



# Innovative recruitment strategies in the fisheries sector

Denmark

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## Introduction

The aim of the study is to establish an inventory of the various innovative practices and recruitment tools that have been implemented in the Danish fisheries sector in order to address the problem of lack of human resources.

### The fisheries sector in the national economic context

#### *Economic importance of fisheries*

Denmark is one of the top 20 fishing nations of the world according to the Food and Agriculture Organisation (FAO). The majority of Danish fisheries production (in terms of both weight and value) is exported. According to Danish government statistics from 2003, fisheries products had an export value of 17.3 billion kroner (2.25 billion euros at today's exchange rate), forming 3.2% of total Danish exports. Fisheries products contributed three billion kroner (0.39 billion euros) to gross value added in 2000, contributing overall about 0.5% to the Danish economy (FAO estimate). Thus the fisheries sector has some value to the Danish economy although it is not a major economic player. A more detailed breakdown of the value of landings by sector is given below. Strong dependency on fishing in Denmark is restricted to a few specific areas in Northern and Western Jutland and the Island of Bornholm in the Baltic.

#### *Employment in fisheries*

Employment in fisheries in Denmark was remarkably constant through most of the 20th century; in 1913 there were estimated to be 12,000 fishermen, and in 1982 11,000. However, from the early 1980s on, the sector was in crisis as a consequence of overexploitation, declining stocks and overcapacity. An ongoing decline in the fleet size, encouraged by the government and the EU via grants for decommissioning, lead to employment levels in 2001 of around 2,000 registered full-time fishermen according to Danish government statistics. FAO estimates for 2000, however, suggest a somewhat higher number of individuals (5,400). This discrepancy is explained by Tables 1 and 2; the FAO statistics include all types of fishermen, while the 2,000 figure includes only full-time independent fishermen. The number of commercial vessels has declined from 2,769 in 1996 to 1,933 in 2005.

Since 2000, employment has continued to decline. Tables 1 and 2 show a decreasing trend in numbers of fishermen across most parts of the sector.

Table 1: *Number of individuals employed in the Danish fishery sector 2000–2004*

Sector/Year	2000	2001	2002	2003	2004
Fishery	4,611	4,529	4,258	3,761	3,497
Aquaculture	825	853	854	729	700
Fish processing	4,582	4,314	4,185	3,789	3,641
Smoke/salt-curing	1,669	1,954	1,718	1,840	1,493
Fishmeal and oil	382	365	408	392	350
Fish auctions	174	195	188	168	173
Wholesale	2,514	2,627	2,637	2,512	2,472
Retail, fish and game	935	888	849	785	778
Total employment	15,692	15,725	15,097	13,976	13,104

Source: *Statistics Denmark, Register-based Labour Statistics, accessed through Directorate of Fishery*

Table 2: Number of fishermen, divided into independent fishermen (vessel owner-operators), 'parts-fishermen' (employees paid via catch share) and assisting spouses

Status/Year	2000	2001	2002	2003	2004
Independent fishermen	2,115	2,046	1,876	1,663	1,585
Parts-fishermen	2,466	2,455	2,355	2,075	1,891
Assisting spouses	30	28	27	23	21
Total	4,611	4,529	4,258	3,761	3,497

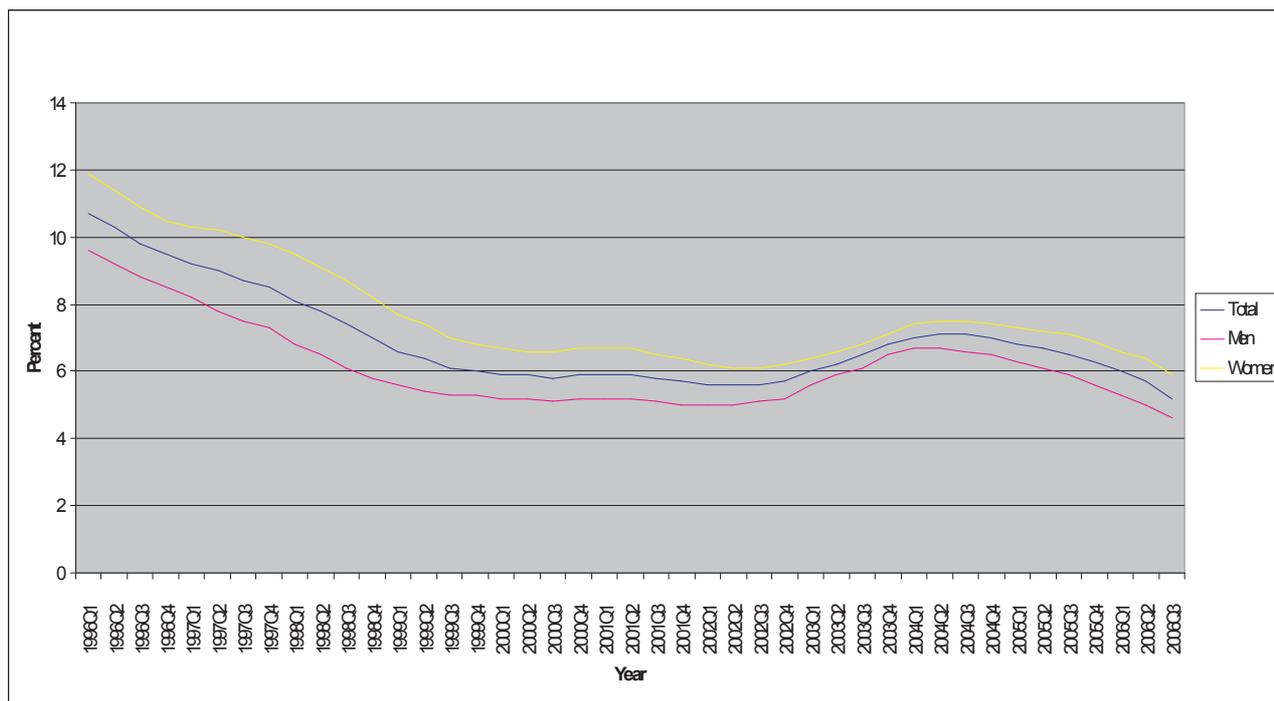
Source: Statistics Denmark, Register-based Labour Statistics, accessed through Directorate of Fishery

Even though no explicit individual income statistics for fishermen are available, the share of income for labour in 'Fishery 2006' (Fødevareøkonomisk Institut 2005, 2006 and Andersen et al, 2006) shows comparatively high incomes in fisheries compared to other skilled labour segments.

