Quality assurance schemes for seafood – structure and implementation

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Abstract

Generic Quality Assurance Schemes referred to as *Scheme,* have been established in the primary industries in many countries. They represent an important part of the generic marketing for different categories of foodstuffs, especially primary produce. Such Schemes are established due to, among other things, severe competition in the international food market, closer integration in international trade and the consumers' concern about topics like the origin and safety of foodstuffs as well as animal welfare. The base for a Scheme is a quality assurance system made visible by a "generic brand". This type of brand will, in most cases, be a registered trademark which certifies that a product has certain qualities, and we call this type of brand a *generic trademark.* There are several problems particular to Schemes, which are not covered by the traditional research on brands. For instance, Schemes are not established and are not run in the same way as brands, nor do they have the same purpose. Schemes have to deal with management control and quality assurance in an entire food chain with many independent participants, and this is much more complicated than described for an integrated company in the literature on quality management.

This present work is based on case studies of Schemes in the European agricultural and seafood industries. The paper is an initial explorative study of Schemes as a tool for marketing and control of quality. It describes and discusses important aspects of the establishment of a Scheme on an industrial level: Establishment, management and ownership of Schemes, criteria for membership, implementation and visualization as well as effects and lessons learned from Schemes.

1/ Introduction

The development of brands[1] is costly and very demanding, but do represent a guarantee, make the consumer's choice easier, give profit and economics of scale in marketing. Not least brands give a basis for differentiation and positioning of quality, service, taste and other important product properties. An appropriate and recognized brand may therefore be regarded as a valuable asset for many companies (King and Cook, 1990). The combination of a brand and a product adapted to the customer, gives a good basis for establishing customer loyalty-suppliers have experienced that a strong brand also makes it easier for the distribution chain to accept their products (de Chernatony and McDonald, 1992).

However, it is important to note that times have changed as far as brands are concerned, both with regard to loyalty and distribution. Research reveals that the customers of today are no longer loyal to a particular brand. They *ask* for safety, confidence and guarantee from brands, but like to vary between several brands if price is decisive (Alsop, 1989). Research also reveals that the development of private brands, *i.e.* brands owned by retailers and distributors, leads to competition with the traditional brands owned by manufacturers (Salmon and Cmar, 1987). Larger chains, with more power and a desire to favor their own products, have established private brands for a number of products.

Traditionally brands have not been equally distributed throughout the grocery trade. For instance, fresh foodstuffs like fruit, meat and fish have accounted for a small proportion of all brands. This is now changing and fresh produces are now increasingly marketed with their own brands (Olsen, 1990):

- Firstly, several private companies have established own brands for fresh commodities, *e.g. Chiquita* (Wilkins, 1994). *Dole* and *Del Monte* for bananas, and *Jaffa* and *Maroc* for oranges.
- Secondly, generic Quality Assurance Schemes (hereafter referred to as *Schemes)* have recently been established in several countries.

Establishment of Schemes is typical of the primary industries, especially agriculture, where the products are formed by nature and sold in a natural form: primary produce[2]. As an example, the Norwegian agricultural industry has recently established a Scheme as part of the development of competitive strategies for Norwegian food on the domestic market - a market which has become more exposed to competition. Schemes are special in the way that they are established in businesses with many small and independent producers, who have a common interest in creating appropriate and stable quality in the different parts of the food chain (Olsen, 1994). The Schemes are reserved for products from approved producers and they are associated with programs for quality assurance and certification. The Schemes are supported by PR, advertising and other forms of communication to the customer (which for some Schemes may be the consumer). Such Schemes are a strategy to meet the customer's requirement for quality, safety and care for the environment. They can also be perceived as a strategy, which promotes loyalty and obligation to production, sale and distribution of primary produce. However, Schemes differ from the traditional marketing of brands with regard to ownership, management and need for control.

Research with regard to different aspects of brands has drawn much attention from researchers (Aaker, 1991- de Chernatony, 1991- Murphy, 1992). However, documented research concerning Schemes is not found. There are several problems particular to Schemes, which are not included in traditional research on brands. Schemes are not established and are not run in the same way as brands, nor do they have the same purpose. Brands are usually established within an (integrated) company and do not have to relate to the same problems of management and control, which the Schemes meet, operating within an industry or sector consisting of many independent participants. Schemes must pay much attention to management, control and assurance of quality in a food chain with many independent participants who are not controlled in the same way as in a traditional company.

The seafood industry in Norway is in need of knowledge regarding management of integrated quality assurance through certified Schemes on an industrial level as well as within a limited sector. Since a Scheme as a management and control mechanism is believed to be relatively new to many in the seafood industry, this study focus on identifying and discussing Schemes from different points of view. Thus, the *main purpose* of this paper is to give a survey of how some Schemes are structured, and also highlight some of the considerations which have been important for the implementation of these. Despite the fact that the basis for this study is a need for information, which the Norwegian seafood industry has, none of the problems focused on are peculiar to Norwegian conditions. The paper focuses on general questions related to Schemes in the food industry, and should therefore also be of relevance to industries other than the seafood industry and countries other than Norway.

2/ Theory

A theoretical approach to a Scheme as a many-sided notion makes it necessary to use different theories. In spite of the fact that little or no research has been done on Schemes, theory about and research into branding, generic marketing and quality management (referred to in chapter 5) has shown helpful.

2.1- Brand versus generic trademark (Scheme)

Kotler (ibid.) has defined a *brand* as:

- "a name, term, sign, symbol, or design, or a combination of them, which is intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors".

  This definition underlines the importance of the differentiation of one product from competing products. The definition also implies that a brand may consist of both a brand *name (.i.e.* that part of a brand which can be vocalized) as well as a brand *mark (i.e.* that part of a brand which can be recognized - a symbol, design, or distinctive coloring or lettering) (Kotler ibid.).

  As a comparison a *trademark* is defined by Kotler (1984:482) as :

- "a brand or part of a brand that is given legal protection because it is capable of exclusive appropriation. A trademark protects the seller's exclusive rights to use the brand name and/or brand mark".

