LOCAL FISHERIES ECOSYSTEM INNOVATION ROADMAPS

- October 2026 -

Interreg Atlantic Area FISHINN

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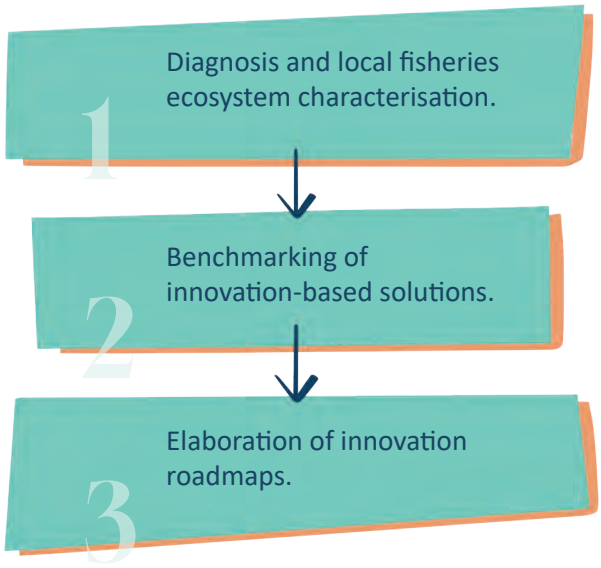
DEFINITION

01

Reminder of Fishinn project

The objective of the Fishinn project is to increase the resilience of the ports that form four local fisheries ecosystems and value chains, in the Atlantic Area by reinforcing local actors' collaboration and innovation capacities. In order to stimulate the creation of new economic activities and to transition towards smart, circular and efficient business models as well as innovative solutions in local fisheries ecosystems to reverse their decline, knowledge exchange among stakeholders across different territories. / November 2023 to October 2026

This project consists of 3 phases :



direct partners are involved

Leartibai Fundazioa, Basque Country, Spain (Fishinn project lead partner)

A non-profit organisation responsible for the economic development of the Lea-Artibai region. It drives regional innovation, supports business competitiveness, promotes entrepreneurship, and leads the implementation of the Lea-Artibai 2030 strategy, including projects linked to the fisheries and maritime sectors

Sines Tecnopolo, Portugal

A business innovation center connecting key stakeholders from the Alentejo Litoral region. It supports entrepreneurship and blue economy businesses, promotes training for fishermen, develops innovation projects, and contributes to sustainable blue growth initiatives at regional and European levels.

Munster Technological University (MTU), Ireland

Through its CIRCBIO research group, MTU is a leader in circular bioeconomy and marine innovation. Its expertise covers value chain development, sustainable business models, bioresources, and new product development, supported by a large portfolio of research projects and industry partnerships.

Technopole Quimper-Cornouaille, Brittany, France

A business innovation centre supporting start-ups and growing companies across sectors. It has strong expertise in agri-food, agriculture, digital technologies, and the blue economy, helping businesses develop innovative projects and access innovation funding

Pôle Mer Bretagne Atlantique, Brittany, France

A maritime innovation cluster covering Brittany and Pays de la Loire, bringing together 440 members, mainly SMEs, research organisations, and industry actors. It supports innovative maritime projects through certification, networking, visibility, and access to funding

5 associated partners : Regional Council of Brittany (public body); BIM Ireland's Seafood Development Agency (public body); Comunidade Intermunicipal do Alentejo Litoral (public body) Associação de Armadores da Pesca Artesanal e do Cerco de Sudoeste Alentejano e Costa Vicentina (not-for-profit private organisation); Basque Government - Department for fisheries and aquaculture (public body) Innobasque-Basque innovation agency (not-for-profit private organisation) AZTI Foundation (Marine and Food Research)(not-for-profit private organisation); Leartiker S.Coop (private organization)

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Fishinn partnership & its territorial pilots



Munster Technological University

Kerry

Fenit
Dingle
Portmagee

Technopole Quimper-Cornouaille & Pôle mer Bretagne Atlantique

Finistère, Brittany

Ports of Cornouaille - focus Saint Guénolé-Penmarc'h

Leartibai Fundazioa

Lea-Artibai

Ondarroa
Lekeitio

Sines Tecnopolo-associação Centro de Incubação de empresas de base Tecnológica Vasco da Gama

Alentejo

Sines
Porto Covo
Vila Nova de Milfontes
Lapa de Pombas
Entrada da Barca
Azenha do Mar

Reminder of the WP3 methodology

The Work Package 3 of the Fishinn project focuses on the development of Local Innovation Roadmaps tailored to address specific challenges within fisheries ecosystems across participating territories. These roadmaps are designed to guide the prototyping, and potential transfer of innovative solutions identified in earlier phases of the project.

Approach

The methodology is structured around the creation of Fisheries Ecosystem Innovation Labs—collaborative, multi-stakeholder environments that foster ideation, experimentation, and strategic planning.

The common methodology offers a structured and integrated approach declined into 7 steps:

CHOOSE

April – July 2025

Identify and prioritize 2–3 key challenges per territory based on local diagnostics and strategic priorities.

ANALYSE

April – July 2025

Refine and deepen understanding of selected challenges to ensure alignment with potential innovative solutions.

MATCH

May – July 2025

Connect local challenges with relevant solutions or good practices from WP2, adapting them to local needs and context.

MODEL

July – December 2025

Prototype and design project ideas or solution concepts, engaging stakeholders in creative ideation and scenario development.

CALIBRATE & VALIDATE

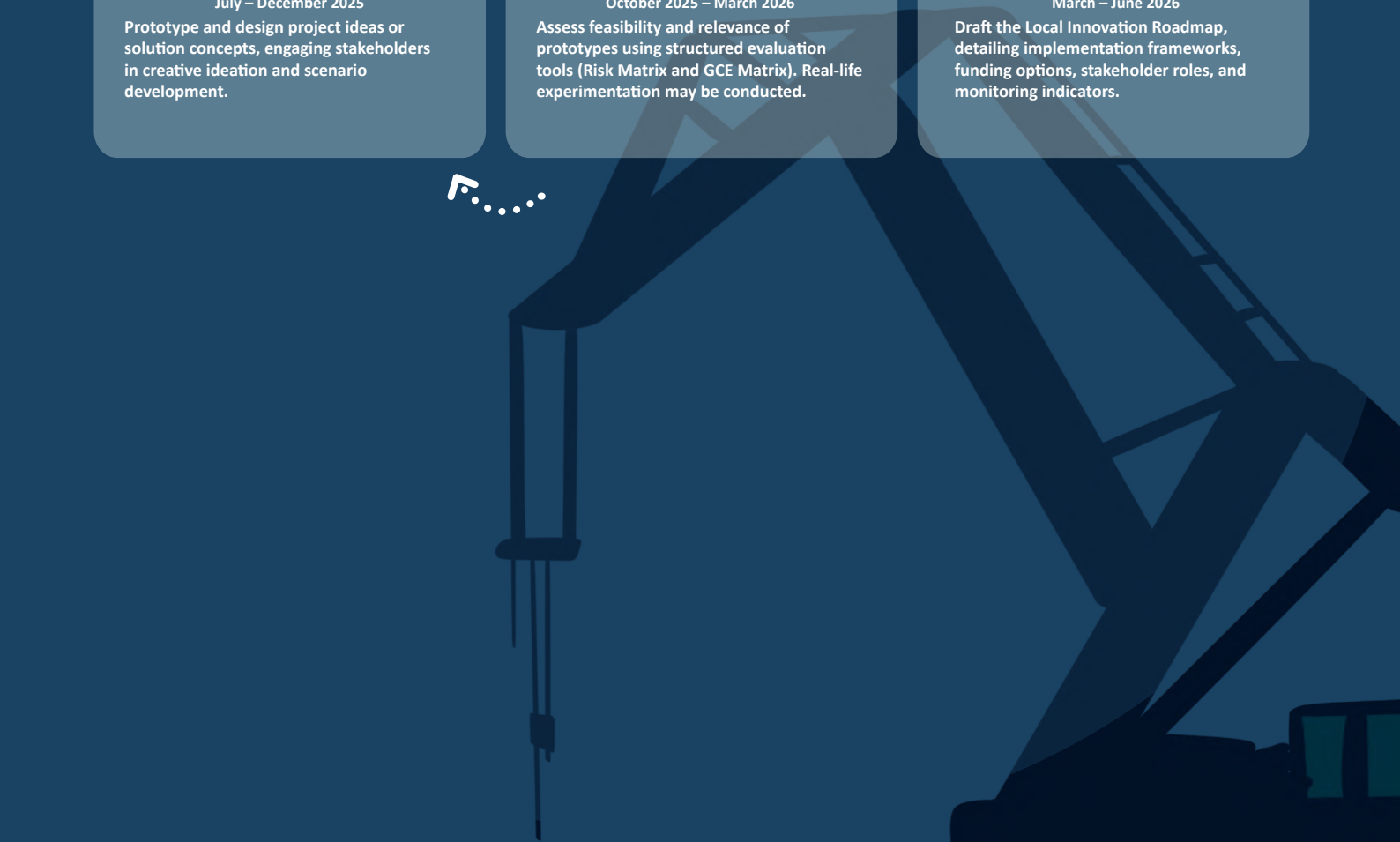
October 2025 – March 2026

Assess feasibility and relevance of prototypes using structured evaluation tools (Risk Matrix and GCE Matrix). Real-life experimentation may be conducted.

ANTICIPATE

March – June 2026

Draft the Local Innovation Roadmap, detailing implementation frameworks, funding options, stakeholder roles, and monitoring indicators.



Definition of a local innovation roadmap

Within the Fishinn project, a Local Innovation Roadmap is understood as the territory-specific tool through which each pilot translates the challenges identified in WP1 into a concrete, actionable path for innovation.

Produced at the close of a nine-month Innovation Fisheries Ecosystem Lab, it deepens 2 to 3 priority challenges selected for the pilot and sets out the implementation framework. Rather than a static document, it stands as an economic development path — a visual and strategic guide co-constructed with the Local Innovation Forum (socio-economic actors and public authorities of the local fishing ecosystem) — reflecting the collaborative, cross-regional culture the lab was designed to foster.

This deliverable brings together the twelve Local Innovation Roadmaps produced across the project — three per participating country — offering both a territory-by-territory account of each pilot's innovation trajectory and, taken as a whole, the foundation for the forthcoming Atlantic Fisheries Ecosystem Innovation Roadmap.

This roadmap is structured around three parts:

-the challenge(s) the prototype solution addresses
-the inspiring practices : good practices from WP2 that could inspire prototype solutions for the local ecosystem
-The presentation of the prototype solutions with two matrix for a reality check : risk analysis and Gain/confidence / effort matrix in order to identify the success factors. This section could describe some terms of implementation

Key point

In our project, the term «Pilot» (or Pilot Action/Project) refers to a structured, small-scale experimentation that acts as a bridge between theoretical work/research and full-scale implementation.

Its primary goal is to validate the relevance and feasibility of a concept in a real-world yet controlled setting, reducing Risks during deployment and making the results easier to transfer across the Atlantic Area.

Important note: A pilot is not limited to a physical prototype. It can take two distinct forms, depending on the project's needs:

1. Tangible (Operational) Pilot – Testing a concrete solution to validate its technical and operational feasibility.
Examples: Developing a new food product, creating a training module, etc.

2. Intangible (Strategic) Pilot – Testing a framework for reflection or a governance tool to validate strategic approaches and coordination.
Examples: Designing a port hub, developing an aquaculture strategy, etc.

Ultimately, the pilot serves as a learning laboratory— which is why we refer to it as an ecosystem lab
The choice of the prototype solution in each ecosystem was done thanks a local innovation forum. It depends strongly on the positioning of each Fishinn partner in their own ecosystem.



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LOCAL INNOVATION ROADMAPS FROM BASQUE COUNTRY (SPAIN)

02

Leartibai Fundazioa has developed three complementary local innovation roadmaps, all anchored in the Port of Ondarroa and the wider Lea-Artibai region. Together they address the revitalisation of the fish market, the activation of the aquaculture industrial estate, and the creation of a coordinated blue economy hub — three facets of the same ambition to strengthen the port's economic, social and environmental future.

1. Revitalisation of the Port of Ondarroa and its Fish Market



This roadmap aims to revitalise the Port of Ondarroa and its fish market by increasing the volume of fish landed. Achieving this requires diversifying both the species marketed and the supply markets, and opening new business opportunities abroad.
Two strategic needs anchor this roadmap: increasing the value of fish and fish products, and promoting the Ondarroa brand. Together they reinforce the port's competitive capacity, improve the positioning of its products, and secure the long-term economic viability of the Ondarroa fish market — while fostering broader economic and social growth across the Lea-Artibai region.

1.1 Priority Challenges

Challenge 1 — Disseminating the Ondarroa brand in national and international markets

Despite its reputation as a leading port, many of Ondarroa's strengths and high-quality seafood products remain under-promoted. Effective branding can boost visibility, attract new markets, and position Ondarroa as a benchmark in the global seafood sector.

Three key strengths deserve to be better promoted: the port's modern infrastructure (a state-of-the-art fish auction, available industrial space, and an offshore marine area suited to aquaculture and related activities); its strong market capacity, reflected in a high level of internationalisation and an established sales network; and the knowledge and expertise of its workers, spanning ship repair and maintenance, artisanal fish processing, and a food-focused R&D centre, complemented by a wide range of auxiliary services such as net-making and maritime supplies.

The challenge is to communicate these assets more effectively, so that the Ondarroa brand becomes strongly associated with innovation, quality and excellence — increasing its visibility both domestically and internationally, and ultimately attracting a greater volume of landings.

Challenge 2 — Increasing the value of fish and fish products

This challenge aims to enhance the added value of fish and fish products across the entire value chain, notably by increasing the number of landings in Ondarroa and by generating greater value for every company in the sector — fishers first, but also distributors, wholesalers and supporting industries — all while complying with European legislation and adapting to changing customer preferences.

Increasing value should be understood not only in monetary terms, but also in social, cultural and environmental terms: the creation of stable, high-quality jobs; the preservation of fishing traditions and the maritime identity of Ondarroa; and, through higher margins, greater economic resilience, reinvestment in innovation and sustainable practices, and diversified income sources. Positioning local fish as a premium product would strengthen Ondarroa's competitiveness while spreading the benefits across processing, logistics, gastronomy and tourism.

The goal is to make the Ondarroa fish market profitable, reinforcing the town's position as a key reference point in the fishing sector, both nationally and internationally, while fostering innovation, sustainability, and long-term competitiveness.

1.2 Inspiring Best Practices

The following best practices, identified during the WP2 benchmarking phase, offer inspiration for the solution prototypes developed in this ecosystem.

DOCAPESCA (PORTUGAL) — FOR CHALLENGE 1

DOCAPESCA is a Portuguese state-run company, under the Ministry of the Sea, that manages fish auctions and fishing ports on mainland Portugal. Unlike the Basque Country, where each port manages its own fishery separately by fishing gear, DOCAPESCA is the sole entity in charge of landed fish nationally, operating first-sale auctions, administering ports, and ensuring the food safety, quality and traceability of marine products.

One of its strategic priorities is to differentiate its catch through its own brand — particularly Portuguese fish caught in Portuguese waters by Portuguese vessels — making it identifiable to auctions, retailers and consumers alike, and running campaigns such as its 'Proof of Purchase at Auction' label to promote fresh, local fish and fairer returns for the fishing community.

