



**The Sea Fish Industry Authority
Seafish Technology**

**Survey of Good Manufacturing Practice
Standards in the UK Fish Industry**

Seafish Report No. SR546
© The Sea Fish Industry Authority

M. Archer
J.W. Denton
August 2002



Sea Fish Industry Authority
Seafish Technology

Survey of Good Manufacturing Practice Standards in the UK Fish Industry

Seafish Report No. SR546

M. Archer
J.W. Denton
August 2002

Summary

The EU Fish Quality Labelling and Monitoring (FQLM) Concerted Action project brought together industry and scientists from throughout the EU and Nordic countries and sought to establish common views on what constitutes quality, the need for fish quality labelling, the methodology of fish quality measurement and the administration of fish quality labelling schemes. One of the findings of the project was that the application of good manufacturing practice (GMP) is a pre-requisite of fish quality labelling, or quality will be variable and the labels will be meaningless. Fish quality labelling schemes must be based on, or incorporate, GMP standards.

A series of surveys on these issues were carried out within the participating countries over the course of the project. The final survey investigated GMP standards in the fish industry. This report summarises the results of this survey for the UK.

It was found that there are eight independent standards operating across different sectors of the UK fish industry. Two of these are generic food standards whilst the rest are seafood specific. Currently, the ports/auctions, wholesaling and retailing sectors have no standard to which they can be accredited. The majority of the processing trade is accredited to a generic food standard in support of commercial brands.

The UK industry sectors broadly agreed on the need for further GMP standards. General views were that these standards should be nationally or internationally based, cover the entire distribution chain and be keyed to broader industry standards. They should be business certification schemes operated on a basis of independent 3rd party inspections, be devised by industry and be voluntary.

Contents:

1.	INTRODUCTION AND BACKGROUND TO THE SURVEY.....	1
2.	DESCRIPTION OF THE SURVEY.....	2
	2.1 THE FQLM QUESTIONNAIRE	2
	2.2 CARRYING OUT THE SURVEY.....	2
3.	RESULTS	4
	3.1 SURVEY OF EXISTING GMP STANDARDS	4
	3.2 THE PERCEIVED NEEDS FOR FURTHER STANDARDS.....	21
4.	DISCUSSION	23
	4.1 SURVEY OF EXISTING GMP STANDARDS	23
	4.2 THE PERCEIVED NEEDS FOR FURTHER STANDARDS.....	24
	4.3 VIEWS FROM OTHER COUNTRIES	24
5.	CONCLUSIONS	25

Appendices:

APPENDIX I	THE FQLM SURVEY QUESTIONNAIRE	i
APPENDIX II	THE UK QUESTIONNAIRE ON THE PERCEIVED NEEDS FOR FURTHER GOOD MANUFACTURING PRACTICE (GMP) STANDARDS	X

1. Introduction and Background to the Survey

The fish industry trades in a unique commodity that can spoil very rapidly. Fish freshness quality can be difficult to measure and there is a lack of a standardised method of measurement. This can be a barrier to trade and can also lead to disputes. If quality cannot be measured, it cannot be managed and so it is important that fish quality is defined and is measured on a standardised basis, particularly for trade between countries.

The EU Fish Quality Labelling and Monitoring (FQLM) Concerted Action project originated from the scientific community and followed an earlier EU Concerted Action project which set out to investigate scientific methods of fish quality measurement. FQLM brought together industry and scientists and sought to establish common views on what constitutes quality, the need for fish quality labelling, the methodology of fish quality measurement and the administration of fish quality labelling schemes. Further information is available on the project website www.fqlm.nl

Fourteen countries participated in the project. These included the Netherlands, Denmark, Germany, United Kingdom, Iceland, Norway, Spain, Belgium, France, Portugal, Sweden, Greece, Italy and Finland. Participating industry sectors included trade associations at both national and EU level. This represented all the major sectors of the fish industry including research laboratories, the catching sector, port markets, processing, wholesalers, retailers and fish marketing groups.

A series of meetings and workshops were held over the duration of the project, which were attended by representatives from research institutes and industry. These provided the opportunity for discussion and to plan future work. Over the course of the project, a series of surveys were devised for each participating country to complete in conjunction with and on behalf of their industry. Surveys investigated commercial definitions of fish quality, quality measurement practices, the nature of the fish distribution chains and the needs for fish quality information and for quality labelling.

One of the findings of the FQLM project was that the application of good manufacturing practice (GMP) is seen as a pre-requisite of fish quality labelling, or quality will be variable and the labels will be meaningless. Fish quality labelling schemes must be based on, or incorporate, GMP standards. As such, the final survey investigated the current application and perceived needs for GMP standards in the European fish industry. This report summarises the results of this survey for the UK. The results are also being collated at an international level and are to be published in that form by the FQLM project.

