilot project shall always include adequate scientific follow-up in order to yield significant results and 2) the results of pilot projects financed under this measure must be the subject of technical reports available to the public.

Small-scale coastal fishing[16]

For the purpose of this Measure, small-scale coastal fishing means fishing carried out by fishing vessels of an overall length of less than 12 metres and not using towed gear[17]. Specifically the measure will contribute to the financing of socio-economic measures in order to:

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[14] Article 39 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[15] Article 41 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[16] Article 26 of Council Regulation (EC) No 1198/2006 of 27 July 2006

[17] As listed in Table 3 in Annex I of Commission Regulation (EC) No 26/2004 of 30 December 2003.

(c) Improve management and control of access conditions to certain fishing areas;

(d) Promote the organisation of the production, processing and marketing chain of fisheries products;

(e) Encourage voluntary steps to reduce fishing effort for the conservation of resources;

(f) Encourage the use of technological innovations (more selective fishing techniques which go beyond existing regulatory obligations under Community law or innovations to protect the gear and catches from predators) that do not increase fishing effort;

(g) Improve professional skills and safety training.

Targets

- That the scheme components achieve a subscription rate, which ensures the proportional allocation of grant-aid over the period of the NDP;
- That the value of output from the fisheries sector is increased through recognised environmental provenance and accreditation of seafood products and production methods;
- That public perception of the fisheries sector as an environmentally responsible industry is achieved.

Marine Environment Protection and Product Quality Assurance Measure

Description of Measure - Aquaculture

As aquaculture activity is predominantly located on the state foreshore, a commonage shared with many other stakeholders, there is a need to establish environmentally sound credentials through the widespread adoption by the sector of Environmental Management Schemes. These schemes will help to ensure other stakeholders and the local communities that sound environmental practice is being adhered to by the sector. They will also help to build and maintain consumer confidence in the products. This action together with a range of other steps in waste management and related issues is covered in the proposal to continue the existing public programmes as a scheme forming part of this integrated measure.

Given that the volume of production from the Irish industry is unlikely to place it in a position to be the price setter for any given species, differentiation of Irish aquaculture products from the international competition will be a key to success in an increasingly discerning market place. The building blocks to achieving this will be: internationally accredited product quality assurance schemes, certified environmental management systems leading to eco-labelling, organic status, innovative product forms and use of Ireland's image, all effectively communicated to the consumer through BIM's seafood marketing programme in conjunction with the industry.

The predictions for 2013 presupposes a reasonable degree of acceptance for the industry amongst the local communities in which it operates; the emerging national issues of Integrated Coastal Zone Management and the designation of large tracts of the foreshore as Special Areas of Conservation have the potential to seriously constrain the sector if not properly managed. Group participation in the CLAMS "Co-ordinated Local Aquaculture management Systems" process and adoption of the ECOPACT EMS by individual industry members is seen as the best means of achieving integration with other stakeholders in the inshore zone. The development and maintenance of the CLAMS process and the regional delivery of the ECOPACT EMS and EN45011 quality assurance schemes will be covered by the continued provision of regionally based aquaculture development services in a publicly funded project, which is set out as a scheme in this measure. This and all such actions will be subject to regular independent audit.

Amendment to the Marine Environment Protection and Product Quality Assurance Measure arising from the Strategic Environmental Assessment (SEA) of the Irish Seafood National Programme 2007-2013.

Additionally as a mitigating measure, arising from the consultation process of the Strategic Environmental Assessment of this Programme, it is evident that the marine salmon farming sector must improve its level of control of sea lice infestations if its operations are to be seen as acceptable by the authorities responsible for the conservation of wild migratory salmonids. To address this issue a pilot project (as understood under article 41 of the EFF Regulation) will be undertaken under the Marine Environmental Protection and Product Quality Assurance Measure of this National Programme. The project will seek to put in place measures to improve sea lice infestation control efficiency in the marine salmon farming industry in Ireland. The project will be led and administered by BIM in scientific partnership with the Marine Institute. The project will be overseen by a steering group including a representative from the Department of Communications, Energy and Natural Resources. Other possible partners will include Udaras na Gaeltachta and IFA Aquaculture. As per the requirements of the Birds and Habitats Directives, the projects will be screened and an Appropriate Assessment undertaken as necessary. The project will focus on trial initiatives such as:

- The development and implementation of effective bay scale fallowing, stocking and harvesting plans.
- The development and implementation of synchronous and complimentary treatment regimes on a bay scale.
- Training courses to enhance operator efficacy and to raise operator health and safety standards during treatments.
- Trial work to improve the efficacy of certain treatment methods, theraputants and possible vaccines.

- The development of detailed Protocols and Standard Operating Procedures (SOP's) codifying and standardising operations with a view to making the available treatment methodologies for sea lice infestation control more reliable and predictable.

Under no circumstances will any expenditure associated with increasing output or productive capacity in the salmon farming sector in Ireland be eligible for financial assistance arising from the actions undertaken in the course of this project. All eligible expenditure will be confined to actions exclusively carried out to test measures designed to enhance the efficiency of sea lice infestation control on marine salmon farms in Ireland and will, as per other projects, be subject to environmental assessment at project application stage in compliance with the SEA monitoring requirements (Table 3 page 61) The results of the pilot project will be the subject of technical reports available to the public.

Market differentiation will be achieved through the BIM led product quality assurance schemes. These schemes under the QSP quality mark umbrella, will be developed from their current status to embrace a wider set of objectives. In the first instance they will be expanded to incorporate a set of national organic standards in conjunction with the Department of Agriculture, Fisheries and Food. Also an eco-sustainability' element will be layered into the accreditation process to address emerging consumer demands in this regard. To provide the eco-labelling constituent, the ECOPACT environmental management system will be further strengthened and integrated into the base suite of quality assurance schemes. Thus the QSP range of Irish aquaculture products will cover the full scope of characteristics, including organic and eco-friendly certification, giving aquaculture marketers the best possible springboard from which to launch their product offerings. The complementary strategic wing to the above is the development and maintenance of the CLAMS (Co-ordinated Local Aquaculture Management System) process and the regional delivery of the ECOPACT EMS and EN45011 quality assurance schemes. This element of the strategy will be implemented by the continued provision of regionally based aquaculture development services, which is set out as a scheme in this Measure.

Priorities & Objectives

- Successfully promote, from a developmental standpoint, that properly practiced aquaculture is an environmentally sustainable activity.
- Continue to support and develop, the existing CLAMS groups and bring new groups into operation until all of the economically significant production areas are included.
- Promote the widespread adoption of the ECOPACT EMS by the members of the industry.
- Develop and expand the existing suite of accredited quality assurance schemes to cover the full range of economically significant species.

- Create and disseminate accredited ‘eco-friendly’ and ‘organic’ standards for the key species to facilitate the niche marketing of Irish aquaculture output.
- Support the development and implementation of fish health codes of practice of the highest international standards.
- transfer technologies to improve, modernise, promote efficiency and safety of aquaculture operations with a view to engendering best practice and improve efficiency and competitiveness while also reducing environmental impact in the sector.
- create a cadre of regionally based aquaculture specialists who will provide an extension service at local level to assist members of the trade in the following areas:
    - In accessing the suite of BIM services and schemes
    - To promote and encourage the highest standards of production efficiency, farm husbandry and product quality
    - To co-ordinate and develop local producer groups and managements schemes i.e the CLAMS process and the Ecopact Initiative.

Targets

Specific Objectives/Targets

- That 75 percent of the capacity of the Irish aquaculture industry is farmed in conformity with the ECOPACT EMS.
- That EN45011 accredited quality schemes are created providing assurance in the ‘eco-friendly’ and ‘organic’ sectors for the main volume aquaculture species.
- That 75 percent of the output from the Irish aquaculture industry is quality assured to an EN45011 standard scheme by 2013.
- To import, test and establish at least three new key aquaculture techniques and technologies into the sector.
- The existing eleven CLAMS groups to be maintained and a further four CLAMS groups to be established. to achieve full coverage around the coastline.