This experience of branding and communication could inspire Ondarroa to build and promote its own identity, enhancing the visibility and market value of its fisheries.

ttps://www.docapesca.pt/en

KOFRADIA – ITSAS ETXEA (BASQUE COUNTRY) — FOR CHALLENGE 2

KOFRADIA – Itsas Etxea is a project led by the Fishermen's Guilds of the Basque Country together with the Coastal Fishing Producers Organisation (OPEGUI), combining tradition, sustainability and innovation to increase the value of fish and fish products while promoting Basque coastal fishing. Its geographical and cultural proximity make it particularly transferable: in Bizkaia, OPESCAYA — the counterpart of OPEGUI — could lead a similar initiative, adapting the model while preserving its collaborative, sustainability-driven approach.

Based in Donostia-San Sebastián, it operates as a collaborative platform connecting local food and beverage producers, sustainability experts, educational institutions and policymakers.

- Organising events, workshops and tastings to showcase seafood and sustainable practices
- Running marketing campaigns to raise awareness of local products and fisheries
- Managing a digital platform for networking, knowledge exchange and innovation
- Promoting sustainability through eco-friendly operations aligned with EU and national strategies

https://kofradia.eus/en/

1.3 Solution Prototype

Vision

To revitalise the Port of Ondarroa and its fish market by increasing landings, this roadmap follows a threefold path of action focused on governance, financing and value proposition.

Short-term: attract fishing vessels from other regions or countries to land in Ondarroa, promote the market through targeted marketing, and make it financially sustainable and profitable.

Mid-term: open the fish market to new species and establish collaborations and partnerships with other fish markets or fishing companies.

Long-term: retain and deepen these partnerships season after season, so that profits benefit the market itself and can be reinvested to make it a leading reference in the sector.

Description of the Solution Prototype

The solution prototype rests on three pillars. On governance, an association bringing together all companies participating in the fish market is to be created in 2026; initial meetings are already under way with OPPAO, KOFRADIA, ONDARROA19 and ONARE to define membership and the framework for collaboration.

On financing, the Basque Government's Fisheries Department currently supports the market; as the roadmap advances, the new association is expected to become financially self-sufficient by increasing and diversifying landings

and by developing more innovative services.

On value proposition, the sales services provided by the four organisations operating in the port — ONARE, OPPAO, KOFRADIA and ONDARROA19 — should be promoted and complemented by additional services that reduce expenses, improve efficiency, and support green initiatives, ensuring the market's overall profitability.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Financial Risk: A financial guarantee is required to participate in sales.			Participants need sufficient resources or backing before committing to sales.
Technical Risk: Vessels from different countries are subject to varying regulations.			EU legislation is harmonised across member states, but does not extend to non-EU countries.
Technical Risk: Three organisations can carry out the sales, which may create coordination challenges.			Internal competition may arise between the three authorised first-sale organisations.
Social Risk: Pelagic fishing is not well regarded, as it is often perceived as destructive.			Environmental associations oppose certain nets and gear types.
Quality Risk: Fish often arrive crushed, with lower quality and reduced market value.			The likelihood of fish arriving in poor condition is very low
Social Risk: Strong competition against the Basque, as they hold much larger quotas.			Basque fishermen are concerned about the competition from other European fishing vessels.
Social Risk: Lack of generational replacement and skilled workforce.			Despite the ambition to promote the sector, there is a significant shortage of workers.
Social Risk: Ensure that the region does not gentrify.			Care must be taken to prevent the area from becoming overcrowded.

Conclusion — key success factors:

Guided by the threefold focus on governance, finance and value proposition, several actions are already under way. Looking ahead, Ondarroa aims to become not only a landing port but a hub for innovation in fisheries, sustainability and product valorisation, building international connections on the strength of its complete value chain.

- Finance and market diversification: connecting Irish trading companies with Ondarroa-based businesses has already delivered a tangible achievement — Ondarroa's fleet sold albacore tuna for the first time to the Irish market in July 2025. (https://www.elcorreo.com/bizkaia/costa/armadores-ondarroa-venden-primera-vez-bonito-flota-20250703173520-nt.html).
- Value chain and local advantage: the region's well-developed canning industry — seven canneries and fifteen trading companies — gives Ondarroa a complete, competitive value chain able to process and commercialise landed fish efficiently.
- Governance and long-term sustainability: reinforcing collaborative governance between fishermen, traders, canneries and the public sector is essential to build resilience and secure generational renewal.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Strong alignment with territorial strategy: economic growth, maritime heritage, and generational renewal. Economic impact: increased fish landings, higher revenue for traders, processors, and auxiliary services, and access to new international markets. Social impact: creation of stable, high-quality jobs, improved sector attractiveness, and stronger stakeholder collaboration. Visibility: strengthens Ondarroa's brand nationally and internationally, positions the port as an innovative hub. Innovation: high level through new markets, diversified species, sustainable practices, and governance improvements.	5
Confidence	Engaged local stakeholders (ONARE, Leartibai Fundazioa, port authorities, fleet operators). Pilot test experience with Ireland provides proof of concept. Clear roadmap covering governance, financing, and value proposition. Risks exist (market fluctuations, regulations), but local commitment and planning give a strong probability of success.	4
Effort	Human, financial, and technical resources needed: infrastructure upgrades, marketing, logistics improvements, and international missions. Medium-term duration: results may take months to materialise in landings and market expansion. Stakeholder involvement is essential; ongoing coordination is required, but the governance structure facilitates collaboration.	3

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 3 = 6.67

Overall, the initiative combines high territorial impact with strong stakeholder confidence, for a moderate but manageable level of effort — positioning it as a priority action for the port's international visibility.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Leadership can be anchored by ONARE (Ondarroa Fish Trader Association), coordinating the initiative, facilitating collaboration among market participants, and ensuring operational alignment. Other local wholesalers, processors and auxiliary service providers will actively contribute their expertise, commercial networks and operational capacity.

Leartibai Fundazioa is a strategic partner, bringing project-management experience, European collaboration networks and support in identifying funding and innovation opportunities.

- Port authorities: regulatory support, infrastructure management, logistical coordination
- Fleet operators and vessel owners: increasing landings, testing new species, ensuring smooth supply
- Processing facilities and canneries: added-value processing, quality control, product diversification
- Local government and regional development bodies: policy guidance, regulatory compliance, co-financing
- International partners and trade contacts: access to new markets and commercial diversification

B) BUSINESS MODEL & POTENTIAL FUNDING

Potential funding sources include European and regional grants, public subsidies for innovation and sustainability, and private contributions from stakeholders. Revenue will mainly stem from increased landings, value-added processing, and expanded access to domestic and international markets.

C) NEXT STEPS

The first step is to identify and engage all relevant stakeholders in the Ondarroa port ecosystem — traders, wholesalers, fleet operators, processors and auxiliary service providers — to build a shared vision and commitment.

Next, the most promising international and regional markets and ports for collaboration will be identified, evaluating demand, existing contacts and potential partnerships.

A clear financing plan will then be established, combining public funding (European or regional grants) with a co-responsibility model among participating stakeholders.

- Direct missions to targeted ports or markets to establish partnerships and attract vessels
- Promotional activities — trade fairs, marketing campaigns, networking events — to raise Ondarroa's visibility
- Logistical and technical improvements: optimised landing processes, upgraded storage and processing facilities, digital traceability tools



2. Strengthening, Maintaining and Activating the Aquaculture Industrial Estate of the Lea-Artibai Region



The Lea-Artibai region benefits from valuable aquaculture infrastructure, both offshore and inshore, which provides a strong foundation for this second roadmap. Offshore, the Mendexa polygon — an established aquaculture industrial estate between Ondarroa and Lekeitio — covers 556 hectares, of which around 290 have been allocated in a first phase and roughly 210 are earmarked for bivalve molluscs such as mussels and oysters, leaving room for future expansion. Onshore, land-based sites in Lekeitio, Ondarroa and Mutriku could also be adapted for aquaculture purposes.

The goal is to build a clear and effective roadmap for this industrial estate, beginning with an analysis of successful aquaculture cases elsewhere to identify which business and production models hold the greatest potential locally. This will guide the development of business models that activate and strengthen the sector sustainably, boosting production capacity and economic value while generating jobs, skills and a stronger reputation for the region as a hub of sustainable seafood production. Local actors are already actively engaged, bringing the experience and technical expertise needed to keep the roadmap practical and actionable.

2.1 Priority Challenges

Challenge — Activating existing infrastructure capacity

Rather than a single, narrowly defined challenge, this roadmap focuses on enhancing the region's infrastructure capacity — a modern fish auction, available industrial-port space, and the offshore Mendexa marine polygon — as a foundation for new business initiatives and for companies seeking additional space.

The project responds to several key opportunities: developing aquaculture facilities able to catalyse new blue-growth ecosystems, fostering new product development within the seafood and marine sectors, and encouraging entrepreneurship and innovative business models that make the industrial estate more competitive and sustainable.

2.2 Inspiring Best Practices

The following best practices, identified during the WP2 benchmarking phase, offer inspiration for the solution prototypes developed in this ecosystem.

ALGALOOP (BASQUE COUNTRY)

Algaloop, based in Asteasu (Gipuzkoa), is a biotechnology company specialising in the sustainable production of microalgae, combining optimised photobioreactors, digital monitoring and sustainable cultivation methods to produce high-quality biomass with minimal environmental impact, from spirulina to bioactive extracts used in food, agriculture, nutraceuticals and biofertilisers.

Hosting a company such as Algaloop within the Lea-Artibai estate — for instance as a testbed partner in the Mendexa polygon — would turn the site into a living laboratory for offshore microalgae production, marine biomass business lines, traceability systems or shellfish co-cultivation, attracting further innovation and diversifying the estate's activities.

https://algaloop.com/

OCEANO FRESCO (PORTUGAL)

Oceano Fresco is a Portuguese sustainable aquaculture firm dedicated to the innovative, environmentally friendly cultivation of high-quality bivalve species such as clams and European flat oysters. It combines advanced hatchery techniques at its BioMarine Centre with open-sea farming off the Algarve coast, applying regenerative methods that avoid artificial feed and antibiotics while supporting water quality and biodiversity.

The Fishinn team visited Oceano Fresco during the Portuguese field trip and observed first-hand its integrated production system and science-led approach to breeding and shellfish farming.

Involving a partner such as Oceano Fresco in the Lea-Artibai estate could turn the region into an experimental platform for new production techniques, value-added products or species diversification, while strengthening links to broader European markets and investment networks.

https://oceano-fresco.pt/es

2.3 Solution Prototype

Vision

The challenge is to fully activate and optimise the industrial polygon, leveraging existing infrastructure to support new sustainable businesses, diversify production, and increase economic, social and environmental value across the Lea-Artibai region.

Short term

- Take stock of what already exists — the modern fish auction, the industrial port grounds, the Mendexa offshore polygon.
- Seek out and rally the right allies: local businesses, research bodies, prospective innovation partners.
- Draw lessons from aquaculture and blue-growth ecosystems elsewhere to shape a fitting business model.

Mid-term

- Bring the industrial aquaculture polygon to life through viable, sustainable, forward-looking ventures.
- Forge partnerships — with the likes of Algaloop and Oceano Fresco — as pilot or innovation collaborators.
- Guide entrepreneurs toward the estate, opening doors to opportunities, funding, and the right networks.

Long-term

- Establish Lea-Artibai Region as a competitive, sustainable aquaculture hub within the Basque Country.
- Cultivate a fully-fledged blue growth ecosystem where industry, research, and commerce converge.
- Elevate the region's profile as a beacon for innovation, sustainable seafood, and the circular economy.

Description of the Solution Prototype

This prototype favors a strategic approach over physical infrastructure alone: a roadmap to activate and strengthen the industrial aquaculture estate in Lea Artibai. It starts by identifying best practices at Basque, Spanish, and European level, to understand which companies and business models have proven most successful in aquaculture and blue growth.

The roadmap also maps and engages potential partner companies — their operating models, achievements, and innovations — with a view to building lasting relationships. These partners could act as pilots, bring expertise, and help shape new production lines or business opportunities on the estate.

It further examines market trends, funding mechanisms, and regulatory frameworks to support entrepreneurs and incoming businesses. Together, these elements — best practices, targeted partnerships, and a clear strategic vision — give the roadmap the substance to activate the Mendexa polygon, diversify production, and position Lea Artibai as a hub for sustainable, innovative marine business.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Financial Risk: insufficient funding or delayed investment.			Securing timely funding is a key condition for success.
Social Risk: Difficulty attracting and retaining a skilled workforce.			Lea-Artibai is a rural region, distant from major cities, which can make attracting and retaining a skilled workforce challenging.
Societal and Governance Risk: Stakeholder coordination and engagement difficulties.			Multiple actors (port authorities, traders, entrepreneurs, research partners), etc.
Economic Risk: Competition from other regions or aquaculture hubs.			Competition from other regions or larger, well-established hubs with international collaborations.
Technical Risk: Lack of sufficient capacity or technical resources.			Some of the companies or startups seeking to establish themselves in Lea-Artibai may either lack sufficient resources or lack the specific resources required.

Conclusion – key success factors:

The key factors for success are securing sufficient and timely funding, ensuring the availability of skilled personnel, fostering strong collaboration among stakeholders, maintaining a competitive advantage within the aquaculture sector, and providing the technical capacity needed to implement and sustain operations. Addressing these areas proactively will be critical to mitigating the identified risks and achieving the project's objectives.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Economic impact: increased aquaculture production, higher revenues for local businesses, and opportunities to attract innovative companies. Social impact: job creation, workforce skills development, and support for generational renewal in the sector. Innovation: high level through integration of best practices, new technologies, and international partnerships.	5
Confidence	Feasible due to existing infrastructure: modern fish auction, industrial port spaces, Mendexa offshore polygon and the available infrastructure in Ondarroa, Lekeitio and Mutriku. Engaged stakeholders and prior pilot initiatives provide proof of concept. Risks exist (funding delays, workforce challenges, technical capacity), but strong governance and a clear roadmap increase the probability of success.	4
Effort	Technical considerations: offshore operations, aquaculture best practices, and innovation adoption require support. Stakeholder involvement: ongoing engagement with authorities, entrepreneurs, and partner companies is essential. Human resources: coordination team, technical advisors, stakeholder managers. Financial resources: Lack of sufficient capacity or resources.	4

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 4 = 5

The expected increase in production, the attraction of innovative companies, job creation and generational renewal position this initiative as a key driver for the local blue economy, supported by high confidence thanks to strategic infrastructure and committed stakeholders.

The effort required is nonetheless significant — offshore operations, innovative practices, specialised human resources, ongoing coordination and limited financial capacity are real challenges. Overall, the matrix indicates that, despite this complexity, the project is strategically worthwhile given its transformative potential for the territory.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Stakeholders combine public authorities, local companies, research institutions and sector organisations. AZTI, the Basque marine and food research centre, currently operates within the polygon, while the Ondarroa fishermen's guild (Kofradia) and other private owners hold the site.

Leartibai Fundazioa can play a key role in attracting new companies or entrepreneurs and supporting grant applications, while public authorities ensure regulatory compliance, infrastructure management and funding facilitation.

B) BUSINESS MODEL & POTENTIAL FUNDING

The business model rests on attracting aquaculture companies and start-ups to the industrial estate, offering access to existing infrastructure, pilot sites and support services, while promoting sustainable and innovative production.

Revenue streams include production and sales of aquaculture products, R&D services, and collaboration with local and international partners; potential funding sources span public grants (regional, national, EU), private investment, co-financing with partner companies, and blue-economy innovation programmes.

C) NEXT STEPS

The first step is to develop a comprehensive roadmap by identifying and analysing aquaculture best practices applicable to the Lea-Artibai region. The second step is to prioritise the most relevant practices and potential partner companies, identifying and contacting them through online research, sector fairs and professional networks.

The final step is to support interested companies by compiling a detailed list of their technical, financial and operational needs, offering guidance on funding, infrastructure requirements and regulatory compliance to facilitate their establishment on the estate.



