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Batch-based Calculation of Sustainability Impact for Captured Fish Products

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 2014-11-25, the constitution of which was supported by CEN following the public call for participation made on 2014-04-02.

A list of the individuals and organizations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations were drawn from the following economic sectors Industry Associations (particularly SME Associations), Industry participants (particularly SMEs) and Scientists and R&D organizations.

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The final review/endorsement round for this CWA was started on 2015-08-24 and was successfully closed on 2015-09-24. The final text of this CWA was submitted to CEN for publication on 2015-10-08.

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Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

This document was prepared by participants in the research project “Automated and differentiated calculation of sustainability for cod and haddock products” (or WhiteFish for short) which was a European Union Seventh Framework Programme (FP7/2007-2013) project under grant agreement n° 286141. The document was circulated, and received input from industry participants and other stakeholders both within and outside of the project.

The CEN Workshop members who have supported the document are:

- Fisheries Iceland
- The Norwegian Fishermen’s Sales Organization
- Icelandic Food and Biotech R&D
- Nofima
- Wageningen University
- Hermes AS
- FELDTS FISK and SKALDJUR AB

Introduction

The European whitefish catch and processing industry is dominated by small and medium enterprises (SMEs), and it is facing several challenges. Worldwide many stocks have been depleted, and environmental organizations warn against consuming some types of captured whitefish. While some cod and haddock stocks, particularly in the northeast Atlantic, are healthy and sustainable strict regulations with respect to documentation and traceability have been imposed on the European wild-caught fish industry in the last few years, and fulfilling these generates significant additional cost. To document the fact that the stocks are sustainably harvested can be challenging, and in the market it is not always easy to differentiate sustainable fish from non-sustainable alternatives.

Sustainable development is a wide concept comprising many aspects including environmental, economic and social sustainability. Life Cycle Assessment (LCA) is a methodology that has been developed and today is widely acknowledged as a useful framework for environmental assessment of products and services. The method has been formalized in ISO standards and it has been applied to seafood production systems for over a decade with a significant number of reports and studies having been published in recent years. Economic sustainability is normally monitored by the companies themselves, although pre-defined methods related to Life Cycle Costing, where economic sustainability is calculated in a similar way to environmental sustainability, exist. Social sustainability can be assessed using Social LCA, although the development of this method is still in its infancy. A drawback of sustainability assessments the way they are undertaken today is the fact that they are very resource intensive to carry out both in terms of time and money, and this hampers wide industry application. An additional drawback is related to the fact that the data used in the calculations is normally based on annual (or even longer term) averages and this may hide important short-term variability in resource efficiency.

To summarize:

- Many aspects of sustainability are important and relevant in the wild-caught fish sector, this includes economic, social and environmental sustainability which encompasses sustainable harvesting.
- A higher data resolution than annual (or three years) gives a possibility for more detailed improvement options and increased understanding of the importance of day-to-day decision-making in the wild-caught fish sector.

This document addresses these challenges in that it provides guidelines for how sustainability in the wild-caught fish industry may be defined in relation to single batches, which indicators to measure, and how to interpret the values and calculate the impact. Note that the data requirements and issues listed in this document were mostly based on experience from several cod and haddock fisheries in the northeast Atlantic. Although these data requirements for self-assessment of sustainability are likely to be relevant for wild-caught fisheries in general, users of this document should be aware that additional or different data requirements may exist for the actual fishery that they operate in.

1 Scope

This document gives recommendations and voluntary standards relating to batch-based documentation of sustainability impact in the wild-caught fish industry.

The document describes:

- what data should be recorded by the fishing vessel operator, processor and transporter to be able to carry out a self-assessment calculation of sustainability impact;
- how the data should be interpreted, and how the sustainability impact can be calculated based on these recordings.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12875:2011, *Traceability of finfish products — Specification on the information to be recorded in captured finfish distribution chains*

EN ISO 14040, *Environmental management - Life cycle assessment - Principles and framework (ISO 14040)*

EN ISO 14044, *Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

supply chain

chain starting with catch and then commonly followed by grading, landing, primary processing, secondary processing, transport and/or storage in some sequence, ending as a product (a fish, part of a fish, or a processed product) for consumption

3.2

link

one part of the supply chain, where the batch in question is defined and where data related to the batch is generated and recorded

Note 1 to entry: 'Catch' is the first link in the supply chain for captured fish, but batches may also be defined and associated data may also be recorded in links like 'Processing', 'Transport' or similar

3.3

fishery

given combination of fishing area and main target species; gear may also be included in the fishery description if necessary