Core Theme 9: Education & Training

Core Theme 9 – Education & Training

The Seafood industry Training Measure comprises three schemes which are set out in the Table below.

Core Themes		Objective/Measure	Intervention/Scheme	Legal Basis - EFF Article	EFF Priority Axis
9	Education & Training	Seafood industry Training Measure	Improving Professional Skills & Safety Training	26/27	1
			Aquaculture Production Lifelong learning	26/27/29	2
			Measures of Common interest - upgrade professional skills	37	3

Seafood Industry Training Measure

Description of Measure

The Seafood Industry Training Measure consists of three training schemes for the catching, aquaculture, processing and marketing sectors with the addition of a fourth diversification scheme for those who wish to remain working in a maritime occupation or alternatively retraining for occupations outside the seafood industry for those who wish to follow a new career path. The latter may involve individuals interacting directly with other training agencies. The overall emphasis will be on skills training to facilitate multi-employments by industry personnel in coastal regions as much as possible, as that is likely to be the future reality for many rural coastal communities heavily reliant on fisheries. The training targets are laid out in Section 6(B) 4.334.

The Seafood Industry Training Measure will be available to new entrants and existing seafood industry personnel alike and the implementation strategy will include the promotion and advertising of courses through a variety of means, including meetings with career guidance counsellors at secondary schools, the production of quality brochures, advertising in the trade press, coastal provincial newspapers and electronic media including BIM's website and careers sites. Course application forms are available from BIM Offices or on BIM's website.

EU Member State, EEA nationals and those holding Work Permits and resident in Ireland are eligible for access to BIM's training courses, subject to meeting the specific entry criteria. The increasing dependence on non-national crew on fishing vessels, on fish farming sites and shore based processing units has posed particular challenges in terms of training delivery for some time now. Students from New Member State countries undertaking long duration new entrant FETAC and Department of Transport deckhand and engineering courses with moderate English abilities receive English language induction and continuation training tailored to their studies. This also helps them adjust to their new surroundings and has proved very successful. BIM also has access to translators in some coastal locations to assist by

translating training materials or being present in classes where mixed languages are often a feature.

BIM assists reputable recruitment agencies make contact with industry representative organisations, whose members are seeking experienced crew, though BIM never becomes involved in the recruitment process. Due to the increasingly short-term transient nature of crewmembers in the fishing industry, communication on operational and safety issues becomes of paramount importance. To address this issue BIM took the lead role in a partnership with several EU training institutes that are part of the REFOPE network (European Network for Vocational Training and Employment in the Fisheries Sector) and Européche (Association of National Organisations of Fishing Enterprises based in Brussels) to produce a safety handbook for fishermen to prevent accidents at sea. The handbook deals with critical safety related topics, from man-overboard procedures, sea survival, and hypothermia, to risk assessment in a concise, colourful and graphically illustrated layout, printed on a durable water resistant paper. This handbook is published in 15 languages and made available free of charge to every EU fisherman following its launch in the last quarter of 2007. BIM will distribute the handbook in Ireland and provide access to a downloadable version in each of the available languages on its website.

Training will be delivered at the National Fisheries College (NFC) Greencastle, Co. Donegal, the Regional Fisheries Centre (RFC) Castletownbere, Co. Cork, at BIM's Head Office, through BIM's two mobile Coastal Training Units (CTUs) and at other coastal locations or through strategic alliances with other training institutions to avoid duplication and maximise training resources and return on investment. The priorities of the European Fisheries Fund under Axis 4, such as improving the skills of those involved in local coastal groups or those networking with other national and trans-national organisations will also be supported. The latter would entail the provision of training in the correct procedures for organising meetings, presentation and negotiation skills, the collection of data, evaluation, analysis and interpretation of results and report writing.