A brand, or trademark[3], will function as a basis for decision for the consumer, *i.e.* a factor that can communicate quality, price, prestige, novelty, durability, etc. It also gives re-assurance by guaranteeing appropriate and consistent quality and other values relevant to the consumer. The supplier (producer) benefit from a brand in terms of promotion activities linked to a well-known brand, increased brand-loyalty, better profit margins, trade leverage in the distribution channel and competitive advantages (Aaker 1991, de Chernatony and McDonald 1992). The retailers also consider strong brands to be important because they provide a swift turnover of goods due to the producer's promotion activities and consumer demand. The

different parts of a brand are the core product, packaging, name and sum of the activities related to promotions and communication (Murphy, 1988). The company, which owns a brand, is selling a unique product, *i.e.* the customer will not get the same product if he or she chooses another producer. In this paper, however, the focus is directed towards studying a "brand", a "generic brand", that gives an image to one or more categories of foodstuffs from several independent primary producers. Produce like fruit, vegetable, meat and fish are categories of foodstuffs, or commodities. Generic refers to related units, objects or properties within such a category. A category consists of relatively homogenous raw material or products which are characterized by the fact that they have a certain common quality. This is achieved through the quality assurance system of which the production of these products is a part.

Quality assurance is one of several characteristics for a Scheme. Among the most important are these:

- The basis for a Scheme is a quality assurance system which is made visible by a "generic brand".
- The "generic brand" will be, in most cases, a *registered* trademark, which *certifies* that a product has certain qualities (Anon. 1993:3).
- Permission to participate in the Scheme and use the "generic brand" implies approval of participants and products.
- It follows that affiliation to the Scheme is based on voluntariness.

In addition, a Scheme will in many cases be an important part of the generic marketing of a category of foodstuffs - By generic marketing, or generic advertising, we understand "the co-operative effort among producers of a nearly homogenous product to disseminate information about the underlying attributes of the product to existing and potential consumers for the purpose of strengthening demand for the commodity" (Forker and Ward 1993:6).

Such a "generic brand" which is registered, certifies certain qualities and gives an image TO a category, which is from now on referred to as a *generic trademark.*

The fundamental difference between a generic trademark and a brand is that they create different forms of loyalty (Olsen, 1994). Those who produce a product under a brand will market an own brand to create loyalty to this particular brand in preference to other brands. The purpose of a generic trademark is, however, to create loyalty towards the category, the origin of the category or some other common attribute (property) (Olsen, 1994**).**

Besides, because of the characteristics of a Scheme, the generic trademark may be perceived as a quality mark as opposed to a grade label. The difference between a quality mark, which identifies a quality assurance program and a label which gives the highest grading, is that while both mean that the product was of high quality when it was inspected, it is only the quality mark which guarantees that the quality will still be high when the product is consumed (Gorga and Ronsivalli, 1988).

2.2 Quality management and implementation

A Scheme deals with quality assurance on the industrial level in a food chain[4], *i.e.* among many individual participants in an industry. This implies focus on organizing and management, and aspects related to requirements and control.

Research done on quality management is mainly concerned with big and integrated companies, but management, control and quality assurance in an entire food chain is much more complicated than within an integrated company (Gorga and Ronsivalli, 1988). For Schemes we have to deal with participants and conditions which are different in several ways. The management literature focuses attention on quality improvements within individual companies, such as *e.g.* establishment of improvement groups, quality circles and making co-workers accountable. However problems like creating a sense of responsibility among individual participants (companies) and between different levels of the food chain, of great importance to a Scheme, are not dealt with in the literature.

There are a number of problems related to a Scheme, which are not focused on by traditional research into quality management. The primary industries are represented by many small companies whereof many lack the formal quality assurance systems, *i.e.* they have low degree of formality and practice informal communication. This will often represent a barrier for introduction of quality improvement (Leirvik and Bekker, 1993). In spite of the special conditions required for a Scheme, one can make use of several aspects of the literature's treatment of quality management. One example is the forming of procedures to use a certified Scheme as a means to build up and visualize quality and quality work in the food chain.

Quality management has gone through four stages of development. These are : inspection, quality control, quality assurance and total quality management (TQM). One stage is above the other in a hierarchy with inspection at the bottom and TQM on the top (Dale *et al.* 1990). A Scheme covers the three first stages as an integrated totality because of the characteristic of each stage. Quality control is the responsibility of each element in the production chain, while quality assurance is the industry's responsibility (Gorga and Ronsivalli 1988 - Gorga 1994). Dale *et al.* (1990) relates inspection to a company's internal activity. For the members of a Scheme, however, inspection is looked upon as an external activity on behalf of the owner of a Scheme to identify members and products who do not satisfy the standard of the Scheme. Inspection serves to detect quality problems and to draw attention to the need for improvement.

To ensure quality there must be a plan of action, which theoretically eliminates any probability of quality assurance not being achieved. Planning, co-ordination and implementation are vital (Gorga and Ronsivalli 1988). If the quality assurance system is to function as intended, the phase of implementation has to be emphasised. It is important to decide appropriate ways for the implementation of a system, *i.e.* how it can be done in practice. Focus on implementation will reveal problems of co-operation and challenges in fragmented sectors where different circumstances can lead to negative consequences such as disloyal behaviour and

free riders (*i.e.* taking advantage of the system without contributing to it). Implementation of quality programs and processes of quality improvement are discussed by many authors and described as an extensive process *(e.g.* Somasundaram and Badiru 1992). A brief description of the elements in the implementation process is given by *e.g.* Sinha and Willborn (1985):

> 1. Planning and control initiating the approved program.
> 2. Motivating, informing and management of the personnel who participate in the program.
> 3. Introducing report formulae and quality manuals.

Although this source of literature has planning included in the phase of implementation, a more general classification of the developing process for a Scheme considers the three phases: planning, implementation and running the Scheme. Between each of these phases it will be a degree of overlap as far as activities are concerned *(e.g.* internal and external information, training and evaluation must be in progress more or less continuously in each phase).