3. Blue Economy Ecosystem Hub Located in the Port of Ondarroa



This third roadmap aims to develop a comprehensive Business Model Canvas for a Blue Economy Hub in the Port of Ondarroa, assessing its feasibility in terms of space, technical requirements, governance, financing and value proposition. The ultimate goal is a well-structured, viable hub promoting innovation, collaboration and sustainable growth across Ondarroa's blue economy.

The port's existing infrastructure makes such a hub particularly valuable: it would strengthen the local maritime and aquaculture sector, attract innovative companies and entrepreneurs, generate new employment, and catalyse economic growth and collaboration across the wider Lea-Artibai territory.

3.1 Priority Challenges

Challenge — Building a structured, well-governed blue economy ecosystem

While the port has infrastructure to offer, there is currently no coordinated hub bringing together companies, entrepreneurs, research institutions and other stakeholders — limiting innovation, business growth and regional impact. The hub responds to the region's need to reindustrialise: activating underused spaces, strengthening the maritime and aquaculture sector, attracting new businesses, generating employment, and positioning the region as a reference in sustainable blue economy activities.

It would directly address the need for stakeholder collaboration and the generational renewal of the maritime and aquaculture sector, while capitalising on opportunities linked to entrepreneurship, new seafood products and innovative business models.

3.2 Inspiring Best Practices

The following best practices, identified during the WP2 benchmarking phase, offer inspiration for the solution prototypes developed in this ecosystem.

PORTXL (ROTTERDAM, NETHERLANDS)

PortXL is a maritime startup accelerator based in Rotterdam, supporting and scaling innovative companies in the port and blue economy sectors by connecting them with port authorities, corporates, investors and research institutions.

- Selecting high-potential startups addressing real industry challenges — sustainability, digitalisation, logistics, energy transition
- Providing tailored mentoring and coaching from industry experts and corporate partners
- Facilitating pilot projects and real-life testing, turning the port into a living lab
- Building public–private partnerships for financial sustainability and long-term impact
- Offering visibility and access to international networks and investors

https://portxl.org/

HUB AZUL PORTUGAL

Hub Azul Portugal is a national network of regional blue economy innovation hubs funded under Portugal's Recovery and Resilience Plan, strengthening competitiveness, digitalisation and sustainability across maritime sectors by bringing together infrastructures, skills and stakeholders nationwide.
During the Fishinn field visit to Portugal, the team met with Hub Azul representatives and observed how the network fosters multi-actor collaboration, leverages existing infrastructure, and connects knowledge exchange with real investment and commercialisation pathways — a concrete example of how structured governance and ecosystem-level platforms can unlock value creation, directly relevant to the design of the Ondarroa hub.

- Connecting startups, SMEs, investors, research institutions and public authorities across the blue economy value chain
- Providing technological and infrastructure support, e.g. the Hub Azul Deal Room, matching ventures with financing and industry partners
- Promoting decarbonisation, digital transformation and sustainable maritime value creation
- Serving as living labs for marine biotechnology, digital ocean technologies, port innovation and climate-smart maritime systems

https://hubazul.pt/en/landing-page-en

3.3 Solution Prototype

Vision

The main challenge is the absence of a structured, coordinated blue economy ecosystem in Ondarroa that connects stakeholders, fosters innovation, and ensures sustainable growth of the maritime and aquaculture sectors.

Short-term: finalise the analysis of the port's infrastructure and select the most suitable building for the hub, prioritising the activation of underused spaces; define the hub's preliminary value proposition as a driver of reindustrialisation and innovation; map potential startups, SMEs and strategic stakeholders; establish initial partnerships with the Basque and regional government, companies, training centres, city halls and research institutions.

Mid-term: design and implement a targeted strategy to attract startups and innovative companies to the hub, particularly those active in the maritime and aquaculture sectors.

Long-term: Establish the Blue Economy Hub as a self-sustaining, innovation-led engine of reindustrialisation for Lea-Artibai, anchored in the Port of Ondarroa, by modernising maritime and aquaculture activity through higher-value business models.

Build a lasting ecosystem of startups, industry, and talent, delivering measurable impact: new businesses, quality jobs, and long-term territorial resilience.

CP : Jonas Jacobsson

Description of the Solution Prototype

The prototype project aims to design a Blue Economy Hub in the Port of Ondarroa — a strategic reindustrialisation initiative to revitalise and modernise the local maritime and aquaculture ecosystem.

Its core objective is to build a comprehensive Business Model Canvas defining the hub's value proposition, governance, financing, spatial and technical needs, and operational structure — assessing its feasibility and ensuring it is viable, well-positioned, and aligned with regional priorities.

The project rests on three pillars :
• Defining the Hub's Value Proposition: clarifying its mission, target sectors, and services, positioning it as a driver of innovation, sustainability, and industrial renewal — while boosting competitiveness through digital, green, and international transitions.
• Attracting Startups and Companies: engaging innovative startups, SMEs, and industrial actors across maritime, aquaculture, seafood processing, and marine technology to foster entrepreneurship and value-added activity.
• Developing Talent and Generational Renewal: building skills through partnerships with vocational and educational institutions to secure the sector's long-term competitiveness.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Financial Risk: Participation of startups and companies in the hub.			Participation may be lower than expected if the hub's value proposition or outreach strategies are not fully aligned with market needs.
Social Risk: Coordination challenges among stakeholders.			The hub may face difficulties sustaining operations if diversified financial sources are not secured.
Technical Risk: Technical limitations of selected infrastructure.			The chosen building may require more adaptation or investment than initially estimated to meet hub requirements.
Social Risk: Resistance from traditional maritime sector actors			Some stakeholders may be reluctant to adopt new practices or collaborate within the hub framework.
Social Risk: Talent shortages and limited generational renewal.			Challenges in attracting, training, and retaining skilled professionals in maritime and aquaculture innovation could limit hub effectiveness.

Conclusion — key success factors:

The success of the Blue Economy Hub will rely on a clear, compelling value proposition that meets the needs of startups, companies and stakeholders, combined with effective governance and strong collaboration between port authorities, research institutions and the private sector. Leveraging existing infrastructure, attracting and retaining innovative companies and skilled talent, and securing diverse funding sources will ensure financial sustainability, allowing the hub to drive high-value-added activities and establish Ondarroa as a reference point in the blue economy.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	A strategic fit for the territory: it advances reindustrialisation and a sustainable blue economy, strengthens the maritime and aquaculture sectors, and fuels regional growth. A source of shared value: generating employment and generational renewal in the maritime workforce, while raising the profile of Ondarroa and Lea-Artibai as a hub for blue economy innovation.	5
Confidence	Firm backing from SMEs and local stakeholders identified during preliminary mapping, echoed by the support of the Basque Government and Provincial Council, whose policies favour its implementation. Lessons drawn from proven models such as PortXL and Hub Azul Portugal, with existing infrastructure further lowering the technical barriers to entry.	4
Effort	Technical requirements are well understood, with resources and expertise available locally and through partners; stakeholder involvement will be substantial, yet manageable under clear governance and coordination.	4

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 4 = 5

The Blue Economy Hub combines high potential gains with a strong chance of successful implementation, thanks to alignment with territorial priorities, stakeholder interest, and lessons from similar initiatives abroad. While coordination and resource management require significant effort, the project remains feasible through structured governance, clear planning and phased implementation.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

The hub will involve a wide range of stakeholders: port authorities and local government for governance and strategic support; startups, SMEs and established maritime companies for innovation and business development; universities and research institutions for talent and R&D collaboration; fishermen's associations, cooperatives and NGOs to align the hub with social and environmental priorities; and international networks such as PortXL and Hub Azul Portugal for knowledge exchange, mentoring and visibility.

B) BUSINESS MODEL & POTENTIAL FUNDING

The hub will operate as a collaborative ecosystem for maritime and aquaculture activities, combining shared infrastructure, innovation support and business services. Value will be generated through partnerships, service fees and project-based collaborations, with funding drawn from public grants, regional development programmes, private investment and EU blue economy initiatives.

C) NEXT STEPS

- Infrastructure assessment and selection — identify and prepare the most suitable port building, including renovations and technical adaptations
- Definition of the hub's value proposition — clarify mission, target sectors, services and positioning
- Stakeholder engagement and governance setup — establish clear governance and involve public authorities, companies, research institutions and community actors
- Startup and company attraction — map, reach out to and onboard innovative startups and SMEs
- Talent development strategy — partner with universities and vocational training centres to support skills development
- Pilot projects and living-lab activities — test technologies, business models and processes to validate solutions
- Funding and financial sustainability — secure public grants, private investment and revenue-generating activities



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LOCAL INNOVATION ROADMAPS FROM PORTUGAL — SOUTHWEST ALENTEJOGAL

03

The three roadmaps from Sines Tecnopolo all address the fisheries ecosystem of the Southwest Alentejo coastal region, tackling the valorisation of marine resources, the strengthening of short supply chains, and the diversification of fishing communities through co-management and fisheries tourism.

1. Centre for Fish Valorisation and Blue Bioeconomy



The fisheries sector in the Southwest Alentejo faces a structural challenge: a large share of landed fish has low commercial value or fluctuating demand, reducing income for fishers and limiting profitability across the value chain. At the same time, the region lacks the local infrastructure and capacity to process and valorise these resources into higher value-added products, and current value chains remain largely dependent on traditional commercialisation channels, with limited use of circular-economy approaches or under-exploited resources such as seaweed.

1.1 Priority Challenges

Challenge 1 — Low valorisation of marine resources

A considerable share of catches consists of low-value or fluctuating-demand species, limiting the ability of the local ecosystem to diversify its economic base and capture more value from emerging bioeconomy and sustainability-driven markets.

This challenge carries high strategic relevance for the sustainability and competitiveness of the local fisheries ecosystem: addressing low valorisation directly increases fishers' income, strengthens the local economy, and reduces dependency on extractive activity. It aligns with the local co-creation process's priority of economic valorisation of marine resources, and offers strong potential for innovation and transferability through bioeconomy solutions and new value chains.

Challenge 2 — Lack of infrastructure and capacity for processing and transformation

There is a gap in technological capability, know-how and collaboration between fishers, industry and research entities, limiting the adoption of bioeconomy approaches and the development of new product lines based on marine by-products and alternative resources.

This challenge directly addresses the operational and structural barriers to implementing a valorisation strategy, complementing Challenge 1 by focusing on the physical infrastructure, technical capacity and innovation ecosystem needed to move from concept to implementation.

1.2 Inspiring Best Practices

The following best practices, identified during the WP2 benchmarking phase, offer inspiration for the solution prototypes developed in this ecosystem.

CHALLENGE 1 — BIOECONOMY AND PRODUCT INNOVATION

ALGAplus, is a Portuguese company based in Ílhavo, dedicated to the sustainable cultivation and processing of organic Atlantic macroalgae, combining aquaculture, innovation and the development of high-value seaweed products. (www.algaplus.pt). It demonstrates the potential of integrated multi-trophic aquaculture (IMTA), combining fish and seaweed production to create high-value biomass for the food, cosmetic and pharmaceutical industries.

Allmicroalgae is a Portuguese company based in Pataias, Leiria and one of the largest European producers of microalgae, specialising in sustainable microalgae production and solutions for food, nutraceuticals, animal feed, agriculture and cosmetics. (www.allmicroalgae.com). Necton is a Portuguese marine biotechnology company based in the Algarve specialising in the industrial production of microalgae and traditional sea salt, with applications particularly in aquaculture, food and research. (www.necton.pt).

Both show how marine biotechnology and microalgae production can create diversified, high-value products for strong international markets, supported by R&D, certification and industrial-scale processing. Selo de Mar is a Portuguese project based in Setúbal, focused on researching, recovering and innovating traditional fish preservation techniques, including the development and valorisation of products such as garum. (www.selodemar.com) It illustrates the valorisation of low-value fish through innovative processing — fermentation and niche gastronomic products — reinforcing heritage, storytelling and differentiation, while Bake My Dog Happy is a Portuguese company based in Faro- Portugal, specialising in the development of sustainable pet food and treats using alternative ingredients, including fish and marine by-products, contributing to waste reduction and the circular economy. (bakemydoghappy.com).

It shows how fish by-products can be transformed into new marketable products through circular-economy approaches.

Together, these cases show that combining bioeconomy, product innovation and circular use of resources is key to increasing the value of fisheries products.

CHALLENGE 2 — INFRASTRUCTURE AND TECHNOLOGICAL CAPACITY

Exporsado is a Portuguese aquaculture company based in Setúbal, specialising in the production of high-quality oysters in the Sado Estuary Natural Reserve, with a strong focus on international export markets. (www.exporsado.pt).

It demonstrates how aquaculture production combined with logistics, processing infrastructure and international commercialisation channels can position high-quality marine products in premium markets, underlining the need for integrated value chains from production to market. ALGAplus, Allmicroalgae and Necton reinforce the importance of dedicated processing units and specialised teams for quality control and diversification at scale, while Sensefinity shows how digital technologies (IoT, AI, traceability) can strengthen cold-chain management and supply-chain efficiency — all critical for commercialising value-added seafood.

Sensefinity is a Portuguese technology company based in Lisbon, specialising in IoT solutions, sensors, tracking, analytics and AI for supply-chain and logistics monitoring, including cold-chain and maritime cargo applications.

www.sensefinity.com

1.3 Solution Prototype

Vision

Challenge addressed: the low valorisation of marine resources, combined with the lack of infrastructure and capacity for processing and transformation.

Short-term objectives (1–2 years)
Shape the Centre for Fish Valorisation and Blue Bioeconomy — its concept, operational model, governance, and key stakeholders — while securing strategic partnerships with fishers, research institutions, and industry.
Run feasibility studies and pilot actions on transforming low-value fish species and marine by-products, testing early products such as algae-based applications, and defining the technical, regulatory, and investment groundwork for the centre.

Mid-term objectives (3–5 years)
Bring the centre's physical infrastructure to life — processing and innovation facilities — while scaling value-added product lines for niche and premium markets.
Weave bioeconomy approaches into the model, from marine by-products to algae-based value chains, deepening collaboration between fishers, industry, and R&D to drive innovation, knowledge transfer, and market positioning through quality, traceability, and certification.

Long-term objectives (5+ years)
Establish the region as a reference hub for marine resource valorisation and blue bioeconomy, nationally and across Europe, while diversifying incomes and easing fishers' dependency on low-value catches.
Forge a fully integrated, circular value chain that minimises waste and maximises resource efficiency — a model built to be replicated in other coastal regions and to anchor the long-term resilience of the fisheries ecosystem.

Description of the Solution Prototype

The prototype solution is a Centre for Fish Valorisation and Blue Bioeconomy in Southwest Alentejo — an integrated platform designed to unlock the economic value of local marine resources. Conceived as a multi-actor hub, it will bring fishers, processors, researchers, and market stakeholders together to transform and valorise fish and marine by-products.

Its core activities span several fronts:
• Turning low-value fish species into higher-value products for niche and premium markets, and developing new applications — from food products to nutraceuticals and bio-based materials.
• Embedding bioeconomy approaches, notably marine by-products and algae-based value chains, while supporting R&D in partnership with universities and research centres.
• Piloting new business models and technologies built for scalability and replication.

Quality control, certification, traceability, and technical training will underpin the centre's work, ensuring regulatory compliance and market competitiveness. Strong partnerships and clear governance will coordinate stakeholders and foster knowledge transfer across the local ecosystem — making the model not just viable here, but scalable and replicable in other coastal regions, in service of a more sustainable and innovative blue economy.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Lack of stakeholder engagement and commitment			Requires active facilitation and communication.
Unclear or unvalidated business model			Needs refinement through co-creation.
Regulatory constraints			Early legal assessment required.
Limited access to funding			Funding sources must be identified early.
Insufficient technical capacity			Mitigate through partnerships.
Diverging stakeholder interests			Requires a clear governance model.
Low market acceptance			To be validated in a future phase.

