LOCAL INNOVATION BASED SOLUTIONS TRANSFER PLANS

- Septembre 2026 -

Interreg Atlantic Area FISHINN

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A quick reminder of the Project

Fisheries play a crucial role in the socio-economic advancement of coastal communities in the Atlantic Area. However, according to the EU Blue Economy Report 2021, the fisheries' ecosystems are progressively losing competitiveness as a result of different factors, such as the COVID crisis, Brexit, a lack of qualified workers and generational replacement, fuel price, global supply chain disruptions, quota regulatory uncertainty, climate change, and marine pollution. Meanwhile, the demand for food fish worldwide is expected to increase by 14.8% (OECD FAO Agricultural Outlook 2021-2030).

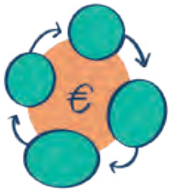
The overall objective of the Fishinn project is to increase the competitiveness and resilience of the ports that form four local fisheries ecosystems and value chains, in the Atlantic Area by reinforcing local actors' collaboration and innovation capacities. In order to stimulate the creation of new 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 will be supported by technological centres and clusters. To increase the resilience and competitiveness of fisheries ecosystems, this project will address the following key challenges:



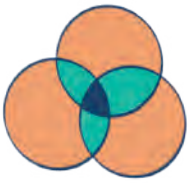
Cooperation and innovation



Digitalisation