2.3 Presenting the problems

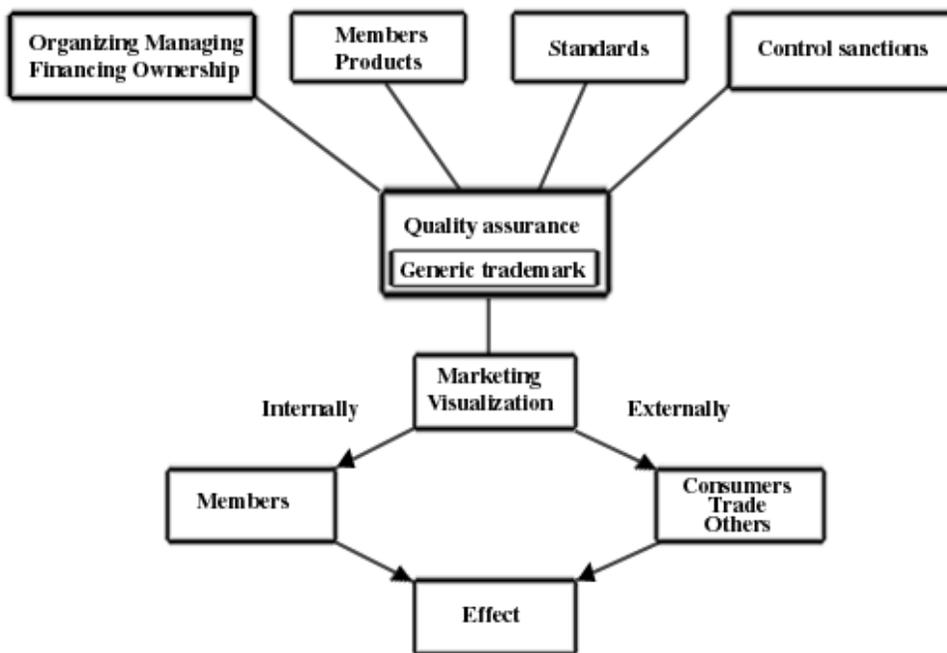A model depicting the framework in a Scheme is presented in figure

Figure 1: The framework in a Scheme.

This figure and the theories considered helpful make up the basis for the main questions, which describe and explain certain aspects of the build-up of a Scheme on an industrial level:

1. Establishing and ownership.

- What are the motives for establishing the Schemes?
- How are the Schemes organized, managed and financed?
- Who is the owner of a Scheme?

2. Criteria for membership and management.

- What parts of the food chain and what kind of products are part of the Schemes?
- What demands must members and products fulfil?
- What kinds of quality systems exist and how are the standards made up?
- What kinds of control and corrective action exist?

3. Implementation and visualization.

- What aspects should be emphasized at the implementation?
- How is quality visualized among members and externally to customers?
- What kind of marketing activities and target groups exist?

4. Effects.

- What are the effects of Schemes on the industry, consumers and other customers?

The presentation of the results in chapter 4 is based on the questions above and according to the main elements in figure 1.

3/ Method

The aim of a Scheme may often be expressed as what one expects to achieve by the implementation of such a system. But the empirical question, how to achieve such a goal, remains. Knowledge of quality management in individual companies does not seem sufficient to predict the effects of a strategy of quality on the industrial level. In order to be able to say something about the effects of such a strategy, we must know something about the context of the strategy, the strategy itself, and the effects of similar strategies in similar areas. In other words, one has to study what is done within the food industry in other countries, how quality improvement is accomplished and how well and why the improvements function.

The explorative focus of this paper identifies problems and the way in which they are solved, rather than testing well-defined hypotheses. Therefore it is appropriate to use a qualitative method designed as case studies. The reported observations are based on secondary data combined with structured interviews with representatives from the Schemes.

3.1 Data

The starting point for this research was to make a systematic analysis of a sample of Schemes which could illustrate different models of organization, target groups, lessons learned from the Schemes, and in addition throw light on important questions concerning establishment and operation. Based on secondary data from several European Schemes, six were chosen to form the cases. One of these concerns seafood (farmed salmon), while the others cover agriculture (pork, beef, veal and

agricultural products in general). Table 1 shows the chosen Schemes with regard to: owner of the Scheme, the country/region the Scheme represents, year of establishment, categories of foodstuffs the Scheme represents, and the generic trademark identifying the Scheme/the Scheme's image. If the owner of a Scheme represents more than one generic trademark, the year of establishment is given for each of them.

Table 1 : The chosen Schemes.

Scheme owner	Country (Region)- of Origin	Year of Establishment	Category of Foodstuffs	Generic trademark/ Image
Centrale Marketing gesellschaft der deutschen Agrarwirtschaft mbH (CMA)(*)	Germany	1 972/Bariv 80S/1992	Various Agricultural products/ Potatoes/Beef and pork	Gutezeichen- Markenqualitat Aus deutschen Landen, standig Neutral Kontrolliert/ AckerGold-Aus Integriertem Vertragsanbau/ Prufsiegel - Deutsches Qualitatsfleisch Aus kontrollierter Aufzucht *(**)*
Stichting Kwaliteitsgarantie Vleeskalvsector (SKV) (***)	The Nether lands	1990	Veal	*Controlled Quality Veal*
Irish Livestock and Meat Board (CBF)	Ireland	End of 80s/1991	Pork/Beef	*Quality Irish / Quality Irish Beef*
British Meat Manufacturers Association ABMMA	United Kingdom	1982/1992	Bacon/Ham	*Charter Quality Bacon/charter Quality-Ham*
Scottish Pig Industry Initiative (SPII)	Scotland	1990	Pork	*Scottish Quality- Pork - Farm Assured*
Shetland Seafood Quality Control (SSQC)	Shetland	1985	Farmed salmon	*Approved by - Product of the Shetland Islands*

In English

(*):   Central Marketing Association of the German Agricultural Industries.
(**):   Gütezeichen ("Goodness Sign") - Brand name quality from Germany, always independently controlled; AckerGold - From integrated growing on contract: Prüfsiegel ("Test Seal") - German Quality Meat from controlled breeding.
(***):   Foundation for Quality Guarantee of the Veal Calf Sector.

