Fisheries and aquaculture
Diving into the sustainability challenge

by Svein Ludvigsen

Not only is seafood the most traded food product in the world, but all of the world's countries are, to some degree, active in fisheries and aquaculture. The industries, businesses and trades connected to these sectors are fundamentally international in nature. This, coupled with the pressing need to provide sustainable food for the planet's growing population, makes fisheries and aquaculture key areas for standardization.

The challenge is to find sustainable solutions that will make fisheries and aquaculture more efficient while also reducing environmental impacts. This requires International Standards that can be used for all kinds of aquaculture industries, regardless of business size, the level of local economic development or the climatic conditions. The standardization needs of the sector, however, had not been addressed until recently, when ISO established technical committee ISO/TC 234, *Fisheries and aquaculture*.

**What to tackle**

As a relatively recent ISO technical committee, the approval of the business plan for ISO/TC 234 is an important milestone that provides firm ground for the work ahead.

The plan looks at how the work of ISO/TC 234 could influence the fisheries and aquaculture sectors and other stakeholders. In particular, the committee will focus on areas where:

- Performance can be assessed against specified benchmarks (e.g. under global sustainability market certification regimes)
- Actors in the sector can learn from one another's experience, develop best practice, efficiently exchange knowledge and utilize international expertise in the field
- Food business operators can reduce workloads by avoiding conflicting documentation requirements and reusing data
- Electronic data interchange and automatic translation of product and process parameters can be enabled
- There are global markets for equipment and technology, and sufficient similarity in operating conditions to warrant establishing minimum design, testing or performance standards
- There is a desire for international transparency in import requirements used by various countries, in order to support fair trade
- Comparability of data can be promoted.
Broad participation

ISO technical committee ISO/TC 234, Fisheries and aquaculture, was established in 2007. It currently comprises 19 fully participating national members and 17 observers.

Among its participants are ISO members for: Belgium (NBN), Canada (SCC), Denmark (DS), Fiji (FTSOI), Finland (SFS), France (AFNOR), Iceland (IST), India (BIS), Republic of Korea (KATS), Malaysia (DSM), Mauritius (MSB), New Zealand (SNZ), South Africa (SABS), Spain (AENOR), Thailand (TISI), USA (ANSI), the United Kingdom (BSI) and Viet Nam (STAMEQ).

In addition, four international organizations are in liaison: the UN Food and Agriculture Organization (FAO), the Codex Alimentarius Commission (CAC), the International Union for the Conservation of Nature and Natural Resources (IUCN) and the Federation of European Aquaculture Producers (FEAP).

ISO/TC 234 held its third meeting in Nanaimo, Canada, in October 2009, and will meet again in Bangkok, Thailand, in November 2010.

Comprehensive solutions

So far, there are no recognized International Standards directed specifically at the fisheries and aquaculture sector. This means that ISO/TC 234 has to start more or less from scratch. Up till now, part of the work has therefore concentrated on identifying the main areas of standardization. An advisory group has been established to point out the most urgent needs.

Sustainable solutions increase efficiency.

As in all standardization projects, it is important that industry, and other stakeholders, truly require and want the standards, and of course, that they participate in their development. The work of ISO/TC 234 is organized as follows:

Advisory group

• Aquaculture advisory group.

Working groups

• Traceability of fish products
• Environmental monitoring of seabed impacts from marine finfish farms
• Aquaculture technology
• Food safety for aquaculture farms
• Methodology for sea lice counts
• Calculation of FIFO (fish-in, fish-out) and FCR (feed conversion ratio).

Tracing fish products

The work on traceability of finfish products has now reached consensus in ISO/TC 234. Once this work is completed, ISO/TC 234 will have its first two published standards (ISO 12875 and ISO 12877).

These two standards look at both captured and farmed fish at the level of trade units. Not only will they enable the tracking of products throughout the distribu-
Norway’s long and curved coast line has 6,790 fishing vessels (2008).

The fisheries and aquaculture share of Norwegian exports for 2008 was 4.12%.

Traceability is an important tool in ensuring food safety, quality and labelling. Consumers demand to know that their food has been produced according to certain standards and that the products are safe. They want to know where the products come from and how they have been produced. Traceability systems are therefore an essential part of the food supply chain, from origin to destination and back, and vice versa, but they will also require that information be provided on what products are made of, and what has happened to them as they moved through the chain.

Traceability is important for ensuring food safety, quality and labelling. The draft standards are expected to become valuable tools for enabling the traceability of fish after packaging. *

About the author

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