

Workshop: Digital transformation for sustainable fisheries

Harnessing technology to boost productivity, protect marine ecosystems, and build resilient value chains.

Date: 29th of October - 2PM: 4PM CET

Format: Online (zoom)

Session 1: Opening & setting the scene: why digital transformation matters in fisheries (17 min)

This opening session will lay out the foundations of the workshop by framing the relevance and urgency of digital innovation in today's fisheries sector. As industry faces complex challenges, including illegal, unreported and unregulated (IUU) fishing, biodiversity loss, climate pressures, energy transition, pollution, and market transparency requirements, digital technologies are no longer optional tools but key enablers of sustainability, competitiveness, and resilience.

The session will:

- Introducing the broader context and purpose of the workshop
- Explain the difference between digitalization (adopting digital tools) and digital transformation (redefining systems, processes, and governance models through technology)
- Present the Blue Dots initiative and how it supports digital capacity building
- Provide a European roadmap perspective through a flagship initiative (FISH-X) on the digital transformation of fisheries by 2030

This introduction will prepare participants for the practical sessions that follow, which explore concrete applications, enabling conditions, and real-world examples.

Speakers:

- **Marilou Suc, Blue Economy and Blue Technology consultant at Blue Connection:** *Introduction to the workshop, challenges & opportunities of digitalization vs digital transformation in fisheries, overview of the program (5 min)*
- **Francisco Martínez, Senior Expert, Diesis – Blue Dots Project:** *Presentation of the Blue Dots initiative and its role in supporting digital transition in fisheries (5 min)*
- **Joana Oliveira, Ocean & Fisheries Officer, WWF Portugal:** *Insights from FISH-X: EU Roadmap for the Digital Transformation of Fisheries by 2030 (7 min)*

Session 2 – Enhancing productivity and decision-making for small-scale fisheries (5 min)

Small-scale fishers often operate with limited resources, but digital solutions are unlocking new opportunities for productivity, efficiency, and safety at sea. Advanced decision-support tools and satellite-based tracking systems enable fishers to optimize their operations, improve resource management, and access new markets, all while preserving traditional knowledge and practices.

This session will explore practical examples, which help small-scale fisheries modernize and compete in an increasingly digital blue economy.

Speaker:

- Marilou Suc, *BlueTech Podcast – digitalization in small scale fisheries. (5 min)*
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Session 3 – Digital technologies for sustainable practices and ecosystem resilience (20 min)

While previous sessions focused on improving productivity, economic performance, and policy decision-making, this session shifts the lens toward environmental sustainability and long-term resilience. Digitalization plays a critical role in reducing the ecological footprint of fisheries by enabling smarter monitoring, mitigation and prevention of environmental impacts.

This session will explore how digital tools contribute to:

- Tackling ghost gear (ALDFG) through real-time tracking, recovery networks, and predictive monitoring
- Reducing bycatch using sensor-enabled gear, AI-based detection and selective fishing solutions
- Accelerating fleet decarbonization, supported by data-driven fuel optimization, hybridization strategies and energy transition roadmaps

Through concrete case studies, participants will discover how innovation is helping fisheries transition toward more responsible, climate-resilient practices while reinforcing accountability and ecosystem stewardship.

Speaker:

- **Stéfanía Campogianni, WWF Mediterranean Marine Initiative / NetTag+**: Digital monitoring and gear marking solutions to prevent and recover ghost gear (ALDFG), with lessons from the NetTag+ project (Spain, Portugal, Croatia, Italy, Malta) and new pilot work under Plastic Smart Ports in Tunisia and Turkey. **(5 min)**
 - **Alice Chamberlain WWF-UK**: Panorama of innovations in bycatch reduction and digital conservation tools: selective gear, ghost gear monitoring, data platforms – insights from WWF's "Not in the Net" report **(5 min)**
 - **Tom Hooper, FishTek Marine Ltd**: Overview of practical bycatch reduction technologies: what's already in the marketplace vs under development, and the technical challenges of deployment in fisheries **(5 min)**
 - **Gorka Gabina, Energy Transition Partnership (ETP)**: Digital enablers of fleet decarbonization **(5 min)**
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Session 4 – Data-driven governance: digitalization for policy, stock assessment and smarter decision-making (10 min)

Digitalization transforms how fisheries are observed, understood, and governed. From automated onboard monitoring to real-time catch reporting and ecosystem-based analytics, data now plays a central role in how stock assessments are conducted and how policy decisions are justified, implemented, and evaluated.