The table illustrates that three of the organizations represent more than one generic trademark. This is the case for BMMA (2), CBF (2), and CMA (3).

This paper emphasis on problems is somewhat different for the six Schemes. For the three first mentioned in table 1 (CMA, SKV and CBF), the paper focus more on problems related to establishment and visualization, while for the three others (BMMA, SPII and SSQC) the focus is on implementation. As to problems related to implementation, this paper is based on preliminary data from an ongoing research project.

4/ Results

In this chapter the questions raised in section 2.3 will be discussed.

4.1 Establishment and ownership

Motives for establishment

Establishment of Schemes must be viewed in the light of several circumstances, whereof some are more important than others. The most essential motives are presented in table 2.

Table 2 : Main motives for the establishment of Schemes.

• Avoid problems caused by critical conditions within an industry/sector (quality problems, environmental problems, etc.) • Take the consequences of consumer trends (provide security). • Create niche products/differentiation. • Meet competition from imported goods. • Stabilize and develop an industry. • "Copy" initiatives taken by others. • Achieve accountability (commitment).

The motives are based on internal conditions in a category of foodstuffs together with external conditions. An important reason for establishing Schemes within European agriculture has been to guarantee safe products, *i.e.* products that can be consumed without risk to one's health. There has also been a need to ensure an ethically justifiable husbandry. The use of growth hormones and outbreak of serious animal diseases illustrate the need for such Schemes (provided they are based on quality assurance). As a consequence of the consumer trend, which demands increased information because of worries about health, environment and safety, the Schemes have sought to reassure consumers. CMA's Prüfsiegel products are an example of a Scheme trying to create niche products through strict production requirements which concern quality assurance through a continuous chain of contract which covers every stage, from the selection of animals and primary production to the retailer. As a result of a more liberalized world trade agreement (GATT/WTO) and the creation of trade blocks *(e.g.* EU, NAFTA and ASEAN), traditional protective trade barriers no longer exist and result in a more open flow of goods between nations within the blocks. One consequence is that nations, which previously had a protected home market, face increased competition from import. In this connection establishment of a Scheme based on national origin can be used both as a defensive and an offensive measure. The motive may be to maintain the market share on the domestic market, but can also be to expand abroad. The effort to develop an industry and thus improve the market position for the products from that particular industry, is also a reason for a Scheme comes into being. The motive for the establishment of a Scheme may also be to follow the strategy of others, which

can be viewed as a countermove. The visualization of the responsibility of links in the food chain for the delivery of homogenous quality, will also be an argument in industries characterized by varying quality and irresponsible behaviour (irresponsible use of medication, animal neglect, etc.).

Often, the reasons for establishing a Scheme coincide with the motives for establishing a brand, namely to give a reassurance/confidence function as a basis for decision and creating an advantage of differentiation. However, the motive is also to cruel accountability and loyalty between the links of the food chain. This clearly distinguishes a Scheme from a brand. Visualization of the primary producer's responsibility for quality is in many ways the basis of a Scheme and thereby the basis for marketing quality to the consumer.

Organizing, managing, financing and ownership

Common to different ways of organizing Schemes, is that the Schemes are included in an independent organization which lacks care of administration and operation. Schemes, which are part of the activities of a marketing board, can be separated from those which represent the main activity of a foundation or a controlling body. A Scheme can be an additional activity for a marketing board established to promote a category of products. This applies to **CMA**, **CBF**, **BMMA**, and **SPU**. As for the Dutch **SKV**, a foundation with no other functions than administration and operation of this Scheme has been established. **SSQC** is part of the activities of a body established to take care of the quality control of a category of foodstuffs *i.e.* fish and other seafood. For the two last-mentioned examples, the promotion of the Schemes is done by others than **SKV** and **SSQC**.

Common for the management of the Schemes is that they are represented by primary producers, processors and consumers. An exception is **SSQC,** which is independent, thus not represented by the industry. Public authorities, represented by a ministry, is part of the management if the Scheme is fully or partly supported by public funds, or established by law. Retailers also take part in the management of some Schemes.

All the Schemes are operated in accordance with the principle of non-profit. An illustration of the Schemes' sources of financing is given in figure 2.
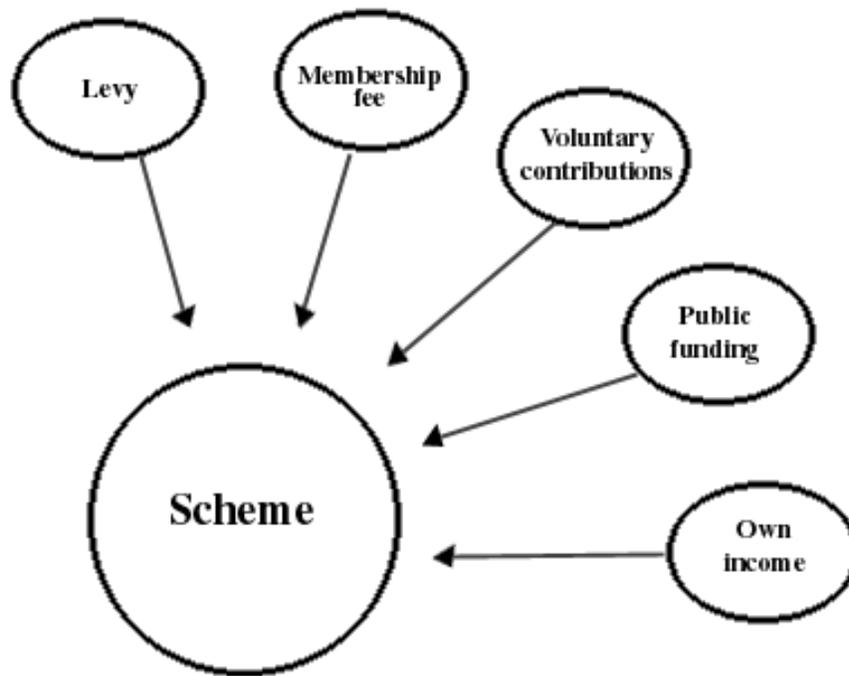
Figure 2: Sources of financing