Conclusion — key success factors:

The success of the proposed solution depends on several key factors:

- Strong stakeholder engagement, particularly between fishers, industry, research institutions and public authorities
- A clear and feasible business and governance model, ensuring alignment of interests and long-term sustainability
- Access to technical knowledge and innovation capacity for value-added product development
- Early identification of regulatory requirements for food safety, processing and commercialisation
- A market-oriented approach focused on differentiation, quality and demand
- A progressive implementation strategy, from concept validation to full operational capacity

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Strong alignment with territorial priorities on resource valorisation and diversification; high potential economic impact through value-added products and increased income for fishers; social and environmental benefits from sustainable resource use and waste reduction; strong visibility potential and significant innovation through bioeconomy approaches.	4
Confidence	A good level of feasibility, based on identified needs, stakeholder interest and relevant best practices, with a realistic pathway from concept validation to operational development. Uncertainties remain regarding stakeholder alignment, regulation and funding, justifying a medium-high confidence level.	4
Effort	A moderate to high level of investment and coordination is required to develop infrastructure, over a medium-to-long timeframe and a phased approach, depending on access to knowledge, technology and skilled human resources secured through partnerships.	3

Estimated prioritisation score = Gains × Confidence / Effort = 4 × 4 / 3 = 5.33

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Project leader: a regional innovation and development entity such as Sines Tecnopolo, responsible for coordination, facilitation and overall project management.

- Municipalities and local authorities (Odemira, Sines, local parishes): institutional support and territorial alignment
- Fisheries associations (e.g. Southwest Fishermen Association (AAPACSACV) is a Portuguese association based in Sines, representing artisanal and purse-seine fishing vessel owners from the Southwest Alentejo and Costa Vicentina, and supporting the interests, development and valorisation of the local fisheries sector. (www.secretatradicao.pt): representing fishers and supporting solution testing
- Local development associations: stakeholder engagement and dissemination
- Processing companies and SMEs: product development and market-oriented activities
- Research institutions (e.g. Marine Sciences Centre, University of Évora in Sines): scientific and technical expertise
- Innovation and technology companies: new solutions, technologies and business models

B) BUSINESS MODEL & POTENTIAL FUNDING

The Centre for Fish Valorisation and Blue Bioeconomy will run on a hybrid model, blending public support with private revenue to secure both its launch and its long-term future.
Business model — the centre will generate value through processing and product development services, R&D and innovation partnerships, technical consultancy for SMEs and fishers, training for blue economy professionals, and shared infrastructure for testing and developing products.
Revenue streams — service and consultancy fees, infrastructure access charges, project-based R&D funding, training income, and potential licensing of the products or processes it develops.
Funding sources — European programmes (EMFAF, Horizon Europe, Interreg), national innovation and blue economy schemes, public investment from municipalities and regional authorities, private partnerships with fisheries, food, and bioeconomy companies, and research grants alongside universities.
Together, public funding to launch the centre and private revenue to sustain it strikes a balanced, scalable financial model.

C) NEXT STEPS

Short-term (0–6 months) — concept validation and preparation
- Stakeholder engagement workshops and interviews to validate and refine the project scope
- Definition of the governance model and partnership structure
- Preliminary feasibility analysis (technical, regulatory, financial) and mapping of funding opportunities

Medium-term (6–24 months) — pilot development and structuring
- Detailed implementation plan, formal partnerships and collaboration agreements
- Pilot actions and small-scale testing of product development and processing
- Securing of initial funding and preparation of location and infrastructure

Long-term (2–5 years) — implementation and scaling
- Operationalisation of the Centre for Fish Valorisation and Blue Bioeconomy
- Scaling of value-added products and services and strengthening of market positioning
- Expansion of partnerships and promotion of replication in other regions

2. Local Seafood Short Supply Chain Model



The fisheries sector in the Southwest Alentejo has limited access to short supply chains and direct commercialisation channels, leaving fishers dependent on intermediated distribution and reduced profit margins. The weak connection between local seafood production and consumers limits awareness of the origin and quality of local fish, constraining product differentiation and territorial valorisation, while logistics, traceability and food-safety compliance present further operational and regulatory barriers.

2.1 Priority Challenges

Challenge — Limited access to short supply chains and direct market channels

Improving commercialisation channels can increase value for fishers without increasing fishing pressure, directly benefiting income and the economic sustainability of the sector.

This challenge is strongly aligned with the local co-creation process's short supply chains and local market axis, strengthening proximity between producers and consumers and territorial identity. It also presents high feasibility for pilot implementation, making it well suited to testing innovative short supply chain models adapted to the local context.

2.2 Inspiring Best Practices

Strengthening short supply chains and market access

Selo de Mar (see above) illustrates how product innovation combined with territorial identity and storytelling can enhance perceived value and create direct connections with niche markets. Exporsado (see above) demonstrates the relevance of integrated value chains combining production, processing and distribution for better quality control and market positioning, while Sensefinity (see above))shows how digital tools and traceability systems can optimise supply chains, quality and logistics. Direct-to-consumer models and alternative distribution channels — such as seafood box schemes — further highlight the potential to reduce intermediaries, improve margins for producers, and strengthen relationships with consumers.

2.3 Solution Prototype

Vision

Challenge addressed: limited access to short supply chains and direct market channels for local seafood products.

Short-term (1–2 years): define the concept and operational model of a local short supply chain system; engage fishers, distributors and market actors; conduct a feasibility analysis on logistics, regulation and demand; design and test a pilot distribution model such as a seafood box scheme.

Mid-term (3–5 years): scale the model, strengthen direct producer–consumer relationships including partnerships with restaurants and local markets, develop branding and territorial-identity communication, and integrate traceability and digital tools.

Long-term (5+ years): establish a sustainable, resilient local seafood distribution system that reduces dependency on intermediaries, strengthens ties between fisheries and local communities, and can be replicated in other coastal regions.

Description of the Solution Prototype

The solution consists of a local seafood short supply chain in the Southwest Alentejo, reducing intermediaries and strengthening direct links between fishers and consumers through direct-to-consumer distribution (e.g. seafood box schemes), short supply channels to local markets and restaurants, coordinated logistics, basic traceability and quality assurance, and communication strategies promoting the origin and sustainability of local seafood. The model will be tested initially as a small-scale pilot, actively involving fishers and local stakeholders, and designed to be flexible, scalable and replicable.

Testing and experimentation approach:
The prototype project will be tested through a concept-validation phase and small-scale pilot, validating feasibility, assessing fishers' and consumers' willingness to participate, testing basic logistics, and evaluating market response — starting from the hypothesis that demand exists for local, fresh, traceable seafood and that short supply chains can increase margins and income stability. Fishers, local consumers, restaurants, local markets and development associations will all be involved, with a pilot duration of 3–6 months tracked through indicators such as the number of participants, volumes distributed, consumer satisfaction, and price differences compared with traditional channels.

Previous experiences with similar schemes point to recurring challenges to anticipate: irregular product supply, logistical difficulties in collection and distribution, mismatches between supply and consumer expectations, low consumer engagement, high operational costs at small scale, and regulatory constraints related to food safety and direct sales.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Irregular supply of seafood due to variability of fishing activity			Requires coordination with fishers.
Logistical constraints in collection, packaging and distribution			Efficient logistics needed.
Mismatch between supply and consumer expectations			Requires market adaptation.
Low consumer engagement and demand instability			Needs communication strategies.
High operational costs at small scale			Requires scaling strategies.
Regulatory constraints (food safety, traceability)			Early compliance needed.
Limited stakeholder coordination			Requires governance model.

Conclusion — key success factors:

The success of the proposed short supply chain model depends on several key factors:

- Strong coordination between fishers and distribution systems, ensuring regularity and reliability of supply despite the variability of fishing activity
- Efficient and well-structured logistics, adapted to small-scale operations and capable of ensuring freshness, quality and timely delivery
- Clear alignment between supply and consumer expectations, particularly regarding product variety, pricing and convenience

● Effective communication and consumer engagement, promoting the value, origin and sustainability of local seafood products
● Progressive scaling of the model, allowing optimisation of costs and improvement of economic viability over time
● Early identification of and compliance with regulatory requirements, especially regarding food safety, traceability and direct sales
● Strong stakeholder involvement and governance, ensuring commitment, coordination and long-term sustainability of the system

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	-A close territorial fit, answering the region's call for stronger short supply chains, better market access for local seafood, and greater economic sustainability for Southwest Alentejo's fisheries. - Real economic, social and environmental value: higher fisher incomes and new distribution opportunities, closer producer–consumer ties that strengthen coastal communities, and shorter supply chains that ease transport emissions while favouring seasonal, local produce. -Strong visibility and innovation potential, positioning the region as a reference for sustainable local food systems while blending traditional fisheries with modern logistics, direct sales, and digital tools.	4
Confidence	- Solid feasibility, grounded in clearly identified sector needs and aligned with territorial priorities around short supply chains and local markets, with a realistic path forward: concept validation followed by small-scale piloting, allowing gradual, risk-managed growth. -Credibility drawn from proven practices, such as direct-to-consumer distribution already tested elsewhere, and from a strong regional ecosystem of fishers, authorities, development associations, and market actors ready to support implementation. -Some uncertainty remains around logistics, stakeholder coordination, regulation, and market stability — justifying a medium-high confidence level.	4
Effort	-A moderate overall effort, chiefly in coordination, logistics, and stakeholder engagement — feasible without complex infrastructure, though resting on organisational capacity and coordination. -Manageable cost and pace: modest investment to launch, especially during piloting on existing resources, with scaling calling for further spend on logistics and packaging; a phased rollout, from a short pilot (3–6 months) to gradual expansion, allows steady adaptation. -Technically accessible, requiring no complex technology, though a clear grasp of logistics, traceability, and basic digital tools is needed, alongside sustained engagement and alignment among fishers, distributors, and market actors.	3

Estimated prioritisation score = Gains × Confidence / Effort = 4 × 4 / 3 = 5.33

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Project leader: a regional innovation and development entity such as Sines Tecnopolo, ensuring stakeholder alignment, overseeing implementation and supporting the operational model.
- Municipalities and local authorities (Odemira, Sines, local parishes): institutional support and coordination with local markets
- Fisheries associations (e.g. Southwest Fishermen Association) and fishers: supply organisation and pilot participation
- Local development associations (e.g. TAIPA: Local development cooperative – Odemira, ADL: Regional development association – Alentejo : community engagement and dissemination
- Restaurants and local markets: distribution and commercialisation channels
- Logistics and distribution partners: collection, packaging and delivery
- Research institutions (University of Évora ue to its strong regional presence through CIEMAR – Marine Sciences Laboratory, based in Sines, and its expertise in marine resources, coastal ecology, R&D and environmental monitoring): feasibility analysis, monitoring and evaluation
- Innovation and technology companies: digital tools and traceability systems

B) BUSINESS MODEL & POTENTIAL FUNDING

The model combines direct sales (pre-orders, seafood boxes, subscriptions), short supply channels to restaurants and local markets, coordinated supply aggregation, basic logistics services, and targeted communication. Funding may draw on EMFAF and Interreg, national short-supply-chain and blue-economy schemes, municipal support for pilot phases, community-led local development (CLLD) instruments (implemented through the Fisheries Local Action Groups (FLAGs) under Portugal's MAR 2030 Programme, supporting local fisheries projects focused on short supply chains, seafood valorisation, diversification and cooperation between fishers, businesses and local organisations), and private contributions from restaurants and logistics partners — with low initial investment and incremental scaling based on demand.

C) NEXT STEPS

Short-term (0–6 months) — concept validation and pilot preparation
- Stakeholder workshops with fishers, consumers and local actors
- Definition of the operational model — supply organisation, distribution channels, logistics
- Preliminary feasibility analysis and design of a pilot distribution model

Medium-term (6–24 months) — pilot implementation and refinement
- Launch of the small-scale pilot and monitoring of logistics, costs and consumer response
- Adjustment of the model based on feedback; development of partnerships with restaurants and markets
- Implementation of basic traceability and communication tools

Long-term (2–5 years) — scaling and consolidation
- Expansion to more fishers, products and distribution channels
- Improved logistics efficiency and stronger market positioning
- Development of digital coordination tools and exploration of replication elsewhere

3. Co-management and Fisheries Tourism Diversification Model



The fisheries sector in the Southwest Alentejo faces structural socio-economic challenges — low income levels, limited attractiveness of the profession, and a lack of generational renewal — that threaten the sustainability of fishing communities. Local stakeholders remain only marginally involved in governance and decision-making, weakening coordination, while the sector shows little diversification into complementary activities such as fisheries tourism that could provide alternative income and strengthen ties between fisheries and society.

3.1 Priority Challenges

Challenge 1 — Weak stakeholder involvement in governance and limited diversification

Addressing this challenge strengthens the long-term sustainability and resilience of the fisheries sector across its economic, social and governance dimensions, and creates an opportunity to build more resilient and attractive coastal communities through fisheries tourism.

It is aligned with local co-creation priorities on participatory governance, stakeholder engagement and income diversification.

Challenge 2 — Lack of structured frameworks, capacity and operational models

Existing governance systems are fragmented, and fishers lack the technical capacity, training, safety qualifications and business-development support needed to engage in fisheries tourism or other diversified activities. The absence of coordination mechanisms and pilot experience limits the ability to test new models at scale.

This challenge operationalises the vision defined in Challenge 1 by addressing the practical barriers — frameworks, capacity-building and experimentation — needed to translate strategic concepts into concrete, scalable pilot models.

3.2 Inspiring Best Practices

The following best practices, identified during the WP2 benchmarking phase, offer inspiration for the solution prototypes developed in this ecosystem.

COMMUNITY-BASED GOVERNANCE AND FISHERIES TOURISM

Pesca-Tourism initiatives (e.g. Lira, Galicia) show how fisher-led tourism can create additional income while strengthening ties between local communities and maritime heritage, illustrating the potential of experiential tourism linked to traditional fishing practices. Community-based fisheries management models highlight the value of participatory governance, where fishers, authorities and other stakeholders share decision-making, improving ownership and resource management, while examples combining local knowledge, environmental education and tourism show how fisheries can diversify beyond extractive activities.

STRUCTURED SUPPORT FOR NEW GOVERNANCE AND DIVERSIFICATION MODELS

Sines Tecnopolo and similar local innovation ecosystems show how facilitation and coordination structures bring stakeholders together and enable new initiatives, while Selo de Mar (see above) demonstrates how training and business-model development support local actors in creating new economic activities linked to fisheries. These cases confirm that developing co-management and fisheries tourism requires operational support and structured experimentation, not strategic vision alone.

3.3 Solution Prototype

Vision

Challenge addressed: weak stakeholder involvement in governance and limited diversification of fisheries activities, combined with a lack of structured frameworks and capacity for co-management and fisheries tourism.

Short-term (1–2 years): define a co-management framework involving fishers, authorities and local stakeholders; establish a collaborative platform for dialogue and decision-making; assess the feasibility of fisheries tourism (regulatory, safety, operational); develop and test pilot initiatives; deliver capacity-building and training for fishers and local actors.

Mid-term (3–5 years): implement a structured co-management model, scale fisheries tourism activities, formalise coordination mechanisms, and strengthen fishers' skills in tourism services, safety and business development.

Long-term (5+ years): achieve a fully operational co-management system, establish fisheries tourism as a sustainable complementary activity, increase the resilience and attractiveness of fishing communities, and ensure the model's replicability elsewhere.

Description of the Solution Prototype

The prototype solution weaves together co-management and fisheries tourism in Southwest Alentejo — strengthening participatory governance while diversifying fishing-related livelihoods.