Priorities & Objectives

The priorities and objectives for the period 2007 – 2013 for the Irish Seafood Industry were clearly set out in the report of the Seafood Industry Strategy Review Group in December 2006, which includes a section on training. Their report *Steering a New Course* recognises the vital contribution that education and training can make to the future development of the Irish seafood industry and highlights the need for increased investment in training and increased take-up by industry. It also requires BIM to act as the central co-ordinating body for the development and provision of nationally accredited training to all sectors of the industry and recommends significant change in the type of training to be delivered in the future.

Though core statutory Certificate of Competency training for skippers, mates and engineers will continue, as will safety training to improve safety at sea and reduce the risks associated with either fishing or fish farming, there will be increased emphasis on imparting commercial

business management, supervisory and marketing skills to the seafood industry to improve efficiency and profitability. BIM will have to focus more of its training resources in support of competence, safety, sustainability and profitability in the small-scale inshore fisheries sector. In noting the significantly higher rate of accidents and machinery failure on inshore and coastal vessels affecting safety, profitability and crew retention, *Steering a New Course* recommends that unqualified skippers and mechanics on these vessels should be required to hold formal Department of Transport Certificates of Proficiency or Competency as deemed appropriate.

Aquaculture training provision will have to be significantly expanded to reflect the sectors increasing contribution to sustainable Irish seafood production (currently 38% of landed value). More training will also be delivered to the shore-based seafood processing sector in partnership with other State Agencies such as FÁS and a BIM/Enterprise Ireland Graduate Placement scheme will be established as a means of attracting more young graduates into this sector.

Environmental responsibility, sustainability and conservation skills modules will have to be incorporated in all existing training programmes and, as *Steering a New Course* proposes significant restructuring of the industry, those individuals wishing to exit the industry will need access to education and training programmes to support diversification into other areas of activity. Specialist expertise to deliver on new training activity will be acquired through the expansion of BIM's strategic training alliances with other State Agencies and educational institutions and up-skilling staff to take on new training roles.

Targets

In recent years, training delivery has been modified to accommodate the *lifelong learning* needs of increased numbers of full and part-time seafood industry personnel requiring update skills training, through modularisation and the availability of a wide range of nationally accredited courses. The provision of 12,000 training places for the period 2007 – 2013, as outlined hereunder, is considered realistic in order to address the sectoral targets detailed hereunder. Total training hours are projected at 700,000 and the female participation rate is projected to rise to 15% by 2013.

TRAINING ATTENDANCES BY SECTOR 2007 – 2013								
Catching Sector	1,230	1,160	1,130	1,100	1,070	1,010	1,000	**7,700**
Aquaculture Sector	320	330	340	360	370	380	400	**2,500**
Shore Based Sector	70	120	130	140	160	180	200	**1,000**
Diversification Training	40	60	80	100	120	190	210	**800**
TOTALS	1,660	1,670	1,680	1,700	1,720	1,760	1,810	**12,000**
Training Hours	80,000	85,000	90,000	99,000	106,000	115,000	125,000	**700,000**

The above table is predicated on an anticipated gradual decline in fisheries training and an increase in aquaculture and shore-based training. However, the new category of diversification training will undoubtedly absorb any fall-off in fisheries training and will be focussed largely on fishermen diversifying out of the catching sector, arising from the implementation of the recommendations in *Steering a New Course*.

SEA Monitoring

Environmental topic	**Measure**	**Monitoring requirement**	**Source**
Human health	Seafood industry training	Uptake and attendance at training courses	BIM

Technical Assistance Measure

(E.F.F. Regulation Priority Axis 5)

Description of Measure

The measure provides 100% Exchequer funding to the State Organisations responsible for the implementation of the EFF schemes, to publicise the Programmes and to assist in the administration and auditing of the programmes

A total of €0.743 million is available to this measure, over the period 2007-2013 with the aim to assist and improve the administration of the European Fisheries Fund in Ireland and to promote and disseminate its benefits.