The main source of financing is represented by a levy-collected, somewhere in the food chain. Generic marketing is based on co-operation among primary producers (Forker and Ward 1993) and therefore it is natural to assume that the money for a Scheme comes from the primary producers. However, some Schemes receive money from feed producers and processors. SKVs main financing is based on a levy on feed. In the Dutch calf industry, the producers of calf feed often own the animals. Thus in a way it is the primary producers who actually pay but technically, the levy is related to the feed volume as a basis for calculation. The basis for SPII was that the primary producers accepted a levy, calculated for each animal slaughtered. A condition for their willingness was that membership should result in better (premium) prices for slaughtered animals. The increased price should cover the levy for slaughter animals and in addition the primary producer's expenses for adjusting their operation to the Scheme's demands. However, as the Scheme did not result in better prices, the primary producers did not see a levy as beneficial. The result was that the processors agreed to finance the SPII Scheme's basic costs (*i.e.* the cost of inspecting the primary producers), because they recognized the importance of a Scheme to them. According to Trenholm and Ritchie (1996) such a financing put into practice has in some cases "led to processors paying the membership fees to the Quality Schemes and acceptable producers joining the Schemes free of charge. Free membership encourages more producers to apply for membership thus increasing the volume of Quality Assured product, which is important in meeting the supply requirements of the retail sector". The principle of compulsory levy (often paid by producers) is, by the way, common as a way of financing agricultural commodity generic promotion programs (Forker and Ward 1993:151).

The costs of a Scheme are split between administration, promotion and inspection. In some Schemes the administration and promotion is covered by a compulsory fee (levy) per unit, as described above, or by an annual membership fee, while the inspection expenses are kept partly or completely separate. It may be that each individual member covers all costs of inspection himself, or just the costs of any

extra inspections. Such extraordinary inspections occur when irregularities have been revealed.

Insofar as the Schemes receive additional private financing, this is in the form of voluntary contributions from the industry and the Scheme owners own income from paid services. As far as public money goes, it is often granted as support for a period related to the establishment of a Scheme : "Public funding has played an important role in a number of Schemes" during the early months/years after launching (Trenholm and Ritchie 1996). In those cases where the Scheme is partly based on public funding, such as SSQC, there is still a trend towards self-financing of the Scheme after a period time.

The Schemes' standards and criteria for use are modeled by the marketing board/foundation/ controlling body in question, which also registers and thereby owns the generic trademarks. Therefore the generic trademarks can be looked upon as being owned by the individual Scheme's members, in contrast to a brand which is owned by a company.

4.2 Membership criteria, standards and enforcement

Schemes are exclusive by specifying who is to participate and use the generic trademark. The Schemes differ from each other depending on which links of the food chain are included. "Extremities" in a food chain may be included, as represented by breeders on the one hand and retailers on the other. Some Schemes are almost totally integrated *i.e.* they connect the primary producers and processors as well as one or more of the following links in the chain. For all the Schemes in this study, the processors are included. Support from the processors is important, because they will have great impact on the primary producer's decision - whether the primary producers decide to join a Scheme or not. As an example, the supermarket chains in the UK have been a driving force in establishing the Charter Scheme for ham. The supermarket chains only wanted to buy from members of the Charter Scheme. This has made the suppliers realize the need to participate in the Scheme in order to maintain their share of the market. In those cases where the primary producers do not take part in a Scheme, the Scheme owner does not practice direct control over them. In such cases it is up to the members, *i.e.* the processors, to make sure that the primary producers, as their suppliers, are up to standard, so that the quality of the end product satisfies the demands of the Scheme.

There are examples showing different types of membership in a Scheme. SPII includes primary producers and processors. In CBF's quality assurance program for beef the slaughterhouses and processing industry are members, as well as the processors retailer customers abroad. Participants in CMA's Scheme Prüfsiegel for pork are breeders and feed companies, slaughterhouses and retailers, *i.e.* butchers. These are regarded as partners in an unbroken chain of contract. In CBF's Scheme the primary producers are not defined as members, but those primary producers who supply animals to the manufacturing industry approved by CBF's criteria are indirectly part of the Scheme. This is achieved by the fact that the primary producers have to satisfy the Scheme's conditions for supplying animals to the quality assurance program.

The criteria for participation are that potential members must satisfy specific demands to be included. For primary producers such demands may concern the breeding of animals including feeding and treatment of diseases. To be a part of the Scheme Charter Quality Bacon/Ham one must be a member of BMMA. The processors are often met by demands related to the technical side of production. For retailers the conditions may concern the fitting up of the retail outlet, presentation and handling of products under the Scheme. One of the conditions for membership is that each member is subject to the Scheme's rules for inspection.

Schemes also specify conditions for raw material and product forms. The Schemes are different from each other depending on whether they include non-manufactured or manufactured goods, and whether they include one or more categories of foodstuffs. None of the Schemes represents whole categories of foodstuffs, as discussed in section 2.1, but are limited to subcategorize. For example, meat is represented by beef and seafood by salmon.

Criteria are given for a Scheme to cover production of certain species or kinds (*e.g.* Atlantic salmon, certain animal breeds and certain kinds of potatoes), and they may be given to ensure that products covered by a Scheme are of national or regional origin. In this way the use of country-of-origin effect can be tied to a product. The product criteria may also influence the demands concerning feed (*e.g.* naturally reared using a grass-based system, not recycled animal byproducts) and demands concerning growing (*e.g.* no pesticides). In order for a Scheme to appear even more exclusive and thus increase the quality mark's reputation, there are examples of limitations in the form of quotas and also limitations for the raw material/the product which has to satisfy the highest classification on a commonly used scale for a product. The following examples illustrate such limitations. For the SSQC Scheme only salmon with the highest grade superior is entitled to use the generic trademark. CMA's Gütezeichen uses quota which include the upper third of the production. In BMMA's Charter for bacon, the level of the standard implies that only 70 percent of the members' output qualify for the use of the generic trademark. CMA and BMMA therefore represent two different ways of limiting the production volume covered by a Scheme. The one through direct limitation in such a way that only the upper third of the production is included and the other indirectly through modeling product standards at such a level that one part of the production will not satisfy the standard.