This session will explore how digital tools:

- Improve data accuracy through automation and verification
- Enable more responsive and science-based stock assessment methodologies
- Bridge gaps between regulatory expectations and operational realities
- Support co-creation of policy through inclusive and data-informed processes (e.g. Advisory Councils)
- Require capacity-building, usability, and sector alignment to ensure adoption and impact

By bringing together perspectives from research, technological innovation, and fisheries governance, this session will highlight how digitalization can enhance decision-making and foster more adaptive, participatory, and transparent management systems.

Speakers:

- **Rachel Haug Fossbakk, Chief Scientist, SINTEF:** *Automated catch monitoring & early lessons from OptiFish and EVERYFISH on data-enabled stock assessment and governance (5 min)*

Session 5 – From sea to market: digital traceability, transparency and consumer trust (5 min)

Digitalization is not only transforming fishing operations at sea, but also reshaping how seafood is verified, valued and trusted once it enters the market. As regulatory pressure increases and consumer expectations evolve, digital traceability systems are becoming essential to ensure legality, sustainability, and transparency across the entire value chain.

This session will explore how:

- Digital traceability platforms improve accountability and reduce fraud
- Blockchain, QR codes and interoperable databases strengthen transparency
- New EU control regulations are pushing the sector toward more robust, real-time reporting frameworks
- Consumer-facing initiatives foster trust and informed decision-making
- Fair access to product information is becoming a key right for final consumers

Through a practical case from Spain, we will examine how digital traceability has evolved, the challenges encountered, and how the sector is preparing to meet the next wave of regulatory and market demands, including movements advocating for universal consumer access to traceability data.

Speaker:

- **María Luisa Álvarez Blanco, General Manager, FEDEPESCA:** *Lessons from Spain's digital traceability journey: past challenges, adapting to new control regulations, and advancing consumer rights through the Follow the Fish movement. (5 min)*
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Session 6 – Success stories: empowering fishers and coastal communities through digital transformation (7 min)

Digital transformation is not just about tools and systems, it is about people, equity, and access to new opportunities.

In the fisheries sector, digitalization brings both enthusiasm and hesitation. While some fishers see opportunities to improve safety, traceability, and market access, others fear losing autonomy, facing higher costs, or struggling to adapt. The ageing fleet and workforce, limited training, and lack of financial and institutional support remain major barriers to modernization.

This session will explore how fishers are reacting to these digital transitions : their hopes, concerns, and the real challenges they encounter. It will also highlight the crucial role of structures such as the **NWWAC** in helping them navigate this transformation, ensuring their voices are heard and represented at the EU level.

Finally, we will showcase positive examples of digital adoption that demonstrate how tailored support, peer learning, and community-driven initiatives can turn digitalization into an opportunity for empowerment and sustainability.

Speaker:

- **Ilaria Bellomo, Fisheries Strategy & Administration Officer, NWWAC:** *Fishers and the Digital Transition: Challenges, Reactions, and the Role of Advisory Councils (5min)*
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Q&A and Closing Discussion (15–20 min)

This closing segment will provide an open space for participants to engage with the speakers, ask questions, and exchange insights. The discussion will highlight key takeaways from the different sessions, identify common challenges across regions and scales, and explore practical pathways to accelerate digital adoption in fisheries.

Participants will also be invited to reflect on enabling conditions such as capacity-building, funding mechanisms, inclusive governance, data accessibility, and cross-sector partnership key levers for driving systemic change.

Speaker:

- **Marilou Suc, Blue Economy and Blue Technology consultant at Blue Connection:** *conclusion and key take away messages*