### Danish labour market

General conditions in the Danish labour market are very stressed due to a very high activity level and a historically low unemployment rate.

Figure 1: Unemployment in Denmark, 1996–2005



Datasource: Statistics Denmark

Figure 1 shows the sharp decline in the unemployment rate over the past 43 quarters. The latest seasonally adjusted unemployment figure for October 2006 is 4.1%, or 113,600 FTE (full-time equivalents). Most sectors are therefore faced with labour shortages and recruitment problems as, at this level of unemployment, the unemployed often do not meet the requirements of companies and vice versa. The majority of unemployed lack both the formal and personal qualifications needed, and in addition there are sectoral and geographical imbalances.

As a result 'The Welfare Agreement' (Danish political agreement of June 2006) has focused on increasing the labour supply through a higher retirement age, adult education and special focus on first and second generation immigrants, who traditionally are still faced with a high unemployment rate. The labour shortage, especially in the building industry, has attracted foreign companies mainly from the new member states (mostly Poland).

The competition for young people entering the labour market in the ageing Danish population is therefore fierce and has aggravated the problem of recruitment to fisheries, which has been persistent and evident in Denmark for the past 10 years.

### *Rules for unemployment benefits*

Danish labour market policy is founded on the belief that a fast and smooth adaptation to changes in demand for labour by companies is the best strategy for long-term growth and stability. This means that it is very easy for the companies to lay off labour at comparatively short notice. To offset the social consequences of unemployment, a good unemployment benefit system is in place.

The fishery sector is in many respects different from the rest of the labour market. First of all it is seasonal in nature and seasonality is increased by fisheries regulations (quota shortage, number of allocated sea days). Further, the income earned when at sea is often higher than average, and it is difficult to establish the number of hours worked as the basis for allocation of unemployment benefits.

Entitlement to unemployment benefit is conditional on membership of an unemployment fund. Most parts-fishermen are members of the 3F unemployment fund, whereas independent fishermen are members of special unemployment funds (ASE – <http://www.ase.dk>) for self-employed persons, with slightly different rules for obtaining 'unemployment' benefits.

Many crew on Danish fishing boats are employees who do not have a share in the vessel but rather are paid a share of the income from the catch. The Danish term for these is 'parts-fishermen'. Parts-fishermen may get unemployment benefit when temporarily unemployed due to resource shortage (no fish, no quota etc.). As the hours worked on-board cannot be established with certainty, fishermen's income (most recent 12 weeks) is estimated into working hours with a set factor (DKK 178.96 (2007) per hour).

It has been ruled that independent fishermen are not eligible for unemployment benefits due to closures of the fishery, lack of quota etc., since natural conditions as well as changes in fisheries regulations are regarded as a normal condition for this type of work. This has influenced especially smaller independent fishermen, who have seen a reduction in their number of sea days due to resource shortage. Consequently, no compensation is available to independent fishermen with temporary unemployment.

Even where benefits are available, and may protect families against social or economic crisis in case of unemployment, benefits are fairly low compared with an average income in fisheries. Note also that newly educated fishermen (Blue Certificate, see below) are entitled to unemployment benefits at a lower rate if a berth is not immediately available.

### Structure of the Danish fleet

The Danish fleet has three main components:

- Industrial fishing for reduction to fish meal and fish oil (sand eel, Norway pout, sprat, blue whiting)
- Pelagic fishing for human consumption (herring and mackerel)
- Demersal fishing (whitefish, flatfish, Norway lobster, deep water prawns)

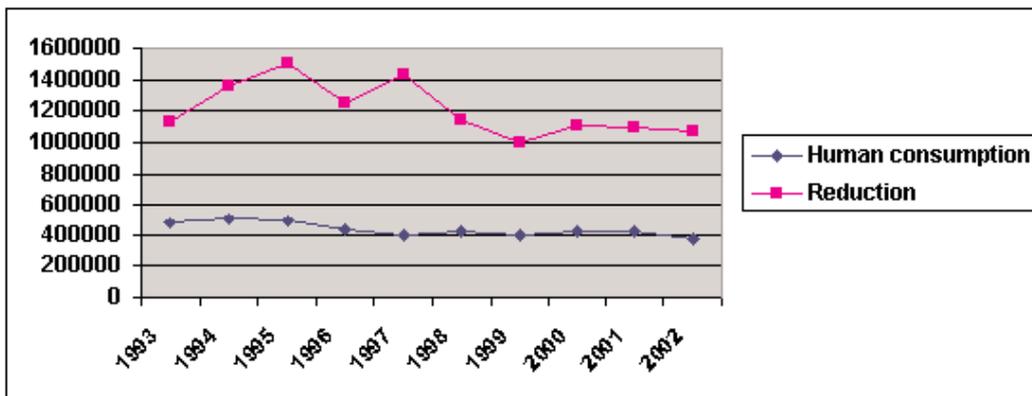
The industrial (reduction) fishery has the largest landings by volume but the fishery for human consumption is more valuable.

In terms of economic differences between the sectors at the level of individual fishermen, it is evident that incomes in fisheries vary between small one-man coastal vessels and large industrial pelagic trawlers. It is also evident that personal image, status, working conditions etc. show a similar pattern. It is not possible to map the differences, but indicators such as the status, income and career of the spouse of the fishermen indicate that skippers on the big trawlers marry very well-educated women with good careers.

### Historical trends

Trends in landings by weight are shown in Figure 2. Trends in landings by value are shown in Figure 3.