Quality systems and standards

The quality systems on which the Schemes are based do not follow an international standard, although in some cases they may be based on certain principles relating to such standards. In other words a Scheme may use parts of an international standard as a framework to achieve goals for quality. Both CBF and the SSQC are based on principles of the ISO-standard. More important than what kind of a system a Scheme is based on, is that it follows written standards. For all the Schemes in this study, the standards are included in quality manuals, producer codes of practice, etc.

In order to give an advantage of differentiation, the standards to product and process are self-defined by the individual Schemes and surpass the demands of the authorities in certain areas. The modeling of a product standard may be illustrated through BMMA. In order to regain lost market shares domestically, the standards for Charter bacon were formed to surpass the standards of the

competing Danish bacon. The Danish bacon, which represented the highest product standards on the market, was examined in detail. Based on what was found, the standard for Charter bacon was established with the intention of being able to compete with the Danes.

Some Schemes are less concerned with standards for product quality, but attach much importance to standards for primary production regarding animal welfare, ethics, etc. BMMA represents Schemes, which focus on product quality, while SPII has farm assurance - *i.e.* assurance of primary production - as the primary objective.
The Schemes in this paper do not use different standards for different target groups. However, SSQC is special. This Scheme is given the right to use the prestigious French generic trademark Label Rouge (LR). There are special standards for the use of LR, which in some areas differ a little from SSQC's ordinary standards.

Much importance is attached to the fact that the standards must be dynamic, *i.e.* trial they are updated when needed in order to meet the demands from the trade and the industry, and that they attend to the consumers' interests. BMMA'S Quality Charter Bacon is an example of this. Because of signals from the market, the thickness of fat in bacon has been reduced from 16 millimeters to 12 millimeters during the 14 years the Scheme has existed.

Inspections and corrective actions

In accordance with inspection discussed in section 2.2, the inspections are done by an independent and officially accredited body. The frequency of inspection varies depending on the part (link) of the food chain in question. Both announced and unannounced inspections occur.

During the inspections any non-conformities are registered and these are commonly classified as major and minor non-conformities. Minor non-conformities require improvement within an agreed time, while major non-conformities most often lead to expulsion from the Scheme and withdrawal of the permit to use the generic trademark. In addition, membership in a Scheme is not forever, but is subject to periodical *(e.g.* annual) renewal based on an evaluation of each member.

4.3 implementation and visualization
Aspects of implementation

The implementation of the Schemes is taken care of by the Scheme owners as co-ordinators. For this purpose neither SPU nor SSQC have needed to restructure their own organization or delegate the implementation. SPII was established merely to administer and operate a Scheme,but for SSQC as a controlling body, quality control and implementation were one and the same task. For BMMA running the Scheme became a task in addition to organizing and taking care of the interests of the processors in the pig industry. Therefore a separate group was formed within BMMA and this group did the implementation and operated the Scheme for the first 3-4 years. When the operation became routine, the group was dissolved and thereafter the follow-up and operation of the Scheme became a part of BMMA's other ordinary activities. As for organization forms, which were originally established for other purposes than solely to administer and operate a Scheme, it seems that

establishment of a separate unit which takes care of the implementation may be necessary.

Internal support is of vital significance in order to be able to implement a Scheme. However, many Schemes have experienced that keeping up support is quite a challenge, especially in the phase of implementation. Motivation and enthusiasm for joining a Scheme must be based on the arguments for establishing a Scheme. Although a Scheme may be established as a result of a crisis in a sector or to meet competition from imported goods, much motivation and persuasion are needed to attract members. This is easier if it is possible to point to the success of similar efforts in the same industry. BMMA is a good example in that respect. BMMA's Charter Quality Bacon was established to improve and ensure the quality of British bacon. At that time British bacon was of variable quality and lost market shares to imported bacon. For ham the product quality was not a problem. Nevertheless a Scheme for this product was successfully established. The argument for establishing a Scheme for ham was a need for much tougher marketing as a consequence of increased competition within the EU. The Charter Quality Ham Scheme became a success almost overnight, partly because Charter bacon was a product which the supermarket chains knew and trusted. That settled the matter, Charter ham was perceived as a quality product similar to the well-known Charter bacon.

Implementation implies both time and money to achieve an adequate membership. For BMMA's Charter Quality Bacon the goal was that 90 percent of the industry should take part, hut it was recognized that at first 90 percent would not satisfy the criteria for the Scheme. For example, some members were inspected up to six times before they met the requirements for the standard. In one single case it took three years before a member was accepted.

Implementation will be made easier if documentation of the old way of doing the work is sufficient. For the implementation of SPII, 80 percent of the work done by the primary producer was registered acceptable, while the rest had to be changed to meet the demands from the Scheme. In other words, the pig producers in Scotland worked in accordance with good practice, but something had to be changed and everything had to be documented.

Implementation can occur on a full scale or, at the beginning, on a small scale. A limited implementation can occur in several ways. One may start with a limited part of the food chain and thus fewer members, or one may limit the implementation to cover only product or process. In SPII the processors were recruited after a certain number of the primary producers had joined. In the beginning BMMA's Charter Quality Bacon covered only inspection of the product. After some time, hygiene in the processing, temperature control, packing, etc., were included, and the Scheme was expanded to include control of the processing. This step-by-step process was a result of a need to learn. SSQC shows that a Scheme may first be implemented for one part of the industry and later he expanded to include a larger part of the industry. For the first years this Scheme covered the fish processing industry. As fish farming became more important, this sector constituted more and more of the Scheme and today it represents 80 percent of SSQC's time on inspection.