At its heart lies a collaborative governance framework, bringing fishers, local authorities, development associations, and other stakeholders into structured dialogue and shared decision-making — sharpening coordination, deepening ownership, and enabling swifter responses to local challenges. Alongside this, the model opens fishers to new income through fisheries tourism: fishing trips, educational activities, and cultural and environmental interpretation.
Its core components include:

- A co-management platform for regular, participatory dialogue between stakeholders.
- Pilot fisheries tourism initiatives, developed with fishers and local communities.
- Capacity-building on governance, tourism services, safety, and business development.
- Regulatory support covering licensing, safety, and operational requirements.
- Alignment with local development, tourism, and coastal management strategies.

Piloting comes first, letting stakeholders test governance mechanisms and diversification in a controlled, adaptive way — with fishers placed at the centre, both as governing partners and as drivers of new economic activity. Built to be flexible and scalable, the model is designed for adaptation and replication across other coastal regions.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Low stakeholder engagement or lack of trust			Requires facilitation.
Regulatory constraints (tourism)			Licensing needed.
Limited skills among fishers			Training required.
Resistance to change			Cultural barriers.
Lack of coordination			Governance needed.
Economic viability			Market validation.
Seasonality of demand			Flexible model.

Conclusion – key success factors:

The success of the proposed co-management and fisheries tourism model depends on several key factors:

- Strong stakeholder engagement and trust-building, ensuring active participation of fishers, public authorities and local actors in governance processes
- A clear and structured co-management framework, with well-defined roles, responsibilities and coordination mechanisms
- Effective facilitation and coordination, enabling alignment between different interests and continuous dialogue
- Early identification of and compliance with regulatory requirements, particularly regarding fisheries tourism, safety and licensing
- Capacity-building and training for fishers, supporting the development of new skills related to tourism, business management and safety
- Development of economically viable and attractive tourism activities, aligned with market demand and local identity
- Integration with local development and tourism strategies, ensuring coherence and support from public policies
- Flexibility and adaptability of the model, allowing adjustments based on stakeholder feedback and local conditions

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	- Firmly aligned with territorial priorities, the solution strengthens participatory governance and stakeholder collaboration while diversifying fisheries-related activities in Southwest Alentejo — opening new income through fisheries tourism and bolstering the sector's resilience.	4
Confidence	-A moderate-to-high feasibility, grounded in identified needs, relevant best practices, and a realistic path — stakeholder engagement and pilots enabling gradual, adaptive growth — backed by a diverse regional ecosystem of fishers, authorities, and development actors.	4
Effort	-A moderate effort centred on coordination, facilitation, and sustained stakeholder engagement: costs stay modest at pilot stage, though scaling fisheries tourism will call for further resources over a medium-to-long timeline, as governance and behavioural change take root. -Technically undemanding, yet reliant on organisational capacity, facilitation skills, and coordination mechanisms — with continuous stakeholder engagement as the key effort factor.	3

Estimated prioritisation score = Gains × Confidence / Effort = 4 × 4 / 3 = 5.33

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Project leader: a regional innovation and facilitation entity such as Sines Tecnopolo, structuring the co-management framework and supporting pilot implementation.

- Municipalities of Sines and Odemira, together with the Parish Councils of Sines, São Teotónio and Vila Nova de Milfontes – local authorities providing institutional support, local coordination and facilitating implementation within fishing communities
- Fisheries associations and fishers as Southwest Fishermen Association and participating fishers from Sines and Azenha do Mar (Odemira), Southwest Alentejo.: representation, sector coordination and direct participation in pilots
- Local development associations: community engagement and dissemination
- Tourism operators and local businesses: development of fisheries tourism experiences and market integration
- Research institutions (University of Évora, through its Marine Sciences Laboratory (CIEMAR), a research unit of the University based in Sines.): technical support and evaluation
- Innovation and support organisations: governance models and training programmes

B) BUSINESS MODEL & POTENTIAL FUNDING

The model rests on two complementary pillars: a co-management governance framework (non-revenue generating but essential for system sustainability) and fisheries tourism and diversification activities generating direct income through guided experiences, partnerships with tourism operators, and integration with local tourism packages. Funding may combine EMFAF, Interreg and rural/coastal development funds, national diversification and tourism programmes, municipal support for governance and pilot phases, Community-Led Local Development instruments, and co-investment with tourism stakeholders — starting with public and pilot funding before transitioning towards self-sustained, tourism-driven revenue.

C) NEXT STEPS

Short-term (0–6 months) — concept validation and stakeholder mobilisation
- Workshops and meetings to initiate dialogue and build trust among fishers, authorities and tourism actors
- Definition of the initial co-management framework — roles, responsibilities, coordination mechanisms
- Preliminary feasibility assessment for fisheries tourism (regulatory, safety, operational)

Medium-term (6–24 months) — pilot implementation and structuring
- Launch of pilot co-management processes with regular participatory meetings
- Small-scale fisheries tourism pilot activities with selected fishers and partners
- Training and capacity-building on governance, tourism services and safet

Long-term (2–5 years) — consolidation and scaling
- Formal, operational co-management system integrated into local governance frameworks
- Expansion and professionalisation of fisheries tourism activities
- Stronger integration with regional tourism strategies and replication in other coastal regions



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LOCAL INNOVATION ROADMAPS FROM FRANCE

04

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1. Fish Churros — New Models for Marketing and Valorising Seafood in Saint-Guénolé



This roadmap aims to reconnect Saint-Guénolé's fishing sector with today's consumers by capturing more value from local landings and reviving the market for seafood along the Cornouaille coast. Achieving this requires opening new routes to market beyond the traditional auction, giving an outlet to under-valorised species and by-products, and making seafood simple and appealing for a new generation of consumers.

Two strategic needs anchor this roadmap: unlocking the value of local landings, and reconnecting consumers with local seafood. Together they reinforce the resilience of Saint-Guénolé's fishing sector, diversify revenue for fishers and processors, and position Cornouaille as a reference for seafood novelty within a changing seafood economy.

1.1 Priority Challenges

Challenge 1 — Unlocking the value of local landings

Despite the quality of fish landed in Cornouaille, a significant share of that value is lost before it reaches the market. Landings are increasingly exported rather than processed locally, and by-products remain largely underused, most ending up as fishmeal instead of higher-value products.
Two factors define this challenge: a wholesale and auction system under strain, where growing concentration among buyers and price-driven competition put pressure on small-scale fishers and leave quality only loosely rewarded; and lesser-known species, for which no strong local outlet yet exists.

The challenge is to open complementary routes to market so that Saint-Guénolé's and more broadly Cornouaille's landings are turned into higher-value, differentiated products. Testing such alternative routes was explicitly flagged as a priority for this ecosystem: meeting the challenge would increase the value captured by small-scale fishers and processors, and strengthen territorial resilience by turning fishing into a lever for local development.

Challenge 2 — Reconnecting consumers with local seafood

Seafood consumption in France has been declining for several years. Traditional sales channels are weakening, seafood struggles to gain a foothold in the catering sector, and many consumers feel increasingly distant from a type of food they perceive as complex to prepare or costly.
Three factors stand out: fragile distribution, with fishmongers disappearing and large retailers remaining the dominant but volatile outlet; a widening gap between well-informed and novice consumers, fed by contradictory messaging and limited awareness of seafood species and regulations; and a perceived complexity of preparation that discourages younger, less experienced consumers in particular.

The challenge is to make seafood accessible and appealing again to reconnect consumers, especially younger generations, with local seafood strengthening Cornouaille identity. Local socio-economic players identified two needs behind this challenge: rebuilding a culture of seafood consumption across generations, through education on lesser-known species and the wider value chain; and exploring new marketing models better suited to today's consumer trends.

1.2 Inspiring Best Practices

The following best practices, identified during the benchmarking phase, offer inspiration for the Fish Churros prototype developed in this ecosystem.

SELO DE MAR (PORTUGAL)

Selo de Mar is a Portuguese company dedicated to reviving and modernising traditional fish-preservation techniques, most notably garum, a fermented fish sauce dating back to Roman times. Working with archaeological and cultural institutions, it studies and adapts these ancient methods to contemporary tastes, crafting its garum from Lusitanian fish into a sauce rich in umami and complex flavour.

https://selodemar.com/

MARSEILLE EN CORNET (FRANCE)

Marseille en Cornet has established itself as a reference for maritime street food on the French coast, serving grilled sardines, fried calamari and fish churros in cones for residents and visitors. It demonstrates that seafood can hold its own in street-food markets once presented in a simple, accessible format.

https://marseilleencornet.fr/

KOFRADIA – ITSAS ETXEA (BASQUE COUNTRY)

Based in Donostia-San Sebastián, Kofradia – Itsas Etxea connects local seafood producers, chefs and consumers through guided tours of the fish auction hall, tastings such as its 'Pintxos en el Puerto de Donostia', and mediation activities that raise awareness of species, seasonality and fishing techniques. Its sea-to-plate approach, bringing fishing heritage directly to the end consumer, offers a model to rebuild the connection between its local fishing fleet and its public.

https://kofradia.eus/en/

1.3 Solution Prototype

Vision

The Fish Churros prototype follows a threefold path of action addressing resource valorisation, consumer reconnection, and territorial attractiveness.

Short-term: finalise the recipe and validate its technical feasibility, test it with consumers at local events, and develop the branding needed to launch the product with confidence.

Mid-term: explore the commercialisation concept, move to regular commercialisation through a dedicated food truck integrate the product into local festivals such as God Save the Kouign or in local restaurant, and strengthen the wider marketing of Cornouaille's seafood.

Long-term: scale the business model, replicate it in other ports in Cornouaille such as Concarneau, Loctudy, Le Guilvinec… and diversify the product range — establishing Fish Churros as a flagship example of fisheries innovation in Brittany, reinforcing the link between consumers, local fishing and territorial identity.

Description of the Solution Prototype

Fish Churros is a mobile street-food concept built around crispy fish sticks made from locally caught, often under-valorised fish — hake, pollock and similar species — served in cones or in any case eco-friendly packaging alongside dipping sauces such as mayonnaise. It is designed to be sold at ports, guinguettes (the traditional seaside cafés of the French coast), markets, festivals and restaurants, and it deliberately rides several current consumption trends: snacking, mobile and nomadic food formats, conviviality, and sustainability through local sourcing and eco-packaging.

For the local ecosystem, the concept delivers added value on several fronts at once. Economically, it creates a genuinely local product that supports fishing and processing businesses along the whole value chain. Socially, it reconnects consumers — younger ones especially — with seafood through a fun and approachable format. Culturally, it draws on Breton maritime heritage and fishing traditions. In terms of innovation, it modernises the image of fish, often perceived as a traditional or complex product to prepare.

The product targets two main audiences: young professionals, locals and tourists aged 18 to 30, drawn to it at festivals, beaches and social outings for its visual appeal, shareability and affordability; and families and curious food-lovers aged 45 to 60, encountered on coastal walks and at cultural events, who value its quality, local identity and practicality.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Low consumer acceptance of the product.			Multiple tasting campaigns, with the recipe adapted as feedback comes in.
Technical difficulties in production.			Additional R&D work
Cost inflation (fish prices, energy).			Diversifying the fish species used and optimising the supply chain.
Supply fluctuations (seasonality, quotas).			Drawing on several fish species, with frozen stock as a backup.
Regulatory constraints (food safety, hygiene).			Strict compliance with HACCP hygiene standards and certification of the mobile unit.
Weak branding.			Investing in storytelling built around local fishing, sustainability and Breton heritage.
High competition in the street-food market.			Differentiating through the format itself, local sourcing and territorial branding.

Conclusion — key success factors:

Guided by product quality, territorial branding and reliable logistics, several of these conditions are already being put in place.

- Product quality and pricing: an excellent taste and texture, at a price of affordable aligned with street-food expectations and justified by local sourcing and an artisanal recipe.
- Territorial branding and storytelling: anchoring the product firmly in Saint-Guénolé, Cornouaille and Breton maritime heritage.
- Reliable supply and logistics: supply contracts securing local fish sourcing, and an efficient cold chain, frying and packaging set-up suited to mobile sales if concept chosen.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Economic: a new revenue stream for fishers, processors and local businesses. Social: reconnects younger consumers with seafood and strengthens community ties. Environmental: promotes sustainable fishing and the use of under-valorised species. Visibility: strong media potential through social platforms, festivals and tourism	4
Confidence	Proven benchmarks in Marseille en Cornet, Kibbeling in Denmark and Mersea in Quimper. Low technical complexity, building on existing churros techniques. Strong alignment with current trends in snacking, sustainability and localism.	4
Effort	Low infrastructure needs: a food truck and basic equipment. Small-scale testing possible through existing events and markets. Moderate investment in recipe R&D, branding and initial equipment. Requires specific expertise in fish processing and marketing.	5

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 4 = 5

Overall, the initiative combines strong economic and social potential with solid stakeholder confidence, for a moderate and manageable level of effort — positioning Fish Churros as a highly promising prototype for the territory's seafood sector.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

- An entrepreneur as project leader, yet to be identified, to coordinate the initiative and drive its business development
- A technical or food-innovation center, still to be identified, could support recipe development and sanitary compliance
- Public authorities
- Fishermen, whose engagement will need to be secured through supply contracts
- Event organisers such as festivals and markets, offering early opportunities for pilot commercialisation...

B) BUSINESS MODEL & POTENTIAL FUNDING

It depends on the commercialisation concept chosen. Revenue is expected to come mainly from direct sales through the food truck and kiosks, event-based sales at festivals and markets, partnerships with restaurants and guinguettes, — with affordable portions with sauce. Potential funding sources could be found according to the needs

C) NEXT STEPS

The period from February to May 2026 was dedicated to test recipes with the participation of the Oceane Alimentaire, a local traditional cannery. Several tests were done with different raw material: pout, gurnard, conger eel, hake, sometimes with a unique species, sometimes combining several species, with fresh and frozen raw material.

The recipe is quite simple in terms of stability of texture, flavour…. The key is the supply chain and the preparation of the raw material (threads…) that can increase the price.
Within this period, a concept notebook was developed to analyse the opportunity and the potential of such initiative. Additionally, a marketing notebook was created to support a potential project leader.

The different first steps are
- finding an entrepreneur as a project leader
- finalising the recipe — fish species, batter and frying technique — with different sauces and validate its technical
- feasibility, before testing it with consumers at local events in Saint-Guénolé for instance.
- Branding and packaging will then be developed around Cornouaille's territorial identity and eco-friendly materials, ahead of a pilot launch at one local event.
- Studying the feasibility of a concept to sell these fish churros : truck ? guinguette? Restaurant?
- Securing the supply chain.



2. Fishing Entrepreneurship Toolkit



This prototype solution objective aims to strengthen the learning fishing enterprise in the fishing ecosystem in Cornouaille, Finistère, Brittany, by giving current and future fishing entrepreneurs access to structured, practical knowledge for installing, running and eventually passing on their fishing business. Achieving this means turning expertise that already exists, but remains under-used, into short, searchable and engaging formats that fishermen and the professionals who support them can draw on whenever they need it.

2.1 Priority Challenges

Challenge 1 — Lack of support tools for fishing entrepreneurship

Fishing entrepreneurs — whether newcomers or successors — face challenges of a different order. The role of fishing boat captain combines high financial risk, regulatory complexity and heavy operational responsibility, with limited visibility on returns. This weight of responsibility, together with steep purchase and maintenance costs, is a major brake on business transmission. Unlike farmers or craftsmen, fishermen lack structured resources — such as business-management guides, case studies, mentoring pathways — to navigate entrepreneurship. Compounding this, the informal transmission of trade skills — net mending, unloading procedures, and other related occupations — is faltering : retired, experienced fishermen help only occasionally, and younger generations are not always trained in these essential gestures.

