

## IDENTIFICATION AND TRACEABILITY IN THE NORWEGIAN AQUACULTURE INDUSTRY

### **Eskil Foras**

SINTEF Fisheries and Aquaculture, Logistics and Traceability, Norway

---

The fish farming industry is a substantial export industry in Norway. To maintain the international market share the industry has to be highly adaptive to new market demands. An increased number of requests for documentation on food safety and animal health have been reported in the last few years.

The Norwegian fish farming industry has already established effective electronic systems for traceability of fish and fish products. The design and functionalities of these systems are in accordance with the CEN standard "TraceFish" (CWA14659 2003). The traceability systems are based on the principles of unique identification of traceable units (TU) and the documentation of relationships between such TUs. At the production stage, live fish are identified at the group level, based on individual cages, boat cargos or harvest batches. The industry does not implement individual identification of fish. The identification of TUs and relationships between TUs are recorded in production management software applications. Essential production information, including conditions relevant to animal welfare, is recorded in the same software application. Information on animal health is thus readily available from the fish farms. All functionalities mentioned are consistent with the Article 4.2.3 on the *Terrestrial Animal Health Code* (OIE 2008) and the design criterions in section 3 of the CAC "principles of traceability" (CAC/GL 2006).

Experience from research and implementation projects shows that traceability from fjord to the point of sale in the store is challenging. To achieve 'whole chain' traceability of products and information from the fish farmer to the store, information has to flow between all the actors in the chain. A 2005 study highlighted multiple challenges to the implementation of a 'whole chain' traceability software system involving multiple food business operators. The study concluded that eight criteria are important for effective implementation of such systems.

**Keywords:** Traceability – Aquaculture – Fish farming.

---