Visualization - Internally and externally

Information, training and internal marketing are "special" activities for Schemes. These activities revolve around a need to make target groups understand *e.g.* nutrition, handling of raw material and quality assurance. Through internal marketing the ideas, the assumptions and the demands are communicated to all those in the food chain who are to contribute to improve the quality. External visualization is about giving quality an image to customers and to those with influence on the public opinion.

Information and training are important to create motivation and identity. Identity implies giving the individual member a feeling of working together with others to reach a common target. Many Schemes issue periodical newsletters to keep members up to date on results. The needs for training are different for different Schemes, and for different links of the food chain. The trend is that primary producers need more guidance than processors; in SPII the objective for the first inspection of the primary producer is more to give necessary advice than to enforce standards. The processors need much less advice, because they are used to meeting demands and to being inspected by their customers. SSQC is an example of using a local training center, North Atlantic Fisheries College, to take care of the training and inform about the Scheme and why it exists.

The generic trademarks which identify the different Scheme, are visualized in different ways to a different extent and to different target groups. Visualization on a product can be a stamp on carcasses, a gill mark and a stamp on packing. Processed and manufactured products are often supported by a generic trademark in combination with a brand or private label. One example is CMA's generic trademark Gütezeichen, which is combined with many different brands/ private labels. In the last resort, however, it is the retailer who decides whether the generic trademark will be visualized. Although both Irish beef and Dutch veal are sold lightly processed, just cut into pieces, it is only CBF's generic trademark Quality Irish Beef which is made visible to the consumer. So far SKV has not succeeded in persuading the supermarket chains to make the SKV generic trademark visible in the retail outlets.

The marketing of Schemes is in some cases directly aimed at the consumer, but more often (or in addition) aimed at media and the trade (retailer or catering). For several Schemes, the trade is the superior or direct target group. In such way a Scheme is different from a brand where the consumer is often the most important target group.

4.4 Effects

Effect studies have been done for CMA's generic trademarks which reveal customer satisfaction, knowledge, etc. Although such tests not have been done for the other Schemes included in this paper, these Schemes still indicate positive effects. Examples of such effects are given in table 3.

Table 3 : Effects of Schemes, examples

- Higher prices.

- Increased sales.

- Stable sale, when sail is difficult for other products in corresponding category of products.

- Export to markets which demand high quality.

- Reinforced country-of-origin effect.

- Recognition which gives positive PR.

- No negative reactions from consumer organizations.

Several of these effects lead to a market position for the products in a Scheme.

One can imagine that the above-mentioned effects are the result of several circumstances, among them those motives for establishing Schemes, which are given in table 2. Thus positive effects can be the result of a Scheme having eliminated or being able to control critical conditions within a sector. A Scheme may have a desirable effect in the way that it is perceived as an answer to the consumers' need for reassurance in the areas of *e.g.* healthcare, protection of the environment and safety. Further, a Scheme may succeed in creating differentiation, it can create competitive advantage associated with country-of-origin profile, and last, but not least, a Scheme can succeed in the way that it creates accountability between the different links in the food chain.

CBF's Scheme for beef is a good example of effect due to recognition, among other things. Shortly after Sweden became member of the EU, Quality Irish Beef was successfully introduced onto the Swedish market. This was due to professional behaviour from the Irish Food Board (includes CBF), promotional support to the Swedish partners, and last, but not least, a reputation which gives the Swedes confidence that quality and the ethical aspects of husbandry are taken care of.

Effect given in table 3 will show the benefit for the whole industry, but in the same way as described for brands in section 2.1, the benefit of a Scheme can be specified for different target groups. In table 4 the benefit of the Schemes in this study is related to the primary producers and the processors.

Table 4 : Benefits of Schemes to (a) the primary producer and (b) the processor.

- (a):
- Provides an independent assessment of one's operation.
- Reduces the need for customer inspections.
- Contributes towards securing stable sales and in some cases also higher prices.

- (b):
- Reduces the time and expenditure associated with supplier inspections.
- Provides information on "acceptable" suppliers (membership in a Scheme becomes a condition).
- Assists in the development and maintenance of a due diligence defence (helps to confirm that necessary precautions have been taken).
- Gives promotional support.

Among the arguments stated for the processors, several will also be valid for the trade. This applies to reduced need for customer inspections, information on suppliers which satisfy the quality criteria's of an independently inspected Scheme, as well as promotional support to products included in the Scheme.

According to the cases in this paper, the benefits of Schemes is in many ways the same as the benefits of brands (Aaker 1991, de Chernatony and McDonald 1992). Both a Scheme and a brand give the manufacturer and supplier more out of promotion, since the promotion is related to a well-known generic trademark/brand (the target group's reduced skepticism, economics of scale in marketing). Further, it is an objective to let the manufacturer/supplier take advantage of the loyalty which follows a well-known generic trademark/brand (perceived quality, the associations). Both a Scheme and a brand act as trade leverage (recognition from the trade) and give competitive advantages (create a barrier to competitors). Higher prices, however, seem to be more important for a brand than for a Scheme for which stable sale can be a motive. In other words, "the security of market position is often more important to an industry sector" than premium prices (Trenholm and Ritchie 1996). A brand tries to reinforce the consumer's confidence and simplify the consumer's decision making. Reinforced consumer confidence is also an objective for a Scheme, but to a greater extent this concerns the trade since several Schemes have the trade as a more important target group.

5/ Conclusion

Lessons learned

The different Schemes have different experiences in different areas and below, there is a summary of the most significant evaluations.