Figure 2: Danish landings by weight (tonnes live weight) from 1993–2003

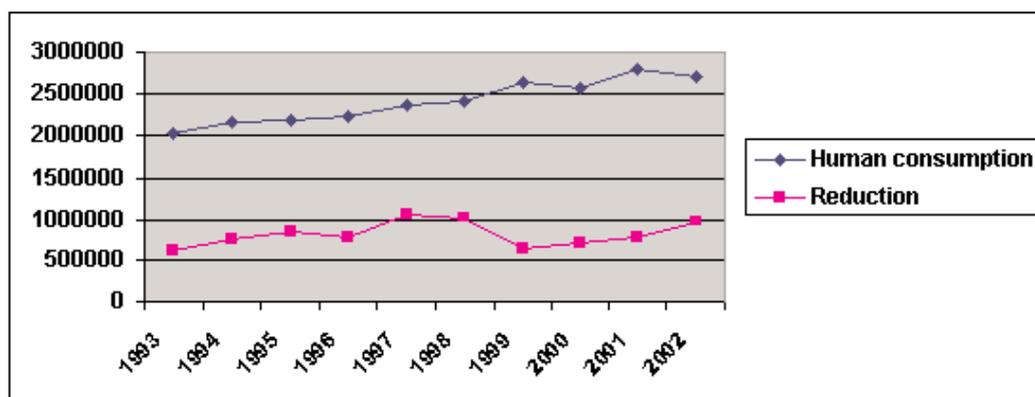


Source: FAO

The decline in industrial fisheries began in the early 1950s, and from 1994 to 1997 fluctuated around a mean production of about 1.4 million tonnes. From 1998 to 2002, production decreased to around 1.1 million tonnes, and anecdotal information suggests that it is continuing to decrease. The decline has mainly been driven by a large decline in catches of Norway pout, but in recent years concerns have been raised about stocks of sand eels, with some resulting controversy surrounding seabirds. Fisheries of species for human consumption have also decreased gradually from around 0.5 million tonnes in the early 1990s to a little under 0.4 million tonnes in more recent years, most strongly driven by a decline in catches of cod and, particularly, herring.

In terms of the value of landings, the picture is somewhat different. While the value of industrial landings has fluctuated without a strong trend over the last 10 or 15 years, the value of landings for human consumption has steadily increased, reflecting a strong increase in prices which in turn reflects the decline in stocks.

Figure 3: Danish landings by value (1,000 DKK)



Source: FAO

Associated with concerns about stocks, recent years have seen a decline in quota (allocated via the EU), as well as an increase in supplementary regulations, including the regulation of number of days at sea (2003) and a progression in the gear selectivity (larger mesh size, for example in the beam trawl fishery).

The ‘parts fishermen’ are paid a share of the revenue from the catch, which gives a clear incentive for a high personal effort in the fishery. The newly adapted transferable vessel quota (FKA, 1 January 2007) system in most Danish fisheries is expected to raise the incomes for those fishermen remaining in fisheries, as vessel quotas can now be transferred or pooled. This is expected to concentrate the quotas on fewer, more efficient fishing vessels.

## Institutional background and social actors

### *Institutional background*

The general framework in which Danish fisheries management takes place is of course the EU Common Fisheries Policy (CFP). Implementation of the CFP is managed at national level by the Ministry of Food, Agriculture and Fisheries. The Ministry consults with fishermen’s organisations and industry representatives via the Regulatory Committee. This committee was established in 1979 to advise the Minister of Fisheries on national administration of the quotas and on national fisheries policy generally.

Local government in municipalities dependent on fishing are of course also important players, and have been key in the establishment and running of the Fisheries Circle (see page 10).

### *Fishermen’s associations*

The key social actors in Danish fisheries are the fishermen and fishermen’s associations. The Danish Fishermen’s Association is the organisation for all Danish fishermen. Membership is available for ship owners as well as employed fishermen. It also acts as the nationwide umbrella organisation for 65 local fishermen’s organisations. The Danish Fishermen’s Association is represented on the Regulatory Committee and is a key member of the Fisheries Circle. Most local organisations are geographical, but one is made up of pelagic fishermen from across Denmark (*Pelagisk Fiskeriforening*) mainly targeting herring, mackerel and other pelagic species, who have their own producer organisation.

The main object of these associations is to manage the interests of the fishermen in any place where fishing is on the agenda – whether at a local, national or international level.

Some of the tasks are handled by the elected representatives of the association while other jobs are taken care of by the employed staff (see <http://www.fiskeriforening.dk>).

### *Trade unions*

Compared with many other European States, the labour movement has a central role in labour market related issues in Denmark. The union 3F represents the employed fishermen in labour agreement negotiations as well as national and local advisory committees and initiatives. 3F is the largest trade union for skilled and especially non-skilled workers (blue-collar) organising 375,566 workers in Denmark. An independent unemployment fund is organised alongside the trade union. 3F is also represented on the management board of the Fisheries Circle.

## **SWOT analysis**

### **Strengths:**

- Labour market flexibility
- Strong networks within the sector
- Good incomes for fishermen relative to national averages
- Relatively modern fleet, with strong investment in technology
- Diversified in terms of stocks exploited
- High cultural value put on sector

### **Weaknesses:**

- Dependence on CFP
- Conflicts with conservation gives poor public image

### **Opportunities:**

- Increasing prices for many key species
- Competitive with other European fleets
- Increasing efficiency due to technology and transferable quota system

### **Threats:**

- Continuing decline in stocks, overexploitation
- Challenge from environmental movement to industrial fisheries, bottom trawling etc.
- Sharing grounds with fleets from other countries
- Increasing fuel prices

## Recruitment challenge in Denmark

There are multiple reasons for fishermen leaving the sector. Most important is the decommissioning of fishing vessels, but age/health-related problems related to the hard work in the fisheries are important factors, as are the uncertainties of future income due to changes in fisheries regulations (declining resources and fishing opportunities). Perhaps the most important reason, however, is that it is rather easy for fishermen to leave the sector and find alternative employment, as described below.

As described above, Danish labour policy is very diversified, and uses a large number of tools to achieve the objectives of employment, growth and social stability. One of the most important policy aims is to ease the transition of manpower from sectors of decline (for example, fisheries) to growth industries (for example, the pharmaceutical, biochemical and the wind power industries) – as opposed to subsidising jobs in fisheries for reasons of social or regional stability. Under the present economic boom, the chance of alternative employment for someone forced out of fisheries is rather good.

The decrease in the number of jobs in fisheries has not influenced the Danish unemployment rate because fishermen leaving have had no problem finding alternative employment. Former fishermen are considered good labour, hard working and willing to work odd hours. The fishermen have primarily found employment within the port-related sector, i.e. supply and watch boats in the oil industry and other maritime transport. The increase in employment by the offshore wind farm industry has also absorbed excess labour from the fishing industry (personal communication with Niels Peter Petersen, 3f, Esbjerg).

Not everybody can enter the fishery as an independent fisherman in Denmark. To be registered as a commercial fisherman you have to document either Danish citizenship or a permanent address in Denmark for the two years prior to registration. Furthermore, you have to have been employed as a ‘parts-fishermen’ for the previous 12 months and have had a minimum of 60% of your gross income from commercial fisheries. This means that the transition back in the other direction (from other sectors into fisheries, or back into fisheries after a break) is not so easy.

All these factors have resulted in a lack of skilled labour and an ageing workforce in Danish fisheries. The Danish fishery has therefore actively engaged in the development of innovative recruitment tools as well as initiatives to retain existing fishermen in the trade.