Strategy

The measure provides 100% Exchequer funding to the State Organisations responsible for the implementation of the EFF schemes to:

- Publicise the Programmes;
- Assist in the administration and auditing of the programmes;
- Disseminate the results and benefits of the programmes supported by the EFF;
- Increase networking of actors in relation to sustainable development of fisheries areas.

Priorities

Priority Objectives

- Promote access to the EFF funding
- Assist in the smooth administration of the programmes.

Information on demarcation with other activities

Introduction

In line with Article 6 of Council Regulation 1198/2006 on the EFF, this section contains information on the both complementarity and demarcation with regard to other EU financed programmes and with Ireland's funding priorities within the National Development Plan 2007-13[18] as a whole. In respect of Article 6.2 of 1198/2006, the Managing Authority for the EFF will participate in the national committee for the coordination of EU Funds, thereby ensuring consistency and complementarity with other funding instruments.

National Development Plan (NDP) 2007-13

[18] http://www.ndp.ie/viewdoc.asp?fn=%2Fdocuments%2FNDP2007-2013%2Foverview.htm

The NDP is Ireland's plan for public grant aid to all sectors in the 2007-13 period and, as such, proposes an overall expenditure of €184 billion. This will be delivered through 5 Investment Priorities – Economic Infrastructure; Enterprise Science & Innovation; Human Capital; Social Infrastructure and Social Inclusion. Among the key objectives that underpin the NDP are:

- Tackling infrastructure deficits;
- Enhancing enterprise development, Science, Technology & Innovation and training and skills provision;
- Regional development (in the context of the National Spatial Strategy[19]);
- Delivering a multi-faceted programme for Social Inclusion
- Providing value for public investment

Therefore, the Seafood Development OP has been designed from the first to fulfil these goals as appropriate and complementary with the range of programmes and Funds, which make up the NDP. In this way, the NDP process has been the driver for the development of Ireland's Seafood Development Strategy, and consequently this OP, with regard to the clarity of its coordination and complementarity with and demarcation from other national and EU funding instruments.

Demarcation

In the preparation of this Operational Programme, due consideration has been given to avoiding duplication with other EU co-funded programmes. As highlighted above, one of the tasks of the EFF Managing Authority will be to liaise on an ongoing basis with other Managing Authorities and the national body responsible for coordination of funding to ensure that appropriate lines of demarcation are respected and duplication of funding does not occur.

Following examination of other EU funded programmes to be implemented in Ireland 2007-13, the actions to be taken under both EFF co-funded and national funded measures appear to be clearly distinct from the actions to be taken under other funding instruments, in that such actions are clearly and specifically aimed at particular activities concerned with the Seafood sector and compliance with the CFP, which would not be considered for funding outside the Seafood Development Programme/EFF.

Complementarity with other Programmes/Funds

Nevertheless, there are strong linkages with other Programmes and Funds, which will be very important in maximising the overall return on Ireland's NDP investment in the Seafood sector.

Marine Research (ERDF)

The most notable of these is the SeaChange[20] research programme led by Ireland's Marine Institute, which will be delivered under the Marine Research Sub-Programme of the NDP and

[19] http://www.irishspatialstrategy.ie/

will benefit from €5m in funding from the ERDF. (It may be noted that both SeaChange and the Seafood Development programmes are placed within the wider Enterprise, Science & Innovation Priority of the NDP). Specific objectives of the Marine Research programme which complement this OP in the areas of stock conservation, competitiveness and innovation are:

- Improving scientific knowledge on which advice on conservation of fish stocks is based
- Increasing our understanding of the ecology and socio-economic role of fish stocks
- Improving the transparency of scientific advice and participation of fishers in the scientific advisory process
- Building integrated data capacity to support the above
- Contributing to aiding the competitiveness of the seafood industry through research aimed at developing market innovation for functional foods and other ways of adding value to seafood output in a manner that ensures sustainability and protects marine environmental diversity and ecosystems.

Given the importance of this programme for promoting environmental sustainability, it is of key importance to the actions to be undertaken as part of the Seafood Development OP. In this context, both SeaChange and the Seafood Development OP show linkages to the Gothenburg Strategy.

