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Good practice recommendations for making Climate Adaptation Plans for fisheries and aquaculture

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European foreword

This CEN Workshop Agreement (CWA 17518:2020) has been developed in accordance with the CEN-CENELEC Guide 29 "CEN/CENELEC Workshop Agreements – The way to rapid consensus" and with the relevant provisions of CEN/CENELEC Internal Regulations - Part 2. It was approved by a Workshop of representatives of interested parties on 2020-02-24, the constitution of which was supported by CEN following the public call for participation made in 2017. However, this CEN Workshop Agreement does not necessarily include all relevant stakeholders.

The final review round for this CWA was started on 2019-12-20 and was successfully closed on 2020-02-24. The final text of this CWA was submitted to CEN for publication on 2020-03-27.

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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Introduction

Climate change has a significant impact on fish stocks and aquaculture species and will affect the productivity within fisheries and aquaculture sectors in the coming years. Therefore, climate adaptation is necessary to maximise the potential of European fish[1] production, and to minimize negative effects due to climate change.

The climate adaptation plans (CAP) development process follows an ecosystem-based approach, in co-creation with key stakeholders. It includes three tasks, each containing a number of specific steps, to develop a CAP for the production system in question. These steps include a detailed analysis of each of the production system's components, biological forecasting, a risk and opportunity assessment, a vulnerability assessment and prioritisation of adaptation needs and measures. Finally, each identified adaptation measure gets a procedure plan, outlining its subsequent implementation.

The CAP development process results in the identification of realistic and efficient adaptation measures for the sector in question, with the aim to address its respective adaptation needs. The final CAP will contain

— identified risks and opportunities;

— identified vulnerabilities;

— identified adaptation measures;

— implementation plan.

By developing and implementing CAPs, users within all three sectors should be able to reduce their production system's vulnerabilities to climate change. CAPs can further serve as a valuable source of information, addition to, or basis of a National Adaptation Plan (NAP), whether that is an existing NAP ready for revision or at an early development phase.

These guidelines are applicable for authorities and operators within all three sectors in question, from national and regional administrations (e.g. ministries and directorates in charge of aquaculture and fisheries), to the industry itself (e.g. producers' organisations, fishing companies and fish farmers), and scientists.

[1] As defined by FAO, *fish* is used as a collective term and includes molluscs, crustaceans and any aquatic animal, which is harvested. FAO Fisheries and Aquaculture Department, FAO, 2018.

1 Scope

This document provides recommendations for good practice for developing effective climate adaptation plans (CAPs) for production systems within the following sectors: marine wild capture fisheries, marine aquaculture, and lake and pond fisheries and aquaculture.

NOTE The guidelines are in line with existing literature and adaptation tools on creating adaptation strategies and plans (e.g. FAO, 2019; Barange et.al, 2018; ISO 14090, 2019; Brugére & De Young, 2015; Shelton, 2014; EC 2013, Glick, Stein & Edelson, 2011; Grafton, 2010; FAO, 2010; FAO, 2003).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
adaptive capacity
ability of production systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences [3]

3.2
adaptation measures
strategies and/or measures available and appropriate to address *adaptation needs* (3.3)

EXAMPLE Increase use of fouling resilient materials and upgrade of infrastructures to reduce negative effects of biofouling.

3.3
adaptation needs
gap between what might happen as the climate changes and what we would desire to happen [4, 5]

3.4
climate adaptation
process of adjustment to actual or expected climate and its effects

Note 1 to entry: In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities (4).