2. Description of the Survey

2.1 The FQLM Questionnaire

The FQLM survey was devised by Seafish in consultation with the FQLM project management team. The survey questionnaire, which was issued to the nominated research organisation in each participating country, is given in Appendix I. This describes the purpose and the methodology of the survey including the tables of information to be completed. The survey covered all sectors of the industry, from catchers to retailers, and considered both GMP guidance schemes and accreditation schemes. It was precise in its information requirements but the details of carrying it out were left to the research institutes who knew best how to approach their industry.

2.2 Carrying out the Survey

Seafish carried out the UK survey during Spring 2002.

To cover the existing GMP standards a list of known standards was drawn up by consulting members of Seafish's Quality Assurance section. A total of eight standards were identified. For each standard, the series of questions in the FQLM questionnaire had to be answered. This was carried out by consulting relevant websites belonging to the respective organisations or using other published data. The different organisations running the standards were contacted directly for any information that was not available by these means.

To cover the perceived needs for further GMP standards, a questionnaire based on the FQLM information requirements was devised and sent by post or e-mail to industry representatives and organisations, including the trade associations. This questionnaire is given in Appendix II. The addressees were chosen by their participation in Seafish Advisory Committee meetings, which should include representatives of all sectors, and by contacts already well established in the various sectors by Seafish staff.

A total of 85 questionnaires were sent out but some of the organisations represent more than one sector and so the total of sector specific opinions sought was 106. Table 1, overleaf, shows the numbers of opinions sought and received on a per sector basis. Of the 106 opinions sought, 58 were received (55%)

Table 1 The number of opinions sought and received by sector

Industry sector	Number of opinions sought	Number of responses
Catching sector / aquaculture	29	11
Port markets / auctions	16	8
Processing	36	23
Wholesalers	13	9
Retail / catering	12	7
Total	106	58

When all the responses were received they were collated, categorised and analysed by industry sector.

3. Results

3.1 Survey of existing GMP standards

The eight GMP standards identified are shown in Table 2 below.

Table 2 The GMP Standards Identified

GMP Standard
British Retail Consortium Technical Food Standard
European Food Safety Inspection Service Standard
Seafish Fish Friers Quality Award
Scottish Quality Salmon Tartan Quality Mark
Quality Trout UK
Seafood Scotland Vessel Quality and Hygiene Scheme
Superior Quality Shetland Salmon
Frozen at Sea Fillets Association Standard

The completed questionnaires for each of these standards are shown in Tables 3 to 10 overleaf.

Table 3 The British Retail Consortium Technical Standard

	Information on the Existing GMP Standards																	
Name of GMP standard	British Retail Consortium Technical Standard																	
'Owners' or originators of the standard	British Retail Consortium																	
Is this in general a food industry standard or a specialised fish industry standard	General food standard	<input checked="" type="checkbox"/>	Food standard with fish sections	<input type="checkbox"/>	Specialised fish industry standard	<input type="checkbox"/>												
Geographic extent of standard	Regional	<input type="checkbox"/>	National	<input type="checkbox"/>	International	<input checked="" type="checkbox"/>												
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	Currently EN45004 but in April/May 2002, it will be changing to EN45011																	
Types of fish covered by the standard	Captured demersal fish	<input checked="" type="checkbox"/>	Captured Pelagic fish	<input checked="" type="checkbox"/>	Captured shellfish	<input checked="" type="checkbox"/>	Farmed fish	<input checked="" type="checkbox"/>	Farmed shellfish	<input checked="" type="checkbox"/>								
Sectors covered by the standard	Farms / Vessels	<input type="checkbox"/>	Ports	<input type="checkbox"/>	Auctions	<input type="checkbox"/>	Transporters	<input type="checkbox"/>	Storers	<input type="checkbox"/>	Processors	<input checked="" type="checkbox"/>	Wholesalers	<input type="checkbox"/>	Retailers	<input type="checkbox"/>	Caterers	<input type="checkbox"/>
Subject matter of standard	Management Controls and documentation	<input checked="" type="checkbox"/>	Food safety practices	<input checked="" type="checkbox"/>	Fish quality practices	<input type="checkbox"/>	Quantified product quality standards	<input type="checkbox"/>	Ecological or humanitarian issues	<input type="checkbox"/>								

Continued

Table 3 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farm/ Vessels %	Ports %	Auctions %	Transporters %	Storers %	Processors 60% *	Wholesalers %	Retailers %	Caterers %
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				The list of accredited businesses is published Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				

