

Fish-X Project

Background

The massive digital transition in the EU creates an opportunity to reconcile environmental and socio-economic issues in the fisheries and seafood sector. It offers solutions to better manage fisheries' activities and increase transparency and traceability, and it also plays a key role in the transition towards a truly sustainable blue economy. However, the digital transition in the fisheries sector also comes with significant challenges for some actors, especially small-scale fisheries (SSF). Modernising SSF are crucial as they make up about 75% of active fishing vessels and represent about 48% of employment in the EU fisheries sector¹. They are also challenged by the evolution of fish stocks and competition with other coastal activities in addition to safety issues, overfishing, illegal, unreported, and unregulated fishing (IUU), limited access to technology and markets, and compliance with the regulations.

Introduction

The Fish-X Project is a project that focuses on technology, aims at digitalising small-scale fisheries, and embraces open-source principles. It has a duration of three years, from June 2023 to May 2025, and is co-funding by the Horizon Europe Programme. The project aims at developing a Fisheries Dataspace (Fish-X), an Insight Platform, and a Traceability Application to support the objectives of the EU Common Fisheries Policy (CFP), the EU Green Deal, and the EU Farm to Fork Strategy. The project is focused on development of accessible technologies to empower small-scale fisheries and grow their credibility towards the customer. It aims at overcoming key sets of challenges including the following points:

- 1) collection and sharing of data, in particular from small-scale and recreational fisheries; and
- 2) accessing, managing, and utilising data to strengthen the monitoring and control as well as the sustainability of EU fisheries.

Fish-X will take advantage of innovations in open interoperable technology via Gaia-X to put the fishers in the centre of the seafood supply chain. This will serve a triple objective of fish population preservation, protection of the marine environment, and socio-economic development.

The primary outcomes of the Fish-X Project are related to development of digital tools that include the Fisheries' Dataspace (Fish-X), a Traceability App, an Insight Platform as well as [EU Fisheries Roadmap for Digitalisation](#), to support the digital transition of SSF. The dataspace and platform will allow users to visualise and better understand fishing activities while also protecting fishers' privacy. The Traceability Application will focus on making the supply chains of SSF transparent to consumers and thereby benefiting the fishers through increased visibility and economic returns. The project will try to conciliate two main usages of the digital transition,

supporting the evolution of monitoring & control while providing market-oriented information for fishers' benefit.

Various stakeholders such as small-scale fisheries, fishermen associations, regulators, relevant ministries, and decision-makers, will participate in the consultative process of developing and refining new technologies. They will be involved through consultation and co-creation for the development of digital tools, and to ensure a fair digital transition for small-scale fisheries and considering the changes and revision of the updated CFP.

Key Fish-X Outcomes

- **EU Fisheries Roadmap for Digitalisation**

One of the primary goals of Fish-X Project is to create a roadmap that will support the digitalisation of the Fisheries Industry across Europe by addressing the main challenges that may hinder its progress and ensuring its smooth implementation. Throughout the roadmap four major action areas have been formulated. Additionally, by carrying out a thorough stakeholder analysis, various stakeholders, from maritime agencies to fishers and fisheries representatives, research and scientific institutes to civil society and NGOs, have been identified as key elements with regard to a successful digitalisation of EU SSF. Fish-X looks for contribution of key stakeholders to further develop the roadmap and if you want to contribute, please write to us at info@fish-x.eu.

- **Fish-X Dataspace**

The Fish-X Dataspace will enable the creation of a data ecosystem. A common-place where fisheries related data can be offered to those institutions and services that require or desire information of fish catch or vessel monitoring systems. Building on Gaia-X federation services, data owners can ensure reliable and trustworthy ways of exchanging data, while keeping full control of their data. By offering this digital solution, the establishment of information transfer can not only satisfy regulatory requirements but also provide an added value to fisheries data utilisation and commodity value.

- **Insight Platform**

The Insight Platform is the user-interface of the dataspace to visualise and better understand fishing activities. It uses fishing vessels locations, activity reports, and environmental data to analyse the patterns of fishing activities. It supports the adaptation of digital systems for small-scale fishing boats and allows to share general information while protecting fishers' privacy.

- **Traceability App**

The Fish-X traceability application will aim at providing the highest possible degree of transparency across European seafood supply chains, while also adopting the overall Fish-X project focus of SSF. It targets efficient traceability of the seafood supply chain from point of catch to final point of sale. Following the approach of digital traceability and utilising blockchain technology, it will be ensured that the relevant data necessary for a

transparent display of the supply chains is recorded and transmitted for every step of a seafood product. The Fish-X traceability application will furthermore be developed in a user-friendly and easy-to-use manner to secure a successful implementation.

Partners

The project is being implemented by seven European organisations in addition to three WWF affiliates, called consortium partners, that include:

- TransMarTech Schleswig-Holstein (TMT, Germany)
- Collecte Localisation Satellites (CLS, France)
- EU Tech Chamber (EUTECH, Germany)
- North.io (Germany)
- OURZ (Germany)
- Sciaena (Portugal)
- WWF EPO (Belgium)
 - WWF ANP (Portugal)
 - WWF MMI (Italy)
 - WWF Adria (Croatia)

Fish-X Goals

The goals of Fish-X Project are defined as follows:

- Fight illegal, unreported, and unregulated (IUU) fishing
- Promote a sustainable use of common natural resources
- Support honest fishers and help to generate fair economic returns
- Foster synergies between fisheries, authorities, supply chain actors, and consumers
- Advance the digital transition for small-scale and recreational fisheries
- Contribute to traceable, healthy, and sustainable food

Learn more about Fish-X

To learn more about the Fish-X Project, please visit our website and subscribe to our newsletter and social media channels via the links given below:

Website: <https://fish-x.eu/>
Email: info@fish-x.eu
LinkedIn: <https://www.linkedin.com/company/fishx-project/>
Instagram: https://www.instagram.com/fishx_project/
Twitter: https://twitter.com/fishx_project
YouTube: <https://www.youtube.com/channel/UCrXzicZTwnVU-jWmiqzJlpQ>

ⁱ https://www.europarl.europa.eu/doceo/document/A-9-2022-0291_EN.html