Addressing this gap would secure business continuity by improving installation and takeover processes improvement and reduce costly errors in entrepreneurial decisions, — building on the demand as launched by CRPMEM[2] Bretagne's START project, which supports and secures the installation and takeover of fishing businesses across Brittany.

START project — funded by EMFAF for 18 months across Breton departments —. Its starting diagnosis is that fishing captains find no single operator able to support them end-to-end, and instead face a fragmented, hard-to-read landscape of banks, management centres and administrations. START's response is to map and coordinate these operators into one directory per department, to structure a clear installation pathway, and to design an accompanying guide with technical fact sheets.

Challenge 2 — Attractiveness and transmission of fishing professions/skills

The fishing sector in Cornouaille faces a sharper recruitment and retention challenge than its economic viability alone would suggest. According to the port stakeholders consulted, the loss of appeal among young people owes less to economic factors than to media, social and environmental perceptions: even where the profession pays well, that is no longer enough to attract people. The picture is not without nuance — the maritime lycée du Guilvinec[3] has observed a renewed, if still uncertain, interest in fishing among its students after years oriented more towards leisure boating. Yet many boats are currently for sale on the ports of Cornouaille without finding buyers, and crew shortages already force some vessels to stay docked, at a direct cost to their owners. Remoteness, physical demands and an already saturated coastal fishery limit vocations further, while informal, trial-and-error learning on board is no longer enough.

[2]Comité Régional des Pêches Maritimes et des Elevages Marins, Regional Professional Fisheries and Aquaculture organisation
[3]Maritime highschool

2.2 Solution Prototype

Vision

The Fishing Entrepreneurship Toolkit sets out to collect, design several useful tools to start a fishing business. A first brick could be to turn CRPMEM Bretagne's recorded entrepreneurship webinars — currently over one-hour long, static and hard to search — into short, engaging and validated digital content.

Short-term : prototype five-to-six-minute videos and podcasts from the START webinar archive, starting with the topic of fishing licences; test AI-assisted production tools for scripting, voice-over and editing; and explore a visual identity for the series.

Medium-term : launch a full series covering the other core START topics — quotas, legal structures, financial management — gather feedback from fishermen and support actors, refine the format, and extend distribution across Finistère.

Long-term : scale this first entrepreneurial brick the toolkit, integrate it into CRPMEM's digital library, and broaden its themes to diversification, sustainability and succession planning, with a view to national replication.

This timeline enables to dovetail with START project's own calendar: the network mapping and first directory closes out in late 2025, guides and fact sheets follow, the pathway itself is formalised from 2026.

Description of the Solution Prototype

START project surfaces a need that goes beyond installation itself: a genuine support gap on business management and team leadership. CRPMEM is looking for "hyper-short, highly individual and practical" formats, and for a support pathway designed around fishing enterprises and the constraints and mindsets of those who run them — an ambition the Fishing Entrepreneurship Toolkit solution designed could serve as one of its building blocks.

The toolkit could contribute to START's broader installation pathway rather than a stand-alone product: where START builds the human network — the CDPMEM[5] entry points, the departmental referents, the operators, the accompanying guide and technical fact sheets — the short video series could give that network a light, on-demand knowledge layer that fishermen but also intermediaries can consult on their own terms.

[4]Vocational training operator (OPCO) dedicated to training and skills development in the agricultural, agri-food, fisheries, and territorial sectors.
[5] Departemental committee for maritime fisheries and aquaculture

Reality Check

Risk matrix : the video serie

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Technical complexity: production quality depends on AI tools still being tested.			Finding the appropriate & efficient AI tools is not easy
Production costs: motion design and AI subscriptions add up over a full series.			Impossible to find free AI tools to do the job; AI assistance is used to reduce editing time
Content accuracy: a mis-scripted episode could mislead viewers on regulatory matters.			Every script is validated by CRPMEM before publication.
Low discoverability: podcasts are easily lost among online content.			Need for active promotion and communication strategy
HR effort to coordinate and facilitate the production process of video			Especially at the beginning, before the process becomes more automated. HR effort is closely linked with resources dedicated to the START project (dependance on public financing)

Conclusion — key success factors:

Guided by its content, validation and distribution pillars, the prototyping is already under way: the topic of fishing licences was chosen for the test and working sessions were scheduled in summer 2026. This work lays the foundation to facilitate this initiative achievement and edit qualitative short videos.

Proven demand: CRPMEM's START webinars already draw strong attendance from intermediaries alike, confirming the appetite for structured entrepreneurship content.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Empowers fishermen support organizations/intermediaries to be more aligned with complex on-the-ground realities and to better structure their support (staff turnover, etc.) Could empower fishermen and improve knowledge equity between newcomers and experienced bosses. Modernises and structures knowledge-sharing in a traditionally oral, informal sector, in line with the objectives of the START project.	5
Confidence	Proven demand: CRPMEM's START webinars already draw strong attendance from support actors. CRPMEM already has the resources/material available via the webinars. AI tools development enables to produce qualitative videos without needs to pay a video service provider	4
Effort	Moderate effort: production is AI-assisted and re-uses existing webinar content rather than creating it from scratch. Low infrastructure needs, as the toolkit is fully digital and hosted on CRPMEM's existing website. Requires CRPMEM's validation time and AI-tool subscriptions, and ongoing coordination between the two lead partners.	3

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 3 = 6.67

Overall, the toolkit combines strong stakeholder confidence and proven demand with a moderate, manageable level of effort, thanks to its reliance on existing content and AI-assisted production — positioning it as a credible, low-risk entry point into the wider "learning maritime enterprise" theme.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Leadership lies with CRPMEM Bretagne, which provides the START webinar content, the expert validation of every script, and its distribution channels. Technopole Quimper-Cornouaille has brought technical support, coordinating AI-tool testing, storyboard design, script support and a graphic charter as the FISHINN partner on the ground.

- Fishermen and support organisations: feedback providers, pilot testers and ambassadors for promotion, engaged through CRPMEM's network.
- Maritime schools: potential partners for integrating the toolkit into training, and a source of student feedback.

B) BUSINESS MODEL & POTENTIAL FUNDING

Costs are concentrated on AI-tool subscriptions for script extraction, voice-over and editing, and on CRPMEM staff dedicated time. It currently relies on the CRPMEM's own budget (START project is co-funded by EMFAF).

C) NEXT STEPS

The first step is to complete the prototyping phase in June-July 2026: finalising the scriptwriting process and storyboard, testing AI platforms for video editing, various graphic approaches.
Pilot testing will follow over the third and fourth quarters of 2026, with a first series of three to five videos released on CRPMEM's digital library, feedback gathered from fishermen and support actors and the format refined accordingly before other topics such as quotas, legal structures and financial management are added.

From 2027, the toolkit could move into scaling: a fuller series covering all START webinar topics, and new themes such as quotas, recruitment... opening the way, later, to potential replication in other French fishing regions and to partnerships with national fishing organisations.



3. PESK — A Port Food Market Celebrating Local Fish (Saint-Guénolé-Penmarc'h)



This roadmap aims to reconnect the port of Saint-Guénolé-Penmarc'h with its residents and visitors, and to give its fishing community a new outlet for direct sale, through PESK — a recurring, convivial food market built around local fish and those who catch it.

3.1 Priority Challenges

Challenge — Disconnection between the port, fishermen, residents and visitors

Saint-Guénolé-Penmarc'h, a historic fishing port in Cornouaille, faces a growing gap between its fishing community and the people who live in or visit the area. Residents and tourists have little direct contact with fishermen, the fish auction, or the daily rhythm of the port; the fish auction hall and other port spaces sit idle outside working hours; the fish auction is at risk of closing (fish landings decreasing and increasing cost for maintenance…); and despite the quality of local landings, the origin and story of the fish rarely reach the consumer. Link with regulations, Direct sales from fishermen to the public remain limited, capping the local economic return of the catch.

Closing this gap would rebuild trust and pride in local fishing by raising transparency on its sustainable practices, open new revenue streams for fishermen and restaurateurs alike, turn port spaces back into places of everyday life, and give consumers a more informed relationship with sustainable, local seafood and fishing practices and heritage. PESK responds directly by turning the port into a recurring, convivial event space built around local fish and the people who catch it playing to current trends towards conviviality, localism and sustainability while reinforcing Saint-Guénolé's branding as a seafood destination.

3.2 Inspiring Best Practices

MARCHÉ À MANGER (RENNES, BRITTANY)

Held monthly since 2016, Rennes' Marché à Manger brings local chefs together to cook on site and serve dishes at a single, affordable price (€10–15), eaten at shared tables that turn the meal into a social occasion; the format now draws over a thousand visitors a month. Its success shows that recurring, affordable and convivial formats engage communities durably, that on-site cooking and shared dining strengthen social ties, that an unusual venue — such as a fish auction hall — adds novelty and draws attention, and that a single-price model simplifies the visitor's decision and encourages participation.

https://www.tourisme-rennes.com/decouvrir-rennes/gastronomie/marche-a-manger-rennes/

SELO DE MAR (PORTUGAL)

It is a Portuguese company dedicated to reviving and innovating traditional fish preservation techniques, with a special focus on producing garum—a fermented fish sauce originating from Roman times. The company aims to study and recover these ancient methods, adapting them to contemporary tastes and promoting Portugal's gastronomic heritage.
The case of Selo de Mar illustrates how innovative product development combined with strong territorial identity and storytelling can enhance the perceived value of seafood products and create direct connections with niche markets. This approach highlights the importance of differentiation, local branding and the user experience.

https://selodemar.com/

3.3 Solution Prototype

Vision

To reconnect Saint-Guénolé's port with its community while giving local fishing a new commercial outlet, this roadmap follows a threefold path: piloting the format, extending it, and scaling it.

Medium-term : pilot event in Saint-Guénolé, testing format, logistics and public interest, move to regular events (twice or three or four times per year).

Long-term : scale PESK into a model for Cornouaille, integrated into territorial tourism and seafood branding — connecting consumers directly with fishermen, promoting short-chain sales and under-used species, and offering a template other Breton ports could adopt.

Description of the Solution Prototype

PESK — "fish" in Breton — is a recurring food market held in Saint-Guénolé's port district, directly inspired by Rennes' Marché à Manger. Local restaurateurs, food trucks and caterers cook on site to showcase local fish, serving dishes at a single affordable price (targeted at €10–15) at shared tables, for conviviality, or in reusable containers, for takeaway. Held in an unconventional venue such as the fish auction hall (criée), the event pairs this cooking offer with animations — cooking demonstrations, meet-and-greets with fishermen, live music — that give it a distinct, memorable atmosphere.

The format speaks to several current trends at once: conviviality, through shared dining; localism, through short-chain seafood that benefits fishermen and local businesses directly; accessibility, through affordable, flexible pricing; sustainability, through seasonal and under-used species and eco-friendly packaging; and tourism appeal, through the distinctiveness of the port setting.

Its value extends across several dimensions. Economically, it can create new revenue for fishermen through direct sales and for restaurateurs, food trucks and suppliers, while short-chain trade strengthens margins. Socially, it rebuilds ties between the port, its residents and its visitors, educates consumers about local fishing, and nurtures pride in maritime heritage. Culturally, it celebrates Breton fishing traditions through food and storytelling, and gives visibility to under-used species. Environmentally, cooking to demand and sourcing seasonally helps reduce food waste and encourages more sustainable consumption. And for tourism, it strengthens Saint-Guénolé's appeal as a seafood destination, complementing existing events.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Low public participation.			Strong multi-channel promotion, free entry and attractive animations.
Weather conditions, if held outdoors.			Indoor backup in the fish auction hall; tents and heaters for outdoor setups.
Organisational costs.			Seek local sponsorships and rely on volunteer support.
Logistical constraints (equipment, hygiene).			Partner with port authorities on safety/hygiene compliance; rent professional equipment.
Mobilising stakeholders (chefs, fishermen).			Make benefits clear (exposure, sales); appoint a dedicated coordinator.
Seasonal traffic fluctuations & Competition with existing events.			Schedule around peak periods and existing local events; Coordinate with the local calendar; differentiate through the seafood focus and venue.
Regulatory hurdles (food safety, permits).			Engage early with the town hall and port syndicate; ensure HACCP compliance.

Conclusion — key success factors:

Guided by its cooking offer, its venue and its animations, the PESK prototype could be designed to be tested quickly and cheaply

- **Strong project leadership:** a dedicated coordinator is essential to manage logistics, stakeholders and promotion.
- **Stakeholder mobilisation:** fishermen, chefs and volunteers need to be engaged and kept motivated.
- **An attractive, accessible offering:** diverse, high-quality dishes at an affordable single price.
- **Effective, multi-channel promotion:** social media, local press and word-of-mouth.
- **Compliance and sustainability:** HACCP standards, permits and insurance in place, alongside eco-friendly practices such as reusable containers and seasonal species.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Economic: new revenue for fishermen and restaurateurs through short-chain sales. Social: rebuilds ties between port, residents and visitors, and educates consumers. Cultural: celebrates Breton maritime heritage and values under-used species. Tourism: strengthens Saint-Guénolé's appeal, complementing existing local events. Environmental: encourages sustainable consumption.	5
Confidence	Proven model: Rennes' Marché à Manger has thrived since 2016. Strong local interest Aligned with current trends towards conviviality, localism and short-chain trade.	4
Effort	Moderate initial effort, drawing on existing infrastructure and volunteer support. Logistical challenges around permits, equipment and coordination. Requires a dedicated coordinator for project management.	4

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 4 = 5

Overall, PESK combines high potential impact with strong local confidence, for a strong level of effort — a promising prototype for revitalising the port and its community ties.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

A project coordinator, still to be identified, either from a non-profit or private organisation, will be critical to bring the various stakeholders together.

- Local authorities: Saint-Guénolé-Penmarc'h town hall; the Cornouaille Ports Syndicate, and the Intermunicipality (Communauté de communes Pays Bigouden sud)
- Volunteer fishermen: supply the fish and engage with the public through demonstrations and storytelling; to be mobilised via the port syndicate.
- Restaurant owners, food trucks and caterers: cook and sell dishes on site; to be recruited among local chefs and guinguettes.
- Local associations: supportive, contributing volunteers, animations and community outreach.
- The Pays Bigouden Sud tourism office: a potential partner for promotion and tourist integration.

B) BUSINESS MODEL & POTENTIAL FUNDING

Revenue is expected to come mainly from dish sales, shared with participating chefs, complemented by an optional entry fee for non-dining attendees, local sponsorships, and modest merchandise sales such as reusable containers or branded aprons. Costs — permits and insurance, equipment rental, hygiene and safety compliance, communication, raw materials, a part-time coordinator's time, and animations — are estimated in the tens of thousands of euros for a pilot year. Funding is expected to combine public fundings in any case at the beginning, with in-kind contributions from the town hall and port syndicate, private sponsorships from local businesses, and possibly a crowdfunding campaign to seed the first edition.

C) NEXT STEPS

The first step is to identify a project leader, form the project team — town hall, port syndicate, associations and volunteers — secure the venue in potentially the fish auction, and define the event's format, its regularity (one, twice, three, four times per year) pricing and animations, drawing on Rennes' Marché à Manger as a benchmark. Stakeholders will then be mobilised, with three to five chefs or food trucks recruited and fishermen's participation confirmed, permits obtained, and a communication campaign launched, ahead of a half-day pilot targeting fifty attendees, with feedback gathered from visitors, chefs and fishermen to evaluate attendance, sales, atmosphere and logistics.

Building on that feedback, the model will be refined, funding secured, and the event turned into a more recurring format enriched with thematic editions, cooking workshops and live music, and tracked through attendance, revenue and social-media indicators.