* estimated

Table 4 The EFSIS standard

	Information on the Existing GMP Standards																	
Name of GMP standard	European Food Standards Inspection Service Standard																	
'Owners' or originators of the standard	Meat & Livestock Commission, Campden & Chorleywood Food Research Association																	
Is this in general a food industry standard or a specialised fish industry standard	General food standard	<input checked="" type="checkbox"/>	Food standard with fish sections	<input type="checkbox"/>	Specialised fish industry standard	<input type="checkbox"/>												
Geographic extent of standard	Regional	<input type="checkbox"/>	National	<input type="checkbox"/>	International	<input checked="" type="checkbox"/>												
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	EN45004																	
Types of fish covered by the standard	Captured demersal fish	<input checked="" type="checkbox"/>	Captured Pelagic fish	<input checked="" type="checkbox"/>	Captured shellfish	<input checked="" type="checkbox"/>	Farmed fish	<input checked="" type="checkbox"/>	Farmed shellfish	<input checked="" type="checkbox"/>								
Sectors covered by the standard	Farms / Vessels	<input type="checkbox"/>	Ports	<input type="checkbox"/>	Auctions	<input type="checkbox"/>	Transporters	<input checked="" type="checkbox"/>	Storers	<input checked="" type="checkbox"/>	Processors	<input checked="" type="checkbox"/>	Wholesalers	<input type="checkbox"/>	Retailers	<input type="checkbox"/>	Caterers	<input checked="" type="checkbox"/>
Subject matter of standard	Management Controls and documentation	<input checked="" type="checkbox"/>	Food safety practices	<input checked="" type="checkbox"/>	Fish quality practices	<input type="checkbox"/>	Quantified product quality standards	<input type="checkbox"/>	Ecological or humanitarian issues	<input checked="" type="checkbox"/>								

Continued

Table 4 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farms / Vessels %	Ports %	Auctions %	Transporters 10%*	Storers 10%*	Processors 60%*	Whole - salers %	Retailers %	Caterers <5%
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				The list of accredited businesses is published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

* estimated

Table 5 The Seafish Fish Friers Quality Award

	Information on the Existing GMP Standards										
Name of GMP standard	Fish Friers Quality Award										
'Owners' or originators of the standard	Sea Fish Industry Authority										
Is this in general a food industry standard or a specialised fish industry standard	General food standard <input type="checkbox"/>			Food standard with fish sections <input type="checkbox"/>			Specialised fish industry standard <input checked="" type="checkbox"/>				
Geographic extent of standard	Regional <input type="checkbox"/>			National <input checked="" type="checkbox"/>			International <input type="checkbox"/>				
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	Is a mixture of known GMP and several ISO standards										
Types of fish covered by the standard	Captured demersal fish <input checked="" type="checkbox"/>		Captured Pelagic fish <input type="checkbox"/>		Captured shellfish <input type="checkbox"/>		Farmed fish <input type="checkbox"/>		Farmed shellfish <input type="checkbox"/>		
Sectors covered by the standard	Farms / Vessels <input type="checkbox"/>	Ports <input type="checkbox"/>	Auctions <input type="checkbox"/>	Transporters <input type="checkbox"/>	Storers <input type="checkbox"/>	Processors <input type="checkbox"/>	Wholesalers <input type="checkbox"/>	Retailers <input type="checkbox"/>	Caterers <input checked="" type="checkbox"/>		
Subject matter of standard	Management Controls and documentation <input checked="" type="checkbox"/>			Food safety practices <input checked="" type="checkbox"/>			Fish quality practices <input checked="" type="checkbox"/>		Quantified product quality standards <input checked="" type="checkbox"/>		Ecological or humanitarian issues <input type="checkbox"/>

Continued

Table 5 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input checked="" type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input checked="" type="checkbox"/> (but voluntary) No <input type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farms / Vessels %	Ports %	Auctions %	Transporters %	Storers %	Processors %	Wholesalers %	Retailers %	Caterers 5%
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				The list of accredited businesses is published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Table 6 The Scottish Quality Salmon Tartan Quality Mark

	Information on the Existing GMP Standards									
Name of GMP standard	Tartan Quality Mark									
'Owners' or originators of the standard	Scottish Quality Salmon									
Is this in general a food industry standard or a specialised fish industry standard	General food standard <input type="checkbox"/>		Food standard with fish sections <input type="checkbox"/>			Specialised fish industry standard <input checked="" type="checkbox"/>				
Geographic extent of standard	Regional <input checked="" type="checkbox"/>		National <input type="checkbox"/>			International <input type="checkbox"/>				
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	EN45011									
Types of fish covered by the standard	Captured demersal fish <input type="checkbox"/>		Captured Pelagic fish <input type="checkbox"/>		Captured shellfish <input type="checkbox"/>		Farmed fish <input checked="" type="checkbox"/>		Farmed shellfish <input type="checkbox"/>	
Sectors covered by the standard (also covers feed producers, small producers, ongrowers, packing stations and co-operative sales organisations)	Farms / Vessels <input checked="" type="checkbox"/>	Ports <input type="checkbox"/>	Auctions <input type="checkbox"/>	Transporters <input type="checkbox"/>	Storers <input type="checkbox"/>	Processors <input checked="" type="checkbox"/>	Wholesalers <input type="checkbox"/>	Retailers <input type="checkbox"/>	Caterers <input type="checkbox"/>	
Subject matter of standard	Management Controls and documentation <input checked="" type="checkbox"/>		Food safety practices <input checked="" type="checkbox"/>			Fish quality practices <input checked="" type="checkbox"/>		Quantified product quality standards <input checked="" type="checkbox"/>		Ecological or humanitarian issues <input checked="" type="checkbox"/>