It is important to devote adequate time to the phase of planning for a Scheme. In this phase there must be dialogue with the industry, and this dialogue forms the basis for shaping the Scheme and for attracting members to the Scheme. It is especially important that processors join since they lay down the premises for how the primary producers behave. In addition finances must be secured. Adequate financial resources must be available to allow the number of inspections, which are necessary in the phase of implementation to bring the number of members to a desirable level. The economy in the industry must also be healthy to allow the necessary upgrading of the infrastructure (buildings, machinery, etc.). In other word, the success of a Scheme seems to be dependent on a "critical mass" of both volume of product and funding. This means that in the early stages of a Scheme, it must have sufficient start-up funds and be able to provide sufficient product volume in order to be credible. As time progresses public funding could/should be reduced or stopped and retailers/supermarkets /processors should demand ("pull") the volume.

One has to allow adequate time for implementation before a Scheme can show some benefits to members. A challenge in the phase of implementation is to keep up the members' enthusiasm until a Scheme can show benefits to them.

Standards are the basis for a Scheme and these must reflect the purpose of the Scheme. Due attention must be devoted to shaping of the standards and standards must be in place before anything else is started. Further, the standards must be practical in use and they must be kept up-to-date. The Schemes must not be too bureaucratic nor too demanding with regard to inspections and standards in such a way that the industry feels the Schemes are a burden and imply a substantial expenditure.

As for giving a generic trademark an image, the importance of making known the fact that production is based on quality assurance is underlined. Moreover it is vital for any Scheme to recognize who their "'customers" are (it may not be the end consumer), because this will impact on their marketing activities.

Considering the internal and external marketing/visualization of a Scheme it seems that Schemes have the infrastructure in place to deal with/react to issues, which can have a negative impact on an industry sector *(e.g.* environmental issues), whereas individual producers do not.

Inspections are the most costly item of expenditure in a Scheme. It is a challenge to reduce such costs at the same time as the credibility associated with a sufficient number of inspections is maintained. A risk for Schemes is that they become characterized by routine and it is also a challenge how to revive them with regard to relevance and message. Moreover, for any Scheme it is important to re-examine their objectives, as these may need to change through time and to meet new circumstances.

Implications for further research

The purpose of this paper has been to use cases which can throw light on certain questions and in this manner serve as a basis to consider establishment of Schemes in the seafood industry. As a conclusion some implications for further research with regard to Schemes will be given.

It has been regarded as appropriate to classify the points dealt with in this paper into two main areas:

- (a) External marketing.
- (b) Internal quality management and control with a Scheme.

Area (a) deals with questions concerning external marketing of a generic trademark to consumers and other target groups. The theoretical basis for this subject is covered by theories on marketing of brands (Aaker 1991, de Chernatony and McDonald 1992, Macrae 1991, Murphy 1992), generic marketing (Forker and Ward 1993, Olsen 1994) and theory on promotion and marketing in general (Engel et *al.* 1991, Kotler 1984).
Among others the following questions are important with regard to external marketing:

1   What importance do consumers (and other customers) attach to a generic trademark which is added to a branded product?
2. What is the value of a generic trademark to different product groups, to different consumer groups and in different situations relating to competition?
3.   What importance is attached to a guarantee from a Scheme which has no responsibility for the product?

Previously, differentiation has been indicated as an objective for a Scheme. The realization of such an advantage presupposes that a Scheme will be understood by the market and achieve credibility. This is, however, a hit of a challenge in a jungle of food products, which claim to be green, healthy, and so on (Jelsφe et *al.* 1993). At the same time, more Schemes internationally contribute to confuse the consumers (Fish Trader 1993). This situation makes it difficult to gain confidence in and perceive the meaning of one Scheme in preference to another (Foster and Macrae 1992). For this reason one should be critical as to how much more information can be given about a product without confusing the customer. This discussion is covered by the first question. The second question is many-sided. It throws light on the fact that within an industry, there will always be a question as to whether more than one Scheme should be established to satisfy different target groups and different groups of members. Finally, the last question focuses on the fact that many Schemes are managed and operated by owners of Schemes who are not responsible either for the product or for the sale. At the same time guarantee is a key message for such Schemes. Often the guarantee concerns conformity between product quality and the specifications given by the Scheme, and the product origin in the nation or region mentioned. The guarantee implies that the owner of a Scheme carries out sanctions if discrepancies are registered, but the legal responsibility for the product safety, for human health, etc. lies with the individual member of a Scheme.

The second area (b) deals with integrated quality control, management and inspection (TQM) with aspects of internal marketing (Clinton et *al* 1994, Cullen and Hollingum 1987, Gorga and Ronsivalli 1988, Reeves and Bednar 1993, Sinha and Willborn 1985). Within this area there are also important questions:

1. What are the criteria for success for implementing Schemes in fragmented industries?

2. What frequency of inspection for which proportion of the members is necessary to be able to claim that a Scheme is quality assured?
3. How can quality standards be secured abroad?

It is interesting to identify the factors which contribute to success in implementing a Scheme in an industry consisting of many independent primary producers and food processors. This is the subject for the first question. Question two focuses on the main item of expenditure for a Scheme, namely the cost of random and regular inspections. This question is about how to determine an adequate frequency of inspection and what should be taken into consideration when deciding the frequencies. The third question is important for Schemes which include products for export. How does one ensure product quality all the way to the shelf in the retail outlet abroad? Often the degree of control is lost or much reduced as soon as the product has left the country-of-origin.

Before Schemes can be encouraged within the seafood industry, we need to know more - a knowledge that may be acquired through research into the above-mentioned questions. Having said that, this empirical work should be considered, as an initial attempt, to study generic Quality Assurance Schemes as a tool for marketing and control of quality.

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i[1] A definition of a brand is given in section 2.1.

ii[2] "By 'primary produce' we mean a product which is sold to the consumer in a form similar to that in which it left the primary producer, therefore one that undergoes only minimal processing and is usually fresh or frozen
- e.g. fresh meat, fish milk, fresh vegetables, fruits" (Anon. 1993:4).

iii[3] In this paper we refer to brand without being specific whether it is given legal protection, thus a trademark, or not.

iv[4] The 'food chain' consists of the following components: The primary producer (e.g. farmer, fisherman), the food processor: the distributor and/or other storage facility (where appropriate) the wholesaler; the retailer; and the consumer" (Anon. 1993:3).