## Inventory of innovative recruitment initiatives

### Overview and context

The macroeconomic framework for development in the fishery sector includes, as described above, competitive wages and incomes, up-to-date public infrastructure, high scope for job mobility, and a lack of natural resources with decreasing possibilities to catch fish. The outcome of general changes in public institutions, such as the welfare systems tied to the labour market, is not clear. However, this system can in some sense be regarded as a barrier to the recruitment of fishermen in competition with other sectors, since the system does not currently take the special working conditions in fisheries into consideration (seasonality, tax deductions, etc.).

Most innovative recruitment tools have been developed the past 10 years, and can be divided into two general groups. The most important has been developments within education (in its broadest sense). This includes education in the sense of training, but also education in the sense of awareness-raising. Another important component has been better technological solutions which have eased the physical strain of working onboard fishing vessels and have raised labour productivity and thus also personal incomes. The effect of this latter on recruitment is clearly impossible to assess, but

anecdotally it appears to be very important. The two components are linked in the sense that at least one awareness campaign has relied on promoting the use of information technology in fisheries employment (see below).

### Danish fisheries education

#### *The Blue Certificate*

The cornerstone of Danish fisheries education is the Blue Certificate. The Blue Certificate provides proof of basic training within fisheries and is a stepping stone for further education within the industry. The Blue Certificate gives a person the right to sail as skipper of fishing vessels of up to nine metres in length. When combined with certificates of competence in shipping and engine maintenance, as well as radio and disease treatment certificates, it gives the right to sail as skipper of fishing vessels of up to 15 metres in length. Everyone who completes the fishing industry's basic training for young people is awarded the Blue Certificate. The certificate is obtained via a mixture of training at a technical college and practical experience as a fisherman for two years.

The Blue Certificate system is considered in more detail as one of the case studies below.

#### *Post-apprenticeship options*

Post-apprenticeship courses are offered at Fiskeriskolen in Thyboroen (see below) and on the training ship Athene in different ports of Denmark. They are available to all fishermen aged 20 years or older, with certain rules applying to the unemployed.

Courses include:

- basic training in safety at sea for professional fishermen (three weeks);
- safety at sea for experienced fishermen (one week);
- fishing theory (three weeks);
- licence for fishing vessels up to 9m (one week);
- radio certificate (one week);
- maintenance of fishing tools (two weeks);
- instruments (one week);
- navigation (four weeks);
- labour market conditions and business economics (one week);
- repair welding (three weeks);
- engine theory (three weeks);
- health, nutrition and provisioning (three weeks);
- first aid (two or four days).

### *Skipper training*

The skipper acts as shipmaster and foreman, and skipper education is highly valued. Training options include Fishing Skipper 3rd class and Fishing Skipper 1st class. The Blue Certificate is a pre-requisite for starting these courses, and 3rd class must be passed before 1st class. 3rd class requires a minimum of two years on a vessel bigger than 12 metres. First class in addition requires school-level qualifications in mathematics, physics/chemistry, English and Danish (10th class, minimum grade 6), otherwise a three-month preparatory course is required. Training for 3rd class takes 21 weeks, while 1st class takes 42 weeks (plus preparatory course if required). So this is a significant investment of time. Training is free and a student grant is available, but individuals must pay for books and other materials.

Training takes place at Skagen Maritime College. Courses include the following:

**Fishing Skipper 3rd class:** navigation, watch duty, vessel technique, maritime law, meteorology, fisheries law, engine theory, English, safety at sea, instruments for navigation and for searching for fish, vessel accountancy. Courses in hygiene, radar, radio, firefighting and management as well as smoke diving.

**Fishing Skipper 1st class:** in addition to an extension of the subjects from Fishing Skipper 3rd class, the following is taught: fisheries biology and theory of the sea, fishing theory, signalling and radar.

Fishing Skippers 3rd class have the right to sail as officers on fishing vessels of up to 45 metres in length in sea areas within close range. Fishing Skippers 1st class can sail as officers on all fishing vessels regardless of size and in all waters. However, 12 months as an officer is required before becoming skipper.

According to Principal Jørgen Chr. Jensen from Skagen Skipperskole, the most important part of their recruitment is quality of education. At Skagen Skipperskole many of the new students are referred by old students. They have an unwritten rule that every student who finishes their education has to send a replacement. In modern terms, this could be characterised as a form of network marketing where past students act as role models to try to recruit new students.

For this to work, Principal Jørgen Chr. Jensen points out a number of requirements.

- The quality of the education must be very good for the students to want to refer their friends or colleagues.
- The students have to learn not only professional skills, but also personal skills so they can become good ambassadors that colleagues and friends look up to.

An example of a bad ambassador is a fisherman featured on TV wearing filthy overalls smoking a cigarette while handling consumer goods (fish) on his vessel. This is the image that Skagen Skipperskole is trying to eradicate by working with skills other than the ones strictly needed in the fishing industry. This is a long-term strategy but has proved to be successful.

### *Finances during fisheries education*

The short courses listed above have a small participation fee, but the Blue Certificate and Skipper training is free, with some grants available (for further discussion of funding for the Blue Certificate, see case studies below). Even for the short courses, benefits are available. If you are a member of an unemployment fund and entitled to unemployment benefits, you can apply for compensation for loss of income. You can also apply for travelling expenses. If you live more than 60 km from the course location you can receive free accommodation and board.

## **The Fisheries Circle (TFC)**

### *Overview of activities*

The Fisheries Circle was established in 1997 with the aim of encouraging the next generation of Danish children to consider a career in the fishing industry. To achieve this, they have developed a programme targeted at students in primary and lower secondary school. The programme includes preparation of training material, marketing and participation in various educational fairs. Before TFC there was no coordinated recruitment effort for the fisheries sector, although many of the fisheries schools had done their own marketing.

Among TFC's marketing activities have been:

- large scale TV and movie theatre commercials;
- radio commercials;
- websites;
- participation in educational fairs (sometimes the fisheries schools will be there physically, but the effort and much of the handouts etc. will have been the product of TFC);
- a variety of educational books for different age groups.

TFC coordinates all marketing and recruitment initiatives for the fishing industry and is therefore the best source of information on recruitment activities for the fisheries industry in Denmark.

Members of TFC are:

- municipalities dependent on fishing;
- the Danish Fishermen's Association;
- General Workers' Union;
- private companies dependent on fisheries;
- a number of educational institutions.