Continued

Table 6 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farms / Vessels 65%	Ports %	Auctions %	Transporters %	Storers %	Processors 55%	Wholesalers %	Retailers %	Caterers %
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				The list of accredited businesses is published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Table 7 Quality Trout UK

	Information on the Existing GMP Standards									
Name of GMP standard	Quality Trout UK (Quality Trout UK Hatchery Standard, Quality Trout UK Farm Standard and the Quality Trout Processing Standard) (previously Scottish Quality Trout)									
'Owners' or originators of the standard	British Trout Association									
Is this in general a food industry standard or a specialised fish industry standard	General food standard <input type="checkbox"/>		Food standard with fish sections <input type="checkbox"/>			Specialised fish industry standard <input checked="" type="checkbox"/>				
Geographic extent of standard	Regional <input type="checkbox"/>		National <input checked="" type="checkbox"/>			International <input type="checkbox"/>				
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	EN45011									
Types of fish covered by the standard	Captured demersal fish <input type="checkbox"/>		Captured Pelagic fish <input type="checkbox"/>		Captured shellfish <input type="checkbox"/>		Farmed fish <input checked="" type="checkbox"/>		Farmed shellfish <input type="checkbox"/>	
Sectors covered by the standard	Farms / Vessels <input checked="" type="checkbox"/>	Ports <input type="checkbox"/>	Auctions <input type="checkbox"/>	Transporters <input type="checkbox"/>	Storers <input type="checkbox"/>	Processors <input checked="" type="checkbox"/>	Wholesalers <input type="checkbox"/>	Retailers <input type="checkbox"/>	Caterers <input type="checkbox"/>	
Subject matter of standard	Management Controls and documentation <input checked="" type="checkbox"/>		Food safety practices <input checked="" type="checkbox"/>		Fish quality practices <input checked="" type="checkbox"/>		Quantified product quality standards <input checked="" type="checkbox"/>		Ecological or humanitarian issues <input checked="" type="checkbox"/>	

Continued

Table 7 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farms / Vessels 50%*	Ports %	Auctions %	Transporters %	Storers %	Processors 50%*	Wholesalers %	Retailers %	Caterers %
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				The list of accredited businesses is published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

*estimated

Table 8 Seafood Scotland Vessel Quality and Hygiene Scheme

	Information on the Existing GMP Standards									
Name of GMP standard	Vessel Quality & Hygiene Scheme									
'Owners' or originators of the standard	Seafood Scotland									
Is this in general a food industry standard or a specialised fish industry standard	General food standard <input type="checkbox"/>		Food standard with fish sections <input type="checkbox"/>			Specialised fish industry standard <input checked="" type="checkbox"/>				
Geographic extent of standard	Regional <input checked="" type="checkbox"/>		National <input type="checkbox"/>			International <input type="checkbox"/>				
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	Is a mixture of known GMP and several ISO standards									
Types of fish covered by the standard	Captured demersal fish <input checked="" type="checkbox"/>		Captured Pelagic fish <input checked="" type="checkbox"/>		Captured shellfish <input checked="" type="checkbox"/> (<i>Nephrops</i> only)		Farmed fish <input type="checkbox"/>		Farmed shellfish <input type="checkbox"/>	
Sectors covered by the standard	Farms / Vessels <input checked="" type="checkbox"/>	Ports <input type="checkbox"/>	Auctions <input type="checkbox"/>	Transporters <input type="checkbox"/>	Storers <input type="checkbox"/>	Processors <input type="checkbox"/>	Whole-salers <input type="checkbox"/>	Retailers <input type="checkbox"/>	Caterers <input type="checkbox"/>	
Subject matter of standard	Management Controls and documentation <input checked="" type="checkbox"/>		Food safety practices <input checked="" type="checkbox"/>			Fish quality practices <input checked="" type="checkbox"/>		Quantified product quality standards <input checked="" type="checkbox"/>		Ecological or humanitarian issues <input type="checkbox"/>

Continued

Table 8 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input checked="" type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (but is a long term plan)				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farm / Vessels 6%	Ports %	Auctions %	Transporters %	Storers %	Processors %	Wholesalers %	Retailers %	Caterers %
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				The list of accredited businesses is published Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				