A mechanism is already in place to ensure coordination between actions taken under the Seafood Development OP and SeaChange through reciprocal representation on the implementing bodies for each programme.

Fisheries & Coastal Infrastructure (ERDF)

The key objective of the Fisheries and Coastal Infrastructure Sub-Programme is to contribute to ensuring the future viability of the seafood industry, to bring the Fishery Harbour Centers up to international practice, to reduce congestion at the harbours and to improve safety for the fisheries sector.

There is substantial scope for increasing fishing activities operating out of Irish harbours through exploiting our geographical competitive advantage. As energy costs increase the global fishing industry will have to change patterns of traveling long distances to fish off Ireland. In order to capitalize on location and to attract a greater proportion of EU landings we must develop our harbour infrastructure to facilitate increased landing and downstream activities, thereby maximising the economic return of seafood related activity to these coastal communities.

The current situation of many fish stocks and the continuing need for sustainable management will continue to constrain the output from the Irish sea fishing fleet. In that

[20] http://www.marine.ie/home/SeaChange.htm

context and in order to sustain the communities dependent on fishing it will be necessary to attract as much business as possible from other fleets fishing in our area and to maximize the scope for diversification to marine leisure and other activities through the utilization and development of our Coastal infrastructure. It will therefore be necessary during the Plan period to develop other industries such as aquaculture, tourism and the leisure industry to provide alternate means of employment for these communities dependant on fishing. The development of port infrastructure and port service facilities will be necessary to accommodate these industries. The development will, in many instances, be at remote rural locations where there is limited, if any, employment apart from farming and fishing. Improved harbours and landing facilities will be vital for the sustainability of rural and coastal communities by enabling the development of other marine related economic activities.

Coastal Protection (National Funding)

The key objective of this Sub-Programme is to protect the coastline from erosion and manage the problem of coastal flooding so as to minimise its impact on the commercial and social activities of coastal communities. In areas where protection is not provided, the establishment of surge forecasting and warning systems can help to significantly mitigate flood damage. A list of prioritised capital projects to be carried out under the Plan will flow from the information framework developed under the Plan. Funding will be provided for the completion of the National Coastal Protection Strategy Study. This will identify areas at risk from erosion and flooding and will quantify damages arising. The situation, with or without global warming induced sea level rise, will be examined. Again, the objectives of this programme are clearly complementary to the aims of the Seafood Development OP in terms of their focus on providing economic and social support to coastal communities.

Rural Social & Economic Development (EARDF)

This component of the NDP shows strong linkages with the Seafood Development OP. While the Seafood Development OP focuses on specific activities in line with EFF rules, the Rural Social and Economic Development Programme deals with the wider supports needed by rural and coastal communities to deal with the social and economic difficulties they face. A key part of this Programme is LEADER. This in turn links with Axis IV of the Seafood Development OP in that LEADER will be the mechanism through which support under that Axis to fishers and their communities will be actually delivered. In this context, the Rural Social Scheme Sub-Programme, which will provide support for low income farmers and fishers and their local communities, and the Rural Enterprise Development Fund, which will provide training (e.g. ICT) and support for enhancements of villages and the countryside, are highlighted. Also under this part of the NDP, the CLÁR Sub-Programme, which will support regeneration of areas where populations are declining by helping rural and coastal communities access vital infrastructural services, is of relevance to coastal communities, as is the Udarás na Gaeltachta Sub-Programme, which will support development of economic, social and cultural

infrastructure for Irish speaking (Gaeltacht) areas, of which coastal communities form an important part.

Agriculture & Food Development (EARDF)

While this element of the NDP focuses on agriculture specifically, there are aspects of complementary to the Seafood Development Programme in terms of objectives relating to improving water quality and maintaining biodiversity. It is also a key objective of the Marketing Measure of the Seafood Development OP to place seafood squarely within the main stream of food product innovation and marketing, therefore there will be important lessons to be drawn for the Seafood industry from activities carried out under this Priority.

