

Practical Guide for the Validation of Traceability in the Seafood Chain.

The general objective of the project VALID within SEAFOODplus integrated programme was to define a validation model for obtaining seafood traceability along the whole chain that could be considered as a guide and reference by all the agents involved in the fishery chain as well as by the control authorities. This validation model will also establish indicators which will give an idea of the efficiency and efficacy of the implemented measures in order to ensure the traceability.

The development of this guide for the verification and validation of traceability in the fishing chain is intended to respond to a need identified by AZTI-Tecnalia in relation to the correct implementation of traceability systems in the fishing industry and the demonstration of its reliability. Indicators capable of measuring the efficiency and reliability of a traceability system have been identified within the scope of a fish chain model with the aim to compare and verify the status of the traceable information in each link of the production and commercialisation chain.

The aim of every evaluation of a traceability system is to provide evidence of its Compliance, that means that the system meets the regulatory requirements, and its Conformity, that means that the records demonstrate that the activities are carried out according to the traceability procedures that have been defined and the control parameters are under the established limits. In other words, to demonstrate that the system is efficient, which means that it is functioning as it has been defined and effective, it is, that it serves for its final purpose.

The guide aim is to facilitate anyone who is involved in the seafood chain to identify the indicators that will tell him if his traceability system complies with the established standards and serves to its purpose with efficaciousness. This means that the system is not only efficient and error free but is also reliable and the information registered is real.

To this purpose, the guide proposes first a *map of indicators* that give objective evidence of the efficiency and reliability of the traceability systems within each link of the chain. Then, the guide also discusses how to evaluate scientifically the compliance-conformity of the traceable information and presents a brief analysis of the most important recognised and novel analytical techniques to evaluate the efficacy of the established records of a traceability system when:

- Ensuring the safety of the product
- Providing the expected quality to customers and consumers
- Preventing fraud in the seafood chain
- Ensuring correct data management and information flow.

AZTI Tecnalia has selected the best validation methods aimed to establish a prompt evaluation in relation with fraud, food safety or quality matters. The methodologies that have been the subject of analysis are the following:

- Methods for authentication of fish species.
- Histamine and biogenic amines
- Toxins in bivalve molluscs.
- Volatile amines.
- Microbiological quality assessment of seafood products.
- Sensory evaluation of quality of fresh fish.
- Product presentation and processing conditions.
- Identification of geographical origin.
- Discrimination of wild from farmed fish.

A synthesis of these methods, known as validation tools, has been done in this guide as it is the purpose of its publication to constitute a "road map" for people involved in any of the links of the fish chain work.

The guide is available online at www.azti.es/valid



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VALID

Validate traceability to reduce a producer's risk exposure



VALID Project
The regulation (EU) n° 1169/2011, by which the general rules and objectives of the food product legislation are established, defines traceability as "the ability to trace and follow a food, feed, food-producing animal or substance throughout or, as provided for its composition, a part or part, through all stages of production, processing and distribution".

The main objective of VALID (Adapted to ISAF 17) is to define a validation model for obtaining seafood traceability. The figure illustrates the process followed until the establishment of the complete system for the evaluation of traceability.