Table 9 Superior Quality Shetland Salmon

	Information on the Existing GMP Standards									
Name of GMP standard	Superior Quality Shetland Salmon									
'Owners' or originators of the standard	Shetland Seafood Quality Control (which was established by the local authority and local industry organisations)									
Is this in general a food industry standard or a specialised fish industry standard	General food standard <input type="checkbox"/>			Food standard with fish sections <input type="checkbox"/>			Specialised fish industry standard <input checked="" type="checkbox"/>			
Geographic extent of standard	Regional <input checked="" type="checkbox"/>			National <input type="checkbox"/>			International <input type="checkbox"/>			
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	Accredited to EN45011 through Scottish Food Quality Certification									
Types of fish covered by the standard	Captured demersal fish <input type="checkbox"/>		Captured Pelagic fish <input type="checkbox"/>		Captured shellfish <input type="checkbox"/>		Farmed fish <input checked="" type="checkbox"/>		Farmed shellfish <input type="checkbox"/>	
Sectors covered by the standard	Farms / Vessels <input checked="" type="checkbox"/>	Ports <input type="checkbox"/>	Auctions <input type="checkbox"/>	Transporters <input type="checkbox"/>	Storers <input type="checkbox"/>	Processors <input checked="" type="checkbox"/>	Whole salers <input type="checkbox"/>	Retailers <input type="checkbox"/>	Caterers <input type="checkbox"/>	
Subject matter of standard	Management Controls and documentation <input checked="" type="checkbox"/>		Food safety practices <input checked="" type="checkbox"/>		Fish quality practices <input checked="" type="checkbox"/>		Quantified product quality standards <input checked="" type="checkbox"/>		Ecological or humanitarian issues <input checked="" type="checkbox"/>	

Continued

Table 9 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input checked="" type="checkbox"/>		Operates a retail product label Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farms / Vessels >75%	Ports %	Auctions %	Transporters %	Storers %	Processors >75%	Whole-salers %	Retailers %	Caterers %
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input checked="" type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> not outwith the participants				The list of accredited businesses is published Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> but are in the process of doing so				

Table 10 Frozen at Sea Fillets Association

	Information on the Existing GMP Standards																	
Name of GMP standard	Frozen at Sea Fillets Association																	
'Owners' or originators of the standard	Industry																	
Is this in general a food industry standard or a specialised fish industry standard	General food standard	<input type="checkbox"/>	Food standard with fish sections	<input type="checkbox"/>	Specialised fish industry standard	<input checked="" type="checkbox"/>												
Geographic extent of standard	Regional	<input type="checkbox"/>	National	<input type="checkbox"/>	International	<input checked="" type="checkbox"/>												
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	Vessel specific - based on HACCP																	
Types of fish covered by the standard	Captured demersal fish	<input checked="" type="checkbox"/>	Captured Pelagic fish	<input type="checkbox"/>	Captured shellfish	<input type="checkbox"/>	Farmed fish	<input type="checkbox"/>	Farmed shellfish	<input type="checkbox"/>								
Sectors covered by the standard	Farms / Vessels	<input checked="" type="checkbox"/>	Ports	<input type="checkbox"/>	Auctions	<input type="checkbox"/>	Transporters	<input type="checkbox"/>	Storers	<input type="checkbox"/>	Processors	<input type="checkbox"/>	Wholesalers	<input type="checkbox"/>	Retailers	<input type="checkbox"/>	Caterers	<input type="checkbox"/>
Subject matter of standard	Management Controls and documentation	<input checked="" type="checkbox"/>	Food safety practices	<input checked="" type="checkbox"/>	Fish quality practices	<input checked="" type="checkbox"/>	Quantified product quality standards	<input type="checkbox"/>	Ecological or humanitarian issues	<input checked="" type="checkbox"/>								

Continued

Table 10 continued

Status of standard	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input checked="" type="checkbox"/>		Participation Voluntary <input checked="" type="checkbox"/> Mandatory <input type="checkbox"/>		
Role of standard	A guidance standard <input checked="" type="checkbox"/>		A business certification scheme <input type="checkbox"/>		Operates a retail product label Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
If a certification scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Farms / Vessels 10%	Ports %	Auctions %	Transporters %	Storers %	Processors %	Wholesalers %	Retailers %	Caterers %
If a certification scheme, the auditing of the accredited businesses	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input type="checkbox"/>		Standard 'owner' auditing <input checked="" type="checkbox"/>		No external auditing <input type="checkbox"/>		
If a certification scheme, its transparency	The details of the standard are published				The list of accredited businesses is published				
	Yes <input type="checkbox"/>		<input checked="" type="checkbox"/>		Yes <input type="checkbox"/>		<input checked="" type="checkbox"/>		

3.2 The perceived needs for further standards

The collated responses from industry are shown in Table 11 below.