Interreg
Atlantic Area
FISHINN
Co-funded by
the European Union

LOCAL INNOVATION ROADMAPS FROM IRELAND — MUNSTER / SOUTH-WEST COAST

05

The Irish partner, Munster Technological University (MTU Kerry), has developed three roadmaps for Kerry and the south-west coast, centred on the ports of Fenit, Dingle and Portmagee and the wider Tralee Bay and Castlemaine Harbour area. They are not three separate proposals. They are three layers of a single system.

• The coordination layer. A national Blue Economy Cluster, giving the sector a single, legible structure and a seat at the Atlantic table.
• The skills layer. A coordinated skills and talent ecosystem, with the Innovate Blue fellowship programme as its flagship.
• The value chain layer. A programme activating underutilised species, developing higher-value products, and opening circular pathways for processing side-streams.

Each addresses one of three priority challenges identified in Kerry: underutilised species with limited market channels, limited new product development capability, and the underutilisation of processing by-products. All three build on the existing service platform of MTU's Circular Bioeconomy Research Group and share a five-year horizon of progressive expansion through regional, national and international partnership.

1. National Blue Economy Cluster – The national layer



Ireland currently has no formal Atlantic-facing blue economy cluster. Research outputs stall between TRL 4 and TRL 6. Regional intellectual property leaks out of the territory. Industry actors across Ireland's Atlantic coastal counties speak with separate voices. A national Blue Economy Cluster closes that gap.

1.1 Priority Challenges

Challenge 1 — A fragmented blue economy innovation ecosystem

Ireland's Atlantic coast holds strong marine assets in fisheries, aquaculture, marine renewables, seafood processing, ports and research centres, but innovation support remains fragmented. Actors operate in silos across counties, institutions and funding streams, and SMEs struggle to navigate research and innovation supports, EU programmes and commercialisation pathways. Without structured coordination the sector duplicates effort, under-leverages EU funding and loses ground to established clusters elsewhere in the Atlantic Area.

Challenge 2 — Weak commercialisation and scale-up pathways

Marine research outputs from the Irish higher education and research system often fail to move from TRL 4 to 6 into market-ready solutions, and there is no structured incubation or acceleration tailored to blue economy enterprises. Where these gaps persist, regional intellectual property leaks to other territories, start-ups relocate or never begin, and regional employment multipliers go unrealised.

Challenge 3 — Limited structured internationalisation

Informal links exist with European marine regions, but there is no formalised cooperation platform linking Ireland's Atlantic coast with aligned ecosystems. Formal alignment would raise EU and Interreg proposal success rates, enable interregional testbeds and strengthen Atlantic Arc positioning.

1.2 Inspiring Best Practices

The following best practices, identified during the benchmarking phase, offer inspiration for the Fish Churros prototype developed in this ecosystem.

ICELAND OCEAN CLUSTER

Its co-location model for marine start-ups, its "100% Fish" value-maximisation concept, its industry and research proximity and its cluster diplomacy. It inspires a physical innovation hub acting as the cluster's nucleus while leveraging distributed regional nodes.

https://sjavarklasinn.is/en/

PORTXL

Its structured maritime accelerator model, corporate and start-up matchmaking, clear TRL progression pathway and investor engagement. It inspires an accelerator stream aligned with fisheries, aquaculture, marine technology and ports.

https://portxl.org/

HUB AZUL PORTUGAL

Its regional coordination platform, public and private governance, alignment with regional smart specialisation and structured EU funding integration. It inspires the cluster's governance architecture and funding alignment model.

https://hubazul.pt/en_gb/

1.3 Solution Prototype

Vision

What a national cluster gives Ireland, in four parts.
• A seat at the Atlantic table. Horizon Europe, Interreg Atlantic Area and the EU Ocean Mission shape their funding priorities around regional clusters representing their territories.
• Fragmented actors become a market. Currently present as unconnected dots and difficult for investors to read as a market. A national cluster makes them legible as one, concentrated, credible and addressable.
• Intellectual property generated and kept in Ireland. Without coordinated infrastructure, research stalls before commercialisation or is exported at commodity value.
• Roadmaps become programmes. Roadmaps without an institutional wrapper depend on individual commitment to stay alive. A cluster provides governance, industry membership and a succession plan, so initiatives become programmes and programmes become infrastructure that outlasts any one person or project.

Short term, year one: formal cluster launch, governance structure established, founding membership in place.

Medium term, years two to three: a pipeline of EU projects under Interreg Atlantic and Horizon Europe, external funding leveraged, cross-regional demonstrators launched, and dedicated innovation space at MTU Kerry.

Long term, five years: recognition as an Atlantic blue innovation hub operating a self-sustaining model and supporting high-value marine start-ups and blue circular economy initiatives.

Description of the Solution Prototype

A structured national cluster coordinating fisheries, aquaculture, marine renewables, seafood processing and new product development, linking higher education institutions, research performing organisations and public authorities across Ireland's Atlantic coastal counties. MTU Kerry is a key partner and hosts the south-west node. It is not constituted as the lead of the national cluster.
Members: Munster Technological University, University of Galway, University College Cork, Atlantic Technological University, the National Maritime College of Ireland, Bord Iascaigh Mhara, the Centre for Applied Biotechnology

Research, county councils, the CIRCBIO Cluster Kerry and Marine Cluster Killybegs, the Department of Agriculture, Food and the Marine, Enterprise Ireland, BiOrbic and Teagasc.
The cluster remains anchored in the existing service portfolio delivered through the MTU Circular Bioeconomy Cluster (www.cbcsw.ie), expanding into marine innovation while maintaining continuity of current cluster supports.
Experimentation objectives: test the cluster governance model; pilot four innovation working groups covering fisheries, aquaculture, marine-derived products and seafood innovation; and test cross-regional collaboration with Atlantic partners.
Monitoring indicators: active members, funded proposals submitted, cross-regional projects initiated, start-ups supported, and investment leveraged.
Conditions for success: strong leadership, a clear value proposition, and a sustainable funding mix.[2]

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Organisational risk: insufficient industry engagement			Early stakeholder mapping essential. Early industry champions required.
Financial risk: funding dependency			Diversified revenue needed.
Social risk: resistance from traditional maritime sector actors			Reluctance to collaborate. Targeted engagement strategy required.
Social risk: talent and skills shortages			Lack of career paths and qualifications; dual income streams. Align with MTU/ATU programme development.

Conclusion — key success factors:

Key success factors: a strong anchor institution, first-mover position, strategic partnership agreements, early quick wins, and access to the EU network through Interreg and Horizon projects.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Establishes the first structured Atlantic-facing blue economy cluster in Ireland, aligned with Ireland's Smart Specialisation Strategy, the Atlantic Maritime Strategy and seafood development priorities, and positioning MTU Kerry as a recognised marine innovation anchor for the south west.	5
Confidence	MTU Kerry provides a physical base, governance credibility and operational continuity, and the Circular Bioeconomy Cluster already delivers innovation services, reducing start-up risk. A broad partner base is already identified across the higher education, agency and local authority sectors.	4
Effort	Requires a dedicated cluster manager, part-time administrative support, governance board engagement and thematic working group coordinators, with an initial operational budget and seed funding for pilot demonstrators. Office space is already available, so the requirement is coordination rather than capital investment.	3

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 3 = 6.67

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

MTU Kerry, with operational support from the Circular Bioeconomy Research Group.

B) BUSINESS MODEL & POTENTIAL FUNDING

Membership fees, EU project overheads, Enterprise Ireland and Interreg funding, and sponsorship from marine corporates.

C) NEXT STEPS

Formal stakeholder roundtable, draft governance charter, sign partner agreements, secure sustainable funding.



2. Skills and Talent for the Blue Economy – The skills layer



A coordinated skills and talent ecosystem embedded within MTU Kerry, with the Innovate Blue fellowship as the flagship programme, supported by a continuing professional development and micro-credential portfolio addressing workforce gaps. Ireland holds the fifth largest maritime territory in the European Union and has the ocean, the science, the industry and the entrepreneurial ecosystem. Its ocean economy generates just 2 per cent of modified gross national income. What is missing is the opportunity-discovery and commercialisation pipeline.

2.1 Priority Challenges

Challenge 1 — Blue economy skills gaps for decarbonisation and innovation

The marine economy is in structural transition, driven by decarbonisation targets, digitalisation, circular bioeconomy principles and evolving EU sustainability regulation, but skills provision across fisheries, aquaculture, seafood processing and marine technology remains fragmented and poorly aligned with emerging innovation needs. The specific gaps are decarbonisation literacy for coastal enterprises, fisheries and ports; circular seafood and marine-derived resource valorisation; blue digitalisation competencies; marine innovation management; and low-carbon technology adoption.

Challenge 2 — Weak talent retention and coastal community resilience

Peripheral coastal communities face demographic pressure, outward migration and limited visible career pathways in marine innovation. The region holds strong marine identity and indigenous knowledge, but structured routes from education into innovation-driven employment remain underdeveloped. New entrants are priced out of the sector unless they inherit, and no new licences are being granted, so there is no route to scale for those who do enter.

Challenge 3 — Limited integration between research outputs and skills delivery

Research and innovation outputs are not systematically translated into training modules, micro-credentials or enterprise-facing learning pathways, slowing knowledge diffusion, SME competitiveness and workforce adaptability.

2.2 Inspiring Best Practices

The inspiration remains aligned with the best practices reviewed under FISHINN WP2:

the Iceland Ocean Cluster, for its integration of innovation, entrepreneurship and education within a co-located ecosystem;

PortXL, for its structured capability development for maritime innovation readiness;

Hub Azul Portugal, for its alignment of regional smart specialisation with coordinated institutional collaboration.

These are adapted here through a skills-first model.

1.3 Solution Prototype

Vision

Innovate Blue delivers a pathway from opportunity discovery to innovation, intellectual property and high potential start-up creation, transforming marine bioresources through advanced industrial biotechnology, bioprocessing and clean technologies.

The programme at a glance.

Element	Detail
Cohorts	Three
Fellows	Twelve per annum
Duration	Ten months, full-time
Stipend	€38,000, tax-free
Participants	Experienced professionals with a minimum of five years post-qualification experience, recruited for entrepreneurial ambition
Output	Not a thesis. A portfolio of commercially validated opportunities with a route to a Commercialisation Fund application, a licence, or a High Potential Start-Up

Four industry immersive environments.

• Pillar 1. Seaweed and marine biomass systems. Converting seaweed and macroalgae into higher-value food, cosmetics and biomaterial products, moving the Irish seaweed sector beyond crude processing toward defined fractions with commercial value.
• Pillar 2. Marine ingredients and bio-based products. Identifying and developing marine-derived molecules, including peptides, polysaccharides, pigments and antioxidants, for food, nutraceutical, cosmetic and medical applications.
• Pillar 3. Seafood processing, circular manufacturing and resource recovery. Activating the shells, frames, bones and residual flesh currently sent to fishmeal, rendering or disposal, for proteins, collagen, chitin and bioactives.
• Pillar 4. Aquaculture, aquatech and sustainable production systems. Treating nutrient-rich aquaculture waste streams as an untapped biological resource through closed-loop system design, waste valorisation and integrated multi-trophic aquaculture.

Description of the Solution Prototype

Innovate Blue is delivered by a national consortium with global reach. Munster Technological University brings proven leadership in industrial biotechnology, marine bioresources and commercialisation. Atlantic Technological University brings all-island reach, opening the Killybegs cluster and the north-west marine economy. Bord Iascaigh Mhara brings national sector connectivity and a knowledge base reaching over 200 companies. Hatch Blue brings global blue economy deal flow and investor networks from an Irish base.

The programme has secured 40 Letters of Intent and Support across all pillars, spanning ten counties and four coastlines, with approximately 200 companies to be onboarded through five sectoral bodies. These are not endorsements. They are companies committing their time, their people and access to their operations, and stating in writing that they will champion Innovate Blue.

The programme is complemented by a continuing professional development and micro-credential portfolio, developed with industry co-design and delivered in flexible modular formats, addressing decarbonisation, circular seafood

product development, blue innovation management and coastal resilience.

Monitoring indicators: participants trained, CPD modules delivered, SME satisfaction, micro-credentials developed, industry co-design participation, and employment retention in coastal areas.

Conditions for success: strong industry co-design, flexible modular delivery, a blended funding model, and clear progression pathways.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Organisational risk: low SME uptake			Requires targeted outreach and sector champions.
Financial risk: funding instability			Blend of public and private revenue streams.
Social risk: skills mismatch			Continuous industry advisory input needed.
Social risk: talent migration persists			Long-term structural issue.

Conclusion — key success factors:

Key success factors: securing cohort funding, converting Letters of Intent into immersion placements, recruiting experienced professionals rather than recent graduates, and maintaining the commercial rather than academic character of the output.

Gains, Confidence and Effort (GCE) matrix

	Arguments & supplements	Estimated Scoring 1-5
Gains	Addresses a skills gap that industry has confirmed in writing through 40 Letters of Intent, reaching ten counties and four coastlines and some 200 companies. Creates visible career pathways in coastal communities where new entrants are otherwise priced out, and converts research outputs into enterprise-facing capability.	5
Confidence	The consortium is formed and complementary: MTU for industrial biotechnology and commercialisation, ATU for all-island reach, Bord Iascaigh Mhara for sector connectivity, Hatch Blue for investor networks. Industry demand is documented rather than assumed.	4
Effort	Foundational teaching and research capability already exists at MTU and ATU. The substantive requirements are cohort funding at €38,000 per fellow, coordination of industry immersion placements, and sustained recruitment of candidates with five or more years of relevant experience.	3

Estimated prioritisation score = Gains × Confidence / Effort = 5 × 4 / 3 = 6.67

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

Munster Technological University, Atlantic Technological University, Bord Iascaigh Mhara and Hatch Blue, with the Circular Bioeconomy Research Group as the operational platform.

B) BUSINESS MODEL & POTENTIAL FUNDING

Enterprise Ireland programme funding, CPD and micro-credential fees, EU funding under Interreg Atlantic and Horizon Europe skills calls, EMFAF support, and regional development funding.

C) NEXT STEPS

Secure programme funding, confirm the first cohort, convert Letters of Intent into immersion placements, establish the industry advisory panel, and launch the first cohort.



3. Seafood Value Chain Development – The value chain layer



A three-stream programme activating underutilised species, developing higher-value products, and opening circular pathways for processing side-streams within existing Irish facilities. It also carries a preservation objective, protecting one of Europe's last remaining self-seeding oyster beds.
Species are moving northwards as waters warm. Spider crab, sardine, anchovy and octopus occur in Irish waters in increasing volumes but lack established commercial processing pathways or market channels. This shift is not yet reflected in national market development supports, and activating sales channels and product innovation for incoming species is one route to offsetting the quota losses affecting pollack, brown crab, hake and mackerel. Spider crab remains almost entirely underutilised. Sardine and anchovy, widely consumed elsewhere in Europe, enter the Irish value chain as fishmeal, the lowest position available to them.

3.1 Priority Challenges

Challenge 1 — Underutilised species with limited market channels

These species occur in significant volumes but remain commercially underdeveloped through weak market pull, limited product formats and insufficient processing pathways. New market channels would diversify fisher and processor income, reduce dependency on a narrow set of target species, and improve resilience against ecological and market variability.

Challenge 2 — Limited new product development capability

Much of the Irish seafood sector remains oriented toward traditional formats and commodity channels, with limited capacity for prepared foods, sauces, stocks, functional ingredients and premium convenience products. Stronger product development capability increases margin capture, supports export diversification, and allows Irish processors to compete where provenance, sustainability and innovation are rewarded.