The Fisheries Circle is financed 50% by the Financial Instrument for Fisheries Guidance and 50% from the Danish Ministry of Food, Agriculture and Fisheries. From 2007 the funding will be 50% from the Fisheries Foundation (the new EU instrument) and from the Danish Ministry of Food, Agriculture and Fisheries.

### *Educational material by TFC*

In Denmark, fishing is a profession which is embedded in the culture and is therefore a profession everybody should have a basic knowledge about. TFC takes advantages of this by promoting the industry while generally educating the students. The aim is to target students at least three times during their primary and lower secondary school years, so that over a long period of time they gain an understanding of possibilities in the fisheries industry. The first time is in the 3rd grade with 'Ferie I Havneby' (Holiday in Havneby). The second time is between 4th and 6th grades (10-13 years of age) with 'Fish on the Job'. The third and final time is between 7th and 10th grades (13-16 years of age) with 'Good Guys and Great Girls'.

One further educational campaign run by TFC (the Minna & Gunnar campaign) is considered below as a case study.

The main focus of the educational material has been on supplying objective information regarding the industry rather than the implicit goal: to attract more young people to the industry. According to a PLS Consult evaluation of 'Ferie i Havneby' from 1999, this has resulted in a high rate of satisfaction from the teachers who have used the material. Furthermore all the educational material that TFC produces is completely non-commercial and is distributed to every school in Denmark at no charge. This increases the credibility of the information and the likelihood of it being used. According to the evaluation, the fact that the material is non-commercial is an important factor for teachers.

There is no clear evidence that the educational material contributes directly to recruitment; it is hard to say what would have happened had there been no educational material. But the fact is that all the material has received good ratings from teachers and students and has been widely used in most schools in Denmark.

Apart from the basic educational material described below, TFC also provides a range of other educational material in the form of books and posters.

**Holiday in Havneby** (a port city in Denmark): In 1998 '*Ferie i Havneby*' (Holiday in Havneby) was sent out to all 3rd grade classes. Holiday in Havneby is a story in 15 parts about Victor, who is visiting his uncle in Havneby, and who learns about the fishing industry during the course of his stay. The material is ideal for use in creating a 'cosy teaching atmosphere' for 15-20 minutes (e.g. during the 15 days before Christmas). However, the material can also easily be used as part of teaching over a longer period. The material consists of the book 'Holiday in Havneby' and 30 calendars (one for each student) with 15 small windows that can be opened – one window for each of the 15 parts of the story.

The concept and content has received top ratings among users (teachers). At the time of evaluation, about 38% of the teachers interviewed had used the material and 95% knew of it, with most of them planning to use it.

**Fish on the Job:** '*Fisk i jobbet*' (Fish on the Job) is the second set of educational material from TFC targeted at 4th to 6th grades. Again, it was sent out to all schools in Denmark. As with Holiday in Havneby, the main focus is on providing accurate and objective information on different aspects of the fishing industry.

In the student book, 'Fish on the Job', several different professions and job functions for people employed in the fisheries sector are presented. The teacher's guide encourages working with a story line, or a project-oriented way of teaching, and so there are both suggestions for a course for the teachers and suggestions for activities for the students. A set for one class contains a teacher's guide, 30 student books and posters as well as stickers for the poster.

**Good Guys and Great Girls:** Good Guys and Great Girls is the third and final step of TFC's efforts to target the primary and lower secondary school students, before they choose their next educational step (again sent out free to all Danish schools).

The material 'Good Guys and Great Girls' is CD-ROM based and is to be used when choosing an education or a career or in connection with project days. When using the CD-ROM, the students are sent on an apprenticeship in a port where they try some of the different job functions that a port has for people with both short and long periods of education.

Again, the concept and content received top ratings among the teachers and students when evaluated. The students' felt that they receive a large amount of new knowledge about the fisheries industry when using the CD-ROM. In the current year 82% of teachers were planning on using the material. However, not enough information is available to conclude definitively that the CD-ROM will lead directly to higher recruitment in the fishing industry.

### *Future activities of TFC*

In week 7 of 2007, TFC starts a new campaign targeting 15-20 year olds.

The main focal points of the campaign are:

- freedom – not a 9 to 5 job;
- good pay (details are described in the Minna & Gunnar campaign case study that also focuses on this point);
- use of IT and other modern technology.

The points are included in a humorous song that also introduces a new word/term: ‘*Kutter-minister*’ (vessel minister or vessel ruler) that further indicates freedom to rule your own life. The aim is that the term will have the same effect as the slogans from the Minna & Gunnar campaign (see p.17) – people start using the word in their daily language and thereby strengthening and prolonging the campaign. There has been no formal investigation into whether this is a successful strategy with potential students. The new campaign is rather the result of TFC’s and the Ad agencies’ gut feeling and past experiences. The campaign is based around ads on local radio, printed ads in the school magazine ‘Frikvarter’ and posters combined with the school fishing vessel visiting a number of local ports.

In addition, TFC is developing a new, common education portal on the internet for all the fishing schools and for the new campaign. Until now the different institutions have maintained their own separate websites, resulting in a lot of repetition when searching for information about possible education within fisheries. The new initiative strengthens communication and gives easy access to all the information needed. When searching the website, the user will be seamlessly guided around the different domains of the different fisheries schools, campaigns etc. As a new feature there is the opportunity of getting the text on each web page read aloud. This ensures that students with poor reading skills are not cut off from seeking information on the possibilities in the fishing industry.

### *Other initiatives from TFC*

**Coaching students:** In most Danish schools tuition is free, but the schools only receive funding when the students have successfully completed their education. Therefore, the students who drop out late in their courses will have taken up a large amount of resources that cannot be retrieved by the schools.

For this reason, TFC started a new coaching initiative in 2007. The aim is to help students complete their education. Sometimes young students may have less rational reasons for wanting to drop out than the conclusion that they have made a bad career choice – for example they might be missing their girlfriend (or boyfriend) or friends when at sea. In these cases the coach can help put their concerns into perspective.

TFC counts on having more students complete their education because of the coaching initiative, even though it will mean a greater drop out rate in the beginning. There are no figures backing this thesis as the initiative has not yet started.

The coaching will be done using an external consultancy company.

**Leadership:** TFC also sponsors a project about leadership in the fishing industry and has subsidised computer equipment for schools.

### **Fiskeriskolen (the fisheries school)**

While the Fisheries Circle deals with general marketing as described above, the fisheries schools talk to the students face to face and try to point out the benefits of a career at sea. This is primarily done at educational and careers fairs.