Table 11 Responses from industry

		Industry sector views on the needs for further GMP standards				
		Farms / Vessels	Ports / Auctions	Processors	Whole-salers	Retailers / Caterers
Number of responses received		11	8	23	9	7
Do industry sector representatives consider further GMP standards to be desirable or necessary	Largely in favour	73%	88%	83%	67%	71%
	Divided					
	Largely against	27%	12%	12%	33%	29%
At what level should GMP standards be developed?	Regional	12%	12%	11%	12%	18%
	National	33%	63%	58%	44%	55%
	International	50%	25%	31%	44%	27%
Should GMP standards be developed on a sectoral or whole chain basis?	Sectoral	67%	12%	43%	50%	25%
	Whole chain	33%	88%	57%	50%	75%
Should local or sectoral standards be keyed to broader industry standards?	Yes	60%	88%	91%	100%	100%
	No	40%	12%	9%		
How should GMP standards be established?	By Legislation	17%	11%	20%	12%	25%
	By official standards bodies	17%	22%	24%	44%	25%
	By Industry agreement	66%	67%	56%	44%	50%

Continued

Table 11 continued

		Farms / Vessels	Ports / Auctions	Processors	Whole- salers	Retailers / Caterers
Should participation in GMP standards be voluntary?	Yes	64%	63%	35%	67%	29%
	No	35%	37%	65%	33%	71%
Should GMP standards be purely guidance standards or be supported by business certification schemes	Purely guidance standards	33%	12%	17%	50%	29%
	Supported by certification schemes	67%	88%	83%	50%	71%
How should business certification schemes be controlled?	By officials	8%		4%	8%	23%
	By independent 3 rd party auditing	42%	37%	80%	50%	44%
	By industry	50%	63%	16%	42%	33%

4. Discussion

4.1 Survey of existing GMP Standards

The UK distribution chain is not wholly covered by one standard, instead at least eight standards exist independently across different sectors of the industry. Two of these are generic food standards (BRC Technical Standard and EFSIS) whilst the rest are seafood specific. All of the standards cover management control, documentation and food safety practices, although only the seafood specific standards include fish quality practices. Whilst the general food standards can be applied throughout the UK and to different species or products, the fish standards apply to one species or generic type of fish i.e. demersal fish only or farmed fish only, or to a particular region of the UK i.e. Scotland or Shetland. Only the finfish aquaculture sector has vertically integrated schemes including primary production, processing and a retail label.

A significant proportion of the fish processing trade (an estimated 60% of the volume of trade) is by processors accredited to one or both of the generic food standards, however uptake by other sectors to which these standards can apply is low. With the exception of the standards that apply to the finfish aquaculture sector, the seafood specific standards currently only cover a small proportion of trade. Currently, the ports/auctions, wholesaling and retailing sectors have no specific standard to which they can be accredited.

All of the GMP standards are voluntary and were established solely by industry or, in the case of two of the standards, by industry in conjunction with an official body. The majority of the standards are based on European Committee for Standardisation (EN) standards. Most of the standards are audited by an independent third party.

Although five of the GMP standards publish the actual details of their respective standard in a technical manual format, these may only be made available to applicants or to appropriate organisations upon request. Only one of the GMP standards permits the sale of their technical manual to any interested parties. At the time of the survey, only four of the standards published a list of members, one had plans to do so but the remaining three standards showed no interest in making their list of members publicly available.

Only three of the standards have their own labels which can be displayed on retail packaging or at the point of retail sale or be used for other marketing purposes. This is not to underestimate the value of the other standards as discussion within the FQLM project has emphasised the importance of establishing standards within the distribution chain to support the 'brands' of the big processors and the multiple retailers. These brands are now the largest force in the retail market.

4.2 The perceived needs for further standards

All of the industry sectors were largely in favour of further GMP standards which should be introduced on a national or international level. The port/auction, processing and retail/catering sectors were largely in favour of GMP standards that apply to the whole fish distribution chain whereas wholesalers are divided between standards being developed on a sectoral or whole chain basis. The catching/farming sector was strongly in favour of standards being applied on a sectoral basis only (although it should be noted that finfish aquaculture already has vertically integrated schemes).

All of the industry sectors felt that local or sectoral standards should be keyed to broader industry standards and that the standards should be established by industry agreement. However, wholesalers equally felt the need for standards to be developed by official bodies.

There was significant division over whether standards should be voluntary. The catching/farming sector, ports/auctions and wholesalers supported this view, however processors and retailers/caterers were of the opinion that GMP standards should be mandatory.

Most of the responses were strongly in favour of GMP standards being supported by certification schemes, although the wholesalers were somewhat divided in their opinion and felt that they should be purely guidance standards.