Challenge 3 — Underutilisation of processing by-products

Processing generates shells, frames, bones and residual flesh that are treated as low-value streams but are, in a circular bioeconomy context, valuable biological resources suitable for conversion into food-grade ingredients and other high-value outputs.

3.2 Inspiring Best Practices

ICELAND OCEAN CLUSTER

The "100% Fish" initiative demonstrates full-utilisation approaches in which multiple high-value product streams are derived from a single species through coordinated innovation, processing optimisation and market development.

https://sjavarklasinn.is/en/home/100-fish/

SUPERGROUND (FINLAND)

Industrial approaches for transforming fish frames and by-products into food-grade ingredients through mechanical separation and fine processing, converting waste streams into nutritionally valuable inputs for soups, sauces and prepared foods.

https://www.superground.com/

NORDIC SEAFOOD INGREDIENT AND PREPARED-FOOD MODELS

Crustacean and pelagic species used in sauces, stocks, ready-to-eat formats and speciality ingredients, supported by product design, branding and high-trust quality systems, illustrating routes to market for sardine and anchovy products and for spider crab-derived bases and condiments.

3.3 Solution Prototype

Solution Prototype 1 — Spider Crab Valorisation Programme

Vision

To unlock the economic potential of spider crab through a processing and product development pathway that goes beyond claw extraction. Short term, feasibility studies and pilot trials validate product concepts and processing methods. Medium term, the programme develops bisques, stocks, sauces and condiments and validates ingredient-processing routes for the remaining biomass. Longer term, repeatable commercial processing models support stable market channels and higher value capture for coastal processors.

Description of the Solution Prototype

The programme coordinates processors, researchers and innovation supports to develop market-ready products while maximising biomass utilisation. After claw removal, remaining body material can be cooked and extracted to produce flavour bases for bisques, stocks and sauces. Residual flesh and shell can then be processed into food-grade ingredients using approaches analogous to SuperGround-style by-product processing. The work requires pilot-scale trials and may require capital investment in cooking, separation and ingredient-processing systems, potentially explored through Enterprise Ireland innovation supports alongside EU seafood innovation funding streams.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Technical risk: processing yield and food-safety validation for residual biomass			Pilot-scale trials and specialist processing-technology partners required.
Organisational risk: limited processor appetite to commit volume to an unproven product			Early processor engagement and written commitments before capital decisions.
Financial risk: capital cost of cooking and separation equipment			Shared-access model through the Circular Seafood Innovation Lab mitigates individual exposure.
Market risk: no established domestic market for spider crab products			Buyer-led development and reference to Nordic and Iberian market precedents.

Conclusion — key success factors:

Key success factors: early processor engagement, credible pilot trials, a clear commercial value proposition, and a staged pathway from prototype to investable processing model.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

MTU as lead, with seafood processors, Bord Iascaigh Mhara, fisheries organisations and specialist processing technology partners.

B) BUSINESS MODEL & POTENTIAL FUNDING

Processor-led commercialisation supported by innovation funding, including EMFAF and national innovation and capital supports.

C) NEXT STEPS

feasibility and market assessment with written commitments from buyers and processors in Q3 2026; pilot processing trials and prototype product development; validation with buyers and preparation of an investable processing plan in the first half of 2027; first commercial runs targeted for summer 2027.



Solution Prototype 2 — Sardine & Anchovy Market and Product Development Programme

Vision

To create viable Irish processing and market pathways for sardine and anchovy, establishing sales channels with canneries and processors in the Basque Country through MTU's relationship with Leartibai Fundazioa. Short term, the programme assesses processing feasibility and target markets, work already under way through a study visit to companies around the Port of Ondarroa with the capacity and interest to work directly with Irish vessel owners and to help arrange contracts with operators in the port region. Medium term, the aim is consistent commercial routes that increase value capture from small pelagic resources. Longer term, prototypes in preserved and ready-to-eat formats.

Description of the Solution Prototype

The programme combines product development, processing trials and market positioning to identify routes to premium and mainstream markets, exploring preserved formats and ingredient use in prepared foods, informed by comparison with European markets where these species are already established. A relevant Irish precedent exists in operators who already use canning capacity in Ondarroa to package high-value canned and jarred products, a capability not currently available in Ireland.

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Organisational risk: weak domestic demand and limited retail familiarity			Brand/provenance strategy and targeted buyer engagement; mitigate via staged product testing and customer validation (already under way).
Technical risk: processing economics, seasonality constraints, and the technical complexity of shell/flesh processing			Pilot trials and partnership with processing-technology expertise (already under way); align product formats with supply variability.
Financial risk: capital investment required for processing facilities; regulatory/food-safety requirements for new ingredients			Reluctance by primary producers to take on risk given the lack of government focus; a demonstrated business case and funding pathways are required.

Conclusion — key success factors:

Buyer-led product development, differentiated positioning, and processing models suited to Irish supply conditions.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

A) POTENTIAL PARTNERS INVOLVED

MTU, BIM, primary producers, processors, and market-channel partners (foodservice, retail, export buyers).

B) BUSINESS MODEL & POTENTIAL FUNDING

Commercial product lines supported by innovation funding, market development supports and pilot production.

C) NEXT STEPS

market assessment and buyer engagement in the Basque Country; processing feasibility trials; negotiation of contract arrangements with Ondarroa operators; and prototype development in preserved formats.



Solution Prototype 3 — Circular Seafood Innovation Lab at MTU Kerry

Vision

A shared pilot-scale facility supporting seafood product development and circular processing trials, enabling processors to test new methods without bearing full upfront risk, and supporting ingredient development from by-products alongside rapid prototyping of new seafood products.

Description of the Solution Prototype

The lab hosts pilot-scale cooking, extraction, separation and ingredient-processing equipment suitable for crustacean and pelagic product development, functioning as a collaboration platform linking research capacity with processor needs and supporting both innovation projects and workforce training. It is the physical infrastructure on which Prototypes 1 and 2 depend, and the point at which this roadmap connects to the skills layer at Section 5.2

Reality Check

Risk matrix

DESCRIPTION OF THE RISK(S) (Technical, Financial, Societal, etc.)	L	I	FURTHER REMARKS
Financial risk: capital cost of pilot-scale equipment			Blended national, EU and industry co-investment; phased equipment acquisition.
Organisational risk: governance of a shared-access facility			Industry steering group with clear access and intellectual property rules from the outset.
Operational risk: low utilisation rates			Secure industrial demand commitments before capital spend; combine innovation use with workforce training use.
Regulatory risk: food-grade compliance for pilot production			Design to food-grade standard from the start rather than retrofitting.

Conclusion — key success factors:

Key success factors: documented industrial demand before capital commitment, clear shared access governance, and alignment with existing MTU and cluster infrastructure.

Terms of Implementation

Detailed information is provided by the transfer plan (Deliverable 2.2)

Hosted at MTU Kerry with an industry steering group. Funding pursued through a blend of national innovation and capital supports, EU seafood innovation funds, and industry co-investment. Infrastructure and capital to be secured in the first half of 2027, with first commercial runs targeted for summer 2027.

Preservation stream — Tralee Bay and the Fenit oyster beds
The Tralee Bay area is home to one of Europe's last remaining self-seeding oyster beds, sustained by forty years of co-management by the local fishing community. The ecosystem and the community that depends on it are both in jeopardy.

The Tralee Bay Marine Biodiversity Restoration Project is a five-year, €7.9 million initiative launched in August 2026 to restore marine habitats in County Kerry. It sits alongside this roadmap as the conservation counterpart to its commercial streams, and provides the ecological baseline against which value chain development in the bay can be assessed.

The roadmap also proposes using Horizon links and funding to create deeper and faster knowledge exchange between fishing and coastal communities on changing climate and species distribution dynamics, so that the sector can respond proactively rather than reactively.

C) NEXT STEPS

6 continuation routes after Fishinn:
• A follow-on proposal under the Interreg Atlantic Area 4th Call.
• The Horizon Europe “By Fishers, For Fishers” call, centred on the Tralee Bay area.
• Innovate Blue skills and talent delivery.
• Continued access to the Local Innovation Forums established during the project.
• Deeper leverage of the Fisheries Local Action Group connection.
• Research and education partnerships with Technopole Quimper-Cornouaille and Pôle Mer Bretagne Atlantique in Brittany, Leartibai Fundazioa in the Basque Country, and Sines Tecnopolo in Portugal.

The Irish work sits within a wider portfolio. The Circular Bioeconomy Research Group at MTU Kerry holds more than €25 million in live EU project funding across seven projects, including PHAROS, FISHINN, BIOCHAINS Atlantic, SMARTCOAST, MARINNONET, FANBEST and DIBEST, and leads the marine challenge within BiOrbic, Ireland’s national bioeconomy research centre. That sustained portfolio is what allows a regional campus to hold its position in European marine research rather than participating project by project.



Conclusion

Taken together, these twelve Local Innovation Roadmaps reveal a set of shared priorities across the four Fishinn territories, despite their different starting points and levels of maturity. Whatever the entry point nearly every pilot addresses the same underlying question: how to capture more value locally from what is already being caught, landed or produced, rather than losing it to export, low-value channels or under-used species and by-products. A second, closely related thread runs through almost as many roadmaps: reconnecting fishing communities with the people around them, whether that means bringing consumers back to seafood, opening ports to visitors, or giving newcomers a clearer path into the profession.

These convergences are not incidental. They confirm that the challenges identified independently by each territory during WP1 and WP3 of the project — value capture, market access, generational renewal, and coordinated governance — are genuinely shared across the Atlantic Area, even where the proposed solutions differ in form and ambition, from a single-product pilot to a multi-partner regional cluster. This is precisely the kind of convergence the Fishinn methodology was designed to surface, and it strengthens the case for continued exchange between partners: several roadmaps already build directly on practices showing that transferability is not only a goal on paper but can already happen in practice.

These twelve roadmaps are not a final destination but a working foundation. Several prototypes are still to be tested, funded or staffed, and their next steps — pilot trials, partnership agreements, funding applications — will need to be tracked over the coming months. Their real value lies in what they make possible next: feeding, alongside the WP2 benchmarking work, into the forthcoming Atlantic Fisheries Ecosystem Innovation Roadmap, where these local trajectories can be read together as a single, coherent story of innovation across the Atlantic Area's fisheries ecosystems.

Glossary

In the following appendix, you will find a dictionary of all the specific terms used and their explanation

• **ADL (Associação de Desenvolvimento do Litoral Alentejano)** : Regional development association supporting sustainable rural and coastal development, local innovation, entrepreneurship, skills development, and community-led initiatives across the Alentejo Coast, Portugal.

• **Associação Casas Brancas :** Non-profit network promoting sustainable, quality-driven tourism in Portugal's Alentejo coast and west Algarve region by uniting vetted accommodation, restaurants and outdoor activities, and, since 2014, by developing Creative Tourism experiences in strategic partnership with local cultural players to give visitors immersive access to the area's heritage, ecology and landscape while benefiting local communities.

• **ATU – Atlantic Technological University :** Donegal.

• **Bantry Marine Research Station :** Conducts research on finfish, shellfish and algae in marine hatcheries (Cork).

• **BiOrbic (Research Ireland Centre for Bioeconomy)** : Ireland's national bioeconomy research centre, bringing together researchers, industry, policymakers, and communities to advance a sustainable circular bioeconomy through innovation in renewable biological resources, ecosystem restoration, and waste valorisation.

• **Bizkaia Coastal Fishing Producers' Organisation [OPESCAYA]** : The equivalent of OPEGUI in Bizkaia, responsible for representing local coastal fishing producers, fostering sector development, and implementing initiatives to enhance the value of fish and seafood products [https://opescaya.eus/].

• **Bord Iascaigh Mhara (BIM)** : Ireland's national seafood development agency, supporting the fisheries, aquaculture, and seafood processing sectors through funding, technical expertise, innovation, training, sustainability programmes, and business development services.

• **CIEMAR (University of Évora)** : Marine research and innovation center based in Sines, Portugal, specializing in marine biology, coastal ecology, environmental monitoring, marine resource conservation, education, and scientific outreach.

• **Coastal Fishing Producers Organisation [OPEGUI]** : A regional organisation representing coastal fishing producers in Gipuzkoa, Basque Country, coordinating activities, promoting sustainable fishing practices, and supporting the marketing of local seafood.

• **Community-led local development (CLLD)** : A predominantly bottom-up approach that places citizens and communities at the centre of decision-making and policy development, allowing them to identify challenges, set priorities, and implement solutions.

• **CRPMEM Bretagne (Regional Committee for Marine Fisheries and Marine Aquaculture in Brittany)** : Professional body representing Brittany's fisheries and aquaculture sector, promoting sustainable marine resource management, supporting fishers, and contributing to maritime spatial planning, environmental policies, and marine research.

• **EMFAF (European Maritime, Fisheries and Aquaculture Fund)** : Runs from 2021 to 2027 and supports the EU common fisheries policy (CFP), the EU maritime policy and the EU agenda for international ocean governance.

• **Enterprise Ireland** : Ireland's national innovation and enterprise development agency, supporting startups, SMEs and high-growth companies through funding, innovation, internationalisation, and export development to drive sustainable economic growth.

• **Fishermen's Guild - Kofradia** : Oversees the weighing and sale of landed fish, ensures fishermen are paid, submits first-sale data to authorities, and acts as an intermediary between fishermen and administration. It also manages aid applications, handles vessel owners' social security, and supports regulatory compliance.

• **Hatch Blue** : Global aquaculture-focused investment, consulting, and venture development firm supporting sustainable seafood and blue economy innovation through accelerators, funding, and industry expertise.

• **Hub Azul** : Connects researchers, companies and public institutions in Portugal through a national network of hubs, offering access to specialised infrastructures, technical knowledge and support to design, test and scale Blue Economy solutions (Lisbon).

• **Offshore Fishing Producers' Organisation [OPPAO]** : A producer organisation based in Ondarroa, Bizkaia, representing the owners of deep-sea fishing vessels. Its mission is to support sustainable fishing practices, improve the marketing and sale of its members' catches, ensure compliance with the Common Fisheries Policy, and add social and economic value to the local fishing sector. OPPAO also promotes innovation, such as digital fish auctions and educational and promotional activities to strengthen the visibility and sustainability of the industry [https://oppao.es/].

• **Ondarroa19** : Seafood wholesale company in Ondarroa that handles the landing, weighing, and sorting of fish, conducts live auctions and exports, ensures payment, and provides logistical and operational support to fishing vessels [https://ondarroa19.com/].

• **Ondarroa Port Fish Merchants Association [ONARE]** : Represents fish retailers and wholesalers. It defends the sector's interests, promotes fish sales, provides training and advice, supports sustainable practices, participates in fairs and events, collaborates with other associations, and contributes to fishing and marketing regulations.

• **PortXL** : Maritime accelerator connecting start-ups with corporates in ports, logistics, and offshore (Rotterdam).

• **RDI Hub** : A not-for-profit Public Private Partnership with Fexco, Kerry County Council and Munster Technological University. It supports startups, SMEs, researchers, and public organisations through applied innovation, AI, digital technologies, entrepreneurship, skills development, and European collaboration programmes.

• **SOSV** : Global deep-tech venture capital firm and startup accelerator supporting early-stage entrepreneurs in climate, health, biotech, AI, and advanced engineering through investment, mentorship, laboratory facilities, and international innovation ecosystems.

• **SuperGround** : Finnish food-tech company developing innovative processing technologies that enable the full utilisation of fish and poultry raw materials, reducing waste and emissions while increasing sustainable food production and resource efficiency.

• **TAIPA – Organização Cooperativa para o Desenvolvimento Integrado do Concelho de Odemira** : Community-based development cooperative promoting social inclusion, entrepreneurship, education, migration support, rural and fisheries development, and local innovation to strengthen sustainable territorial development in Odemira and the Alentejo region.