#### *Educational fairs*

When attending educational fairs, all the fishing schools attend together to supply all the information needed for potential students at one single place. Jørgen Chr. Jensen, principal of Skagen Skipperskole, mentioned in the interview that he usually attends the fairs wearing overalls and a tie. This is to symbolise that they are looking for people who can work with both their hands and their head.

The fairs are not only in Denmark; Jørgen Chr. Jensen also attends fairs in Greenland, the Faroe Islands and Sweden.

According to Kresten Larsen, the student's motivation for starting fisheries education is a mixture of a lot of different things. In no specific order, Kresten Larsen from Fiskeriskolen mentioned the following:

- Freedom: the students have the opportunity to become economically independent when they start their apprenticeship period after three weeks – they will not be dependent on their parents.
- Good pay in general: many students earn more than three times the amount a carpentry student would make.
- Relatively short education (only two years).
- No need to be a mathematical genius: many of the students are happy about a more physical education. The experience of Skagen Skipperskole is that students who were not as academically strong in primary and lower secondary school would have little or no problem learning the academic skills needed for skipper education. One probable reason for this is that the students see the need for the skills during their apprenticeship and the later work at sea, and therefore have a strong incentive and a personal will to learn them.
- Good opportunities for further education at a later stage and the possibility of joining the commercial fleet.
- The possibility to leave home.

Note that the Fisheries Circle have used some of these factors, particularly freedom and good pay, explicitly in their marketing.

#### *Lobbying*

Fiskeriskolen and Skagen Skipperskole work closely together with educational counsellors at the Danish schools to provide them with accurate and up-to-date material about possibilities in fisheries education. They are also planning different education days for the counsellors where they will visit the school fishing vessel, try different activities and hopefully leave with a good impression that they can pass on to students seeking their guidance.

#### *Fiskeri- og søfartsefterskolen in Thyborøn (fisheries boarding school in Thyborøen)*

This type of boarding school is a popular option for parents and pupils wanting an alternative to the public school system at a fairly young age. These schools cover grades 8-10 (lower secondary level boarding school for 14-17 year olds) and are often specialised. This particular school offers (besides the compulsory curriculum for all Danish children) a curriculum on fisheries and general work at sea. When the students leave the school they will be old enough to start fisheries education and receive the Blue Certificate.

The school has between 40 and 45 students a year, from which 25% to 30% (10-12 students) continue to the neighbouring school, Fiskeriskolen (the fisheries school – described above), upon completion. This means that roughly 25% of the students attending the basic two years of training for the Blue Certificate in 2004 came from *Fiskeri- og Søfartsefterskolen in Thyborøn*. This makes the boarding school a very effective recruitment measure for the fishing industry.

Of course there is no way of knowing if the students would have started fishing education if there had not been a primary and lower secondary boarding school specialising in fisheries, but according to Principal at *Fiskeri- og Søfartsefterskolen*, Jens Kjær, very few of the students have made up their minds about their future career when they start. Jens noted that their main motivation, apart from the general reasons why children want to attend a boarding school (get away from home, socialise etc.) was:

- being able to sail, but not necessarily with fishing in mind;
- being able to go fishing, but not necessarily commercially.

Recruitment is done through:

- regional advertising along with the other boarding schools;
- the school's own website (<http://www.sejlogfisk.dk/>);
- brochures that can be acquired through the different youth and educational councils which help guide children on their further education;
- listings under 'nature and fishery' in the boarding schools' secretariat, so they can be found when potential students are browsing through the opportunities.

Jens Kjær saw no specific connection between the number of students applying and the different campaigns from the Fisheries Circle (although it is, of course, hard to tell what would have happened without them).

### Government funding for projects

In 2005, the Ministry of Food, Agriculture and Fisheries funded two separate projects aimed at recruiting young people. One of the projects was funded with 8.7 million DKK and a similar amount from EU to build a new school vessel, which was finished in November 2006.

The aim of the other project is to subsidise the wage for apprenticeships, with a total subsidy of 4,000 DKK, making it cheaper and so more attractive for fishermen. The project was funded with a total of 9.9 million DKK from the Ministry of Food, Agriculture and Fisheries and the EU.

### Project Hanstholm

*Projekt Hanstholm* (Project Hanstholm) is a three month long project aimed at reducing accidents and burnout in the fisheries industry and creating a more attractive work environment ([http://www.f-a.dk/artikler/2004/abning\\_projekthanstholm.htm](http://www.f-a.dk/artikler/2004/abning_projekthanstholm.htm)). It is not directly related to recruitment within fisheries, but among the conclusions is that the younger generation demand better work environments. Quote: 'Bad ships will not attract new workers' (Evaluering af projekt Hanstholm s. 6). Projects like *Projekt Hanstholm* help create awareness of this issue among fishermen, resulting in better and more attractive work environments.

## Case studies

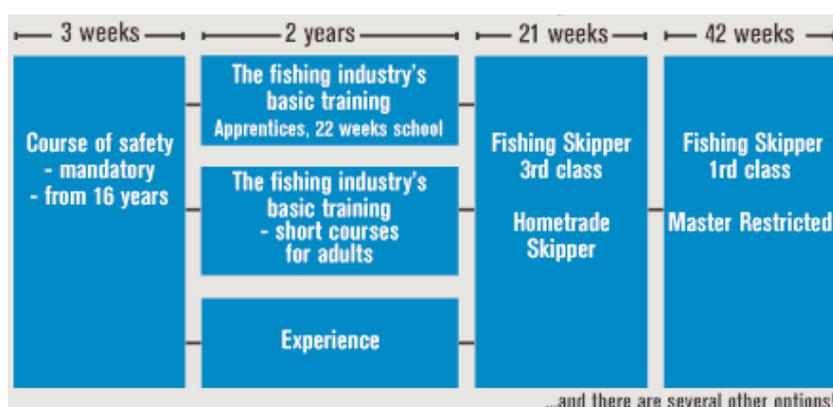
### Case study 1: the Blue Certificate

#### Overview

The diagram below shows how students can progress through education to build a future in Danish fisheries – from the mandatory course on safety, through an apprenticeship or a series of courses to the Blue Certificate and on towards training to be a skipper. The Blue Certificate, started in 1995, is the cornerstone of this process, and is made up of three key components: the safety course, basic training, and work experience in the form of apprenticeships.