Processors, wholesalers and retailers/caterers were largely in favour of certification schemes being controlled by an independent third party, although there was also strong support from the wholesalers and retailers/caterers for industry to control the standards. The catching/farming and port/auction sectors generally favoured industry control but also with strong support for independent third party control.

4.3 Views from other countries

The reports from other countries have also supported the general need for GMP standards although it is noted that in a number of countries there is a greater culture of, and desire for, official controls.

5. Conclusions

The engagement of industry, research organisations, academia and other participants in the FQLM Concerted Action project has helped to establish a common understanding of the current and future needs for fish quality labelling and monitoring. The project has identified that GMP is an essential basis for any fish quality labelling scheme. This survey set out to identify and describe existing GMP standards operated in the fish industries of the European and Nordic States and industry views on the needs for further GMP standards.

The survey identified eight GMP standards operated in the UK fish industry, with two of these standards being generic food industry standards and the remainder being specialised fish industry standards. The standards share many common features:

- they are nearly all business certification schemes
- they are generally based on an EN standard
- they were all established by industry
- they generally cover management controls, documentation and food safety standards.

The schemes are generally sector or geographic area specific although there are vertically integrated schemes operated in the finfish aquaculture sector. There is no specific standard for the ports/auctions, wholesaling and retail sectors. Only three of the schemes have their own retail identity.

The most significant schemes in respect of the volume of trade covered are the BRC and EFSIS food industry schemes applied to the processing sector in support of commercial brands.

All sectors of the UK fish industry were of the general view that there is a need for further GMP schemes although views on their required scope and nature varied. Views generally expressed were that schemes should:

- be nationally or internationally based
- be keyed to broader industry standards
- apply to the whole distribution chain
- be business accreditation schemes operated on a basis of independent third party inspections
- be devised by industry and be voluntary

Appendix I
The FQLM Survey Questionnaire

FAIR PL98-4174 CONCERTED ACTION

Fish Quality Labelling and Monitoring - Survey of Existing GMP Standards in the Fish Industry

W Denton
December 2001

1. Introduction and Purpose

The FQLM Concerted Action has considered the needs for fish quality labelling in the various distribution chains and the technical, practical and commercial issues that are involved. The project has now to consider how fish quality labelling schemes should be established and operated.

The application of good practice throughout the distribution chains is seen to be a pre-requisite of fish quality labelling, or quality will be variable and the labels will be meaningless. Fish quality labelling schemes must be based on, or incorporate, good manufacturing practice (GMP) standards.

The purpose of this survey is to identify existing GMP standards applied in the fish industry, including the scope of those standards and how they are operated, and to determine views on the needs for further standards and how they should be established and operated.

2. Outline of the Survey

The survey covers GMP guidance standards and accreditation schemes that are above and beyond the basic requirements of food legislation. It covers standards that are applied in any or all sectors of the fish industry, from catchers to retailers. It should include generic food industry standards, as well as those specific to the fish industry, where those standards are significant to the operation of the fish industry.

The survey is to be led by the research institute in each of the participating countries. It involves listing the existing GMP standards operated in each country, together with further information on the scope and operation of those standards, and a summary of the views of the various industry sectors on the need for further standards and how they should be established and operated. Simply formatted tables are provided for the tabulation of this information in a standardised form.

It is envisaged that the research institutes will consult with representatives of the various industry sectors, for example with the trade associations, passing on the queries and then collating a consolidated national response. The means of doing this is left to the research institutes as they are knowledgeable of the workings of their own industry. It may well be necessary for them to provide some further explanation of the survey. Bodies such as trade associations may well require their management committee to consider the further needs for GMP standards. However, it may be possible to carry out much of the survey by telephone.

Time remaining for the FQLM project is limited and so the survey is kept as simple as possible. The research institutes are requested to forward their findings to the quality labelling sub-group co-ordinator, Begona Perez Villareal bperez@azti.es, by 15th February 2002 so that they can be summarised and presented to the final FQLM conference at Firenze in April 2002.

3. The Tables

The tables are Microsoft Word documents that are intended for completion electronically or on paper. Please forward the consolidated responses electronically. Much of the content is in a check-box format and, depending on the question, it may be appropriate to check several boxes in each row.

Table 1 is a simple list of the existing GMP standards applied in the country's fish industry.

Table 2 is to be completed for each of the standards listed in Table 1. It provides further information on the origin, scope and administration of the standards.

Table 3 poses a series of questions to the representatives of the main sectors of the fish industry, on the need for further GMP standards and how they should be established and operated.

If necessary, notes providing further explanation can be attached to the consolidated response.

Any queries on the completion of the tables should be directed to Wesley Denton w_denton@seafish.co.uk or to Begona Perez Villareal.