Human Resources & Training (ESF)

The Human Capital Priority of the NDP recognises the important role that investment in education, training and up-skilling has played in Ireland's recent economic performance, hence the continued commitment to public investment to this area. It is also a key driver for Ireland's progress on the Lisbon Agenda. In this way there is strong complementarily between this Priority and the Training element of the Seafood Development OP. It was decided to maintain the Seafood Training Measure as part of the overall Seafood Development OP rather than place it in the Human Capital Priority of the NDP (which does however note the importance of a distinct Seafood Training Measure elsewhere in the NDP) in order to ensure consistency between the Training Measure and the other Measures of the OP in terms of implementation and monitoring. Nevertheless, it is anticipated that Axis IV initiatives would look to utilise supports available for lifelong learning and up-skilling under this Priority to complement those available under the Seafood Training Measure of this OP.

Economic Infrastructure (ERDF)

Under the Economic Infrastructure Priority of the NDP, the Regional Broadband Measure of the Communications Sub-Programme shows clear complementarity with the Seafood Development OP. Part of the aim of this Measure will be to bring broadband to areas of low population, which will play an important part in tackling the economic and social deficits faced by coastal communities and pursuing the goal of the Lisbon Strategy towards making Ireland's economy innovative, inclusive and knowledge based.

Appendix 1: Current and Projected Irish Supplies and Sales of Seafood

TABLE A2.1 CURRENT & PROJECTED SUPPLIES FROM AQUACULTURE AND FISHERIES

Species Categories	2006 Tonnes	2010 Tonnes	2015 Tonnes
Demersal inc. Nephrops	27,616	33,000	34,450
Pelagic	192,281	230,000	237,000
Shellfish	27,958	26,800	26,820
Farmed Finfish 1	12,726	19,524	35,300
Farmed Shellfish	44,696	51,138	70,800
Actual and Projected Supply	**305,278**	**360,462**	**404,370**

Ex-farm and landed weight for 2005 – 2015*

- Due to investment lead times the benefits of the new NDP 2007-2013 in terms of increased output will not be fully realised until 2015. It should be noted that these impacts are based on the total National Seafood Strategy to which the Co-Financed measures of the Operational Programme contribute.

The targets for increased productive capacity for salmon will now have to be deferred until after 2013 arising from the amendments made to this Plan arising from comments received during the SEA process.

TABLE A2.2 IRISH SALES OF SEAFOOD 2005 ACTUAL AND 2010/2015 PROJECTED*

Product Category		Actual	Projected	
		2005 €,000	2010 €,000	2015 €,000
Live and Fresh Seafood Products		158,407	169,960	202,620
Bulk Seafood Products		108,348	129,098	141,620
Prepared Seafood Products		398,211	419,205	529,300
Sub-Total Seafood Sales		**664,966**	**755,763**	**873,540**
Of which:	Export Sales	354,052	391,301	494,540
	Domestic Sales	310,914	326,962	379,000
Landings by Irish vessels at foreign ports		55,083	37,500	37,500
Grand Total Seafood Sales		**720,048**	**755,763**	**911,040**

Appendix 2. Funding * requirement for The Irish Seafood National Programme 2007-2013.

Core Theme & Measures	2011-2013		
	Exchequer € '000	Private €'000	Total € '000
Market Promotion & Category Management	3,500	0	3,500
Processing, Business Development/ Innovation and Competitiveness	10,000	17,500	27,500
Fleet Restructuring, Safety & Fuel Efficiency	10,500	6,300	16,800
Aquaculture	16,000	24,000	40,000
Socio - Economic Measure	7,700	7,880	15,580
Marine Environment Protection Measure	19,800	5,090	24,890
Seafood Industry Training.	7,000	510	7,510
Total Investment over the Programme period 2011-2013	**74,500**	**61,280**	**135,780**

* The original targets and corresponding funding figures were set in 2007. The implementation of the Programme will be dependent on the availability of funding over the period of the Programme and the targets set will be adjusted as appropriate.