Figure 4 below presents the basic structure of Danish fisheries education. The first element is always the mandatory safety course. The second element (two years) can be achieved in two ways: i) the Blue Certificate (basic training + apprenticeships onboard) or ii) experience plus short courses for adults. With this training plus some experience under the belt, individuals can move on to skipper training (see above).

Figure 4: *The Blue Certificate and fishing skipper education*



Source: <http://www.fisheriescircle.com/sw25579.asp>

The Blue Certificate is proof of basic training within fisheries and is a stepping stone for further education within the industry. Below is a general description:

#### Why is the Blue Certificate needed?

The certificate documents that the student has been trained to handle the challenges to be met in the modern fishing industry – the practical ones at sea, which demand fast and independent action, as well as the commercial ones as a responsible member of a team. This can be an advantage when seeking employment or if the student wishes to buy a vessel.

The Blue Certificate gives credit points for skipper training.

#### What rights does the Blue Certificate give?

The Blue Certificate gives the right to sail as skipper of fishing vessels of up to nine metres in length.

The Blue Certificate, with certificates of competence in shipping for fishermen and tending engines, as well as radio and disease treatment certificates, gives the right to sail as a skipper of fishing vessels of up to 15 metres in length.

### How do you obtain the Blue Certificate?

Everyone who completes the fishing industry's basic training for young people is awarded the Blue Certificate.

Courses offered at NVU Technical College, constitute collectively the fishing industry's basic training, giving the Blue Certificate after two years as a fisherman. This means that students or fishermen can pass the courses bit by bit when it fits into their schedule.

### *Compulsory safety course*

Safety at sea is taken very seriously in Denmark, which has ratified the STCW-F Convention (International convention on standards of training, certification and watch-keeping for fishing vessel personnel, 1995) and has implemented the convention through the obligatory safety training courses offered to fishermen (Benny Hansen, The Danish Maritime Authority). The first element of the Blue Certificate is a compulsory safety course, which must be completed by all young people between 16 and 18 years who want to start the fishing industry's basic training for young people, as well as all people over 18 who seek employment on a fishing vessel. The course lasts three weeks, and generally takes place at the Fisheries Training Centre – Thyboroen (Fiskeriskolen Thyboroen) for young people over 16<sup>1</sup>.

The course involves thorough instruction and practical training on land and at sea, to make sure that students become familiar with safety equipment on board. There are also practice drills with life-saving and helicopter rescue services. The focus of the course is the working environment and safety when at sea and on-board. Students also learn first aid and fire fighting and receive a short introduction to laws on fishing and shipping. For most people the course is free.

### *Apprenticeship as a fisherman*

The two-year basic training for the Blue Certificate consists of three periods of practical training on board fishing vessels, as well as a 22-week course at a maritime training centre (see below).

Apprentices must be 16 years or older and have completed nine years of school. They must also have completed a three-week course on safety, and must obtain a health certificate from a maritime doctor. The Danish Fishermen's Association finds apprenticeships on fishing vessels.

Each period of apprenticeship should be in a different type of fishing. Apprentices play a full part in life on board – from provisioning and cooking to preparation and maintenance of the vessel and gear, and handling of the catch as well as watch duty.

At the end of apprenticeships, students should demonstrate practical knowledge in the following areas:

- Safety
- Fish species, methods of catching, fishing tools, vessels, fish handling and quality
- First aid
- Economics and profit sharing

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<sup>1</sup> A merger between the Fisheries Training Centre at Thyboroen (Fiskeriskolen Thyboroen), Grenaa Fisheries Maritime College (Grenaa Fiskeriskole) and NVU Technical College for adults has left Fiskeriskolen (the Fisheries Training Centre, Thyboroen), as the sole remaining school within the field. Fiskeriskolen is today a subsidiary of EUC-Nordvest, which is an umbrella organisation for a range of different educational institutions.

- Navigation
- Engines and engine room equipment
- Repair welding
- Galley duty
- Mending, ropes and wires, and seine making techniques
- Radio

#### *Finance during the Blue Certificate*

During the 22 weeks of compulsory schooling and the apprenticeship period, the students will be paid a minimum of 10,000 DKK a month, plus a percentage of the catch during the apprenticeship. Total pay often reaches 20,000 DKK a month. On top of this, travel expenses to and from the school at weekends is covered. During periods of theory training, students have to contribute to room and board.

For the first three weeks of compulsory safety training there is no payment; however, there is free accommodation, tuition and food. In general, therefore, adults have the opportunity to obtain compensation from the government when educating themselves in the fisheries sector.

Table 4: *Number of students participating in compulsory safety courses, 2004–2005*

<b>Compulsory safety course</b>	<b>2004</b>	<b>2005</b>
Danmarks Fiskeriskole	96	75
Grenaa Fiskeriskole	93	38
Norvestjysk Uddannelsescenter (NVU)	55	30
Total	244	142

Source: *General Secretary Marianne Orlík, the Fisheries Circle*

Table 5: *Number of students participating in fisheries basic training, 2004–2005*

<b>Basic training (2 years)</b>	<b>2004</b>	<b>2005</b>
Danmarks Fiskeriskole	22	46
Grenaa Fiskeriskole	25	-
Total	47	46

Source: *General Secretary Marianne Orlík, the Fisheries Circle*

#### *Findings – the Blue Certificate*

What are the main reasons for choosing fisheries education compared with other opportunities?

- In most non-academic education there is a long school period at the beginning. This results in many of the students dropping out early, because their interest in and motivation for starting the education is the physical work and earning money, as opposed to spending more time at school. Leaving aside the three-week mandatory safety certificate, students in fisheries begin their education at sea rather than behind a desk. This is believed to have a positive effect on the number of students who actually complete their education.

- The second key factor is that the students are paid more than twice as much as in other educational options throughout the period – this has a positive effect.
- The education is very broad and the students learn a range of different skills, rather than specialising in a few narrow areas. This will appeal to many of them.

### Case study 2: the Minna & Gunnar campaign

#### Overview

The Minna & Gunnar campaign, designed and run by TFC, is the largest campaign aimed at recruitment undertaken in Denmark. It was a follow-up on a campaign that ran from 1996 to 1999 using the same characters, aimed at making Danes eat more fish in general. The main hook line in the 1996–99 campaign was: ‘*Fisk, det er nok ikk’ så ringe endda*’ (Fish – it’s not so bad). The main hook line in the 2003–05 campaign was: ‘*Fisker det er nok ikk’ så ringe endda*’ (Fishermen – they’re not so bad).