Table 1	Existing GMP Standards
Country:	<Type country name then tab>
List of names of existing GMP standards applied in the fish industry	<Type name then tab through each text field>

Table 2	Information on the Existing GMP Standards								
Country:	<Type your country name then tab>								
Name of GMP standard	<Type name of standard then tab>								
'Owners' or originators of the standard	<Type name then tab>								
Is this in general a food industry standard or a specialised fish industry standard (check boxes)	General food standard	<input type="checkbox"/>	Food standard with fish sections	<input type="checkbox"/>	Specialised fish industry standard				
Geographic extent of standard (check boxes)	Regional	<input type="checkbox"/>	National	<input type="checkbox"/>	International				
Names of any general standards on which the standard is based (e.g. EN45011 or CODEX)	<Type names then tab>								
Types of fish covered by the standard(check boxes)	Captured demersal fish	Captured Pelagic fish	Captured shellfish	Farmed fish	Farmed shellfish				
Sectors covered by the standard (check boxes)	Vessels	Ports	Auctions	Transporters	Storers	Processors	Whole salers	Retailers	Caterers

Table 2 continued....

Subject matter of standard (check boxes)	Management Controls and documentation <input type="checkbox"/>		Food safety practices <input type="checkbox"/>		Fish quality practices <input type="checkbox"/>		Quantified product quality standards <input type="checkbox"/>		Ecological or humanitarian issues <input type="checkbox"/>	
Status of standard (check boxes)	Established in Law <input type="checkbox"/>		Established by official standards body <input type="checkbox"/>		Established by industry <input type="checkbox"/>		Participation Voluntary <input type="checkbox"/> Mandatory <input type="checkbox"/>			
Role of standard (check boxes)	A guidance standard <input type="checkbox"/>		A business accreditation scheme <input type="checkbox"/>		Operates a retail product label Yes <input type="checkbox"/> No <input type="checkbox"/>					
If an accreditation scheme, the estimated proportion of trade (in the type of fish and sector covered by the standard) that is accredited (%)	Vessels %	Ports %	Auctions %	Transporters %	Storers %	Processors %	Whole salers %	Retailers %	Caterers %	
If an accreditation scheme, the auditing of the accredited businesses (check boxes)	Official auditing <input type="checkbox"/>		Independent 3 rd party auditing <input type="checkbox"/>		Standard 'owner' auditing <input type="checkbox"/>			No external auditing <input type="checkbox"/>		
If an accreditation scheme, its transparency (check boxes)	The details of the standard are published Yes <input type="checkbox"/> No <input type="checkbox"/>				The list of accredited businesses is published Yes <input type="checkbox"/> No <input type="checkbox"/>					

Table 3		Industry sector views on the needs for further GMP standards				
Country:		<Type country name then tab>				
Main industry sectors		Vessels	Ports/Auctions	Processors	Wholesalers	Retailers/Caterers
Do industry sector representatives consider further GMP standards to be desirable or necessary(check boxes)	Largely in favour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Divided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Largely against	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At what level should GMP standards be developed? (check boxes)	Regional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	National	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	International	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Should GMP standards be developed on a sectoral or whole chain basis? (check boxes)	Sectoral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Whole chain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Should local or sectoral standards be keyed to broader industry standards? (check boxes)	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 3 continued

How should GMP standards be established? (check boxes)	By Legislation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	By official standards bodies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	By Industry agreement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Should participation in GMP standards be voluntary? (check boxes)	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Should GMP standards be purely guidance standards or be supported by business accreditation schemes (check boxes)	Purely guidance standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Supported by accreditation schemes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How should business accreditation schemes be controlled? (check boxes)	By officials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	By independent 3 rd party auditing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	By industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix II

The UK Questionnaire on the Perceived Needs for Further GMP Standards

Industry sector views on the needs for further good manufacturing practice (GMP) standards

Name of Company or Industry Organisation: _____

Question		Tick one answer to each question
Which sector is your business/organisation engaged in?	Catching sector	
	Processing	
	Wholesaling	
	Ports/auctions	
	Retailing/catering	
Would you consider further GMP standards desirable or necessary?	Yes	
	No	
At what level should GMP standards be developed?	Regional	
	National	
	International	
Should GMP standards be developed on a sectoral or whole chain basis?	Sectoral	
	Whole chain	
Should local or sectoral standards be keyed to broader industry standards?	Yes	
	No	
How should GMP standards be established?	By Legislation	
	By official standards bodies	
	By Industry agreement	
Should participation in GMP standards be voluntary?	Yes	
	No	
Should GMP standards be purely guidance standards or be supported by business accreditation schemes	Purely guidance standards	
	Supported by accreditation schemes	
How should business accreditation schemes be controlled?	By officials	
	By independent 3 rd party auditing	
	By industry	

Questionnaire Completed by _____

Contact telephone number (in case of any queries) _____