The fact-based part of the campaign was focused on i) the use of modern technology in the industry and ii) pay during school and apprenticeship periods (a minimum of 10,000 DKK a month in school periods plus a share of the catch during apprenticeship). This is relatively good pay since college or university students receive only between 1,200 and 4,300 DKK a month. This means that there is a large economic incentive for the 16 to 18 year olds to enter the fishing industry, which was emphasised by the campaign.

The M&G campaign, made for recruitment purposes, consisted of three different TV commercials, downloadable ringing tones for mobile phones and a website providing details on fisheries education. The focus in the TV commercials was on the many different skills learned during the training, with the main focus on IT. The good income during education was the focus of one commercial.

The campaign ran for five weeks in 2003 to 2005, but was stopped in 2005 due to the general recession in the fisheries industry (see Introduction) and increasing awareness of environmental and conservation issues related to fisheries: the media climate was making it impossible to present a credible positive image of the industry.

#### *Innovative aspects of the M&G campaign*

Earlier campaigns have primarily been based around fact-based information about life at sea, with little or no effort to market or sell fisheries education. The M&G campaign is the first of its kind in Denmark to use ‘modern’ techniques targeting feelings and culture – an approach that has been used by many other industries for a long time.

The M&G campaign has used modern marketing tools and channels to attract young people, for example:

- TV/movie theatre commercials combined with the internet and ring tones for mobile phones;
- well known and loved characters;
- well thought out ‘hook-lines’ that young people use in their everyday language, thereby greatly enhancing the effect;
- humour carefully combined with facts about school, life at sea and possibilities when not at sea;
- sex was used as an underlying theme through the three commercials.

These marketing tools target the mindset and culture surrounding fisheries and help remove the general picture of a conservative and unstable industry with hard work and low prestige.

### *Obstacles*

The main obstacle witnessed during the campaign was the general recession in the fisheries sector. TFC found it impossible to compete against all the bad news that was constantly in the media giving the direct opposite impression of the sector that TFC was trying to impose. This is the reason that there were no major campaigns in 2006.

### *Evaluation of success*

The campaign, at least in the first two years, was a big success. An analysis of the Minna & Gunnar campaign in 2005 showed that:

- 77% of 15-30 year olds had seen the commercial at least once;
- the commercial was seen on average eight times by the targeted group;
- in 4 of the 5 weeks the campaign was running it was in the viewers' top 10 favourite commercials shown on TV2 in the previous 7 days;
- the campaign resulted in 7,470 visitors to the [www.blivfisker.nu](http://www.blivfisker.nu) website, with an average of three minutes' stay per visitor.

More importantly, the Minna & Gunnar campaign seems to have resulted in some visible increase in enrolment in fisheries education. Forty-six students had enrolled for the mandatory safety course and the two schools noted that the courses following were almost full. Also HF Søfart (see above) benefited from the campaign, even though they only train for the commercial fleet. Their numbers had gone from 59 students in 2001 to 99 in 2003 when the M&G campaign was aired.

A guarantee of apprenticeship and of jobs when the training was completed was a key to the success of the campaign. Other sectors where apprenticeship is required have had big problems placing their students.

## **Conclusions**

The most innovative development in recruitment practices in the Danish fisheries sector has been the development of a formal educational system (apprenticeship) funded partly by the Fishermen's Association of Denmark. This education system has been successful in attracting applicants mainly because it is well funded, so this translates into good pay for the students during their education, compared with other industries. The industry is also starting to be perceived as a relatively secure employer, in strong contrast to its previous image, because an apprenticeship place is guaranteed and the educational path through to skipper is clear. Other important factors in making the Blue Certificate attractive are: i) freedom: fisheries is not a 9 to 5 job and is perceived as giving more flexibility; ii) immediate start of apprenticeship at sea (after safety course), i.e. no long classroom period at the beginning; iii) fisheries education gives the student many different skills, including the use of modern information technology.

Alongside this excellent education system has been strong marketing, mainly through the Fisheries Circle. Marketing has been both indirect (creating factual educational materials without links to the industry) and direct (public awareness campaigns such as Minna & Gunnar). They have succeeded in raising the sales of fish to Danish consumers and have paved the way for strengthening the recruitment effort. The effort has been successful because it targets students several times during their educational career, thus keeping them aware of possibilities, but is not strongly commercial, and so is

perceived as trustworthy and useful by teachers. It is also fun, humorous, imaginative (using, for example, a variety of different media) and (last but not least) free.

The point is stressed here that, even given the many examples set out above, it is not possible to point directly towards a single successful recruiting initiative having a clear impact in terms of numbers of individuals recruited into (and staying within) the industry. Existing data (and the scope of this study) simply does not permit us to make such direct connections. However, anecdotally, it seems as if the various recruitment initiatives discussed above have been relatively successful in maintaining the supply of manpower to the sector in the face of a strong labour market and many alternative job opportunities.

According to this analysis, there have been two key elements to this series of successful initiatives: i) cooperative networks between a wide variety of social actors within the sector, and ii) real financial investment, partly from the EU but mainly from government (for the education system) and the sector itself. TFC is itself a network organisation, with individuals and social players from across the sector involved. TFC has also coordinated successfully with the schools, with TFC focusing on 'mass communication' and the schools on the actual face-to-face recruitment.

Perhaps even more important than these well coordinated social networks is the financial investment that has gone into making the industry attractive to potential recruits. This not only includes the investment that has gone into campaigns such as Minna & Gunnar, or even the investment in free fisheries education, although these are key. Even more important, however, is the investment in fleet modernisation, safety and technology, which means that it is a genuinely attractive option to work on board a Danish fishing vessel. Although recruitment drives are key, if conditions on board are difficult, uncomfortable and dangerous, education and marketing are unlikely to improve recruitment into the sector in the long run.

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## **List of interviewees**

Jens Kjær (phone interview) – school principal of Fiskeri and Søfartsefterskolen in Thyborøn on the 14th of February 2007

Inger Bergen (phone interview) – student counsellor from MARTEC (<http://www.martec-fhavn.dk/>) on Tuesday, 13 February 2007.

Marianne Raben Olrik (face-to-face interview) – General Secretary at TFC secretariat on 5 February 2007

Kresten Larsen (phone interview) – educational consultant at Fiskeriskolen on Tuesday, 13 February 2007.

Niels Peter Petersen, 3F (telephone interview) – union secretary, 3F, Esbjerg Tuesday, 13 February 2007

Benny Hansen, (telephone interview) – Danish Maritime Authority, Copenhagen, Wednesday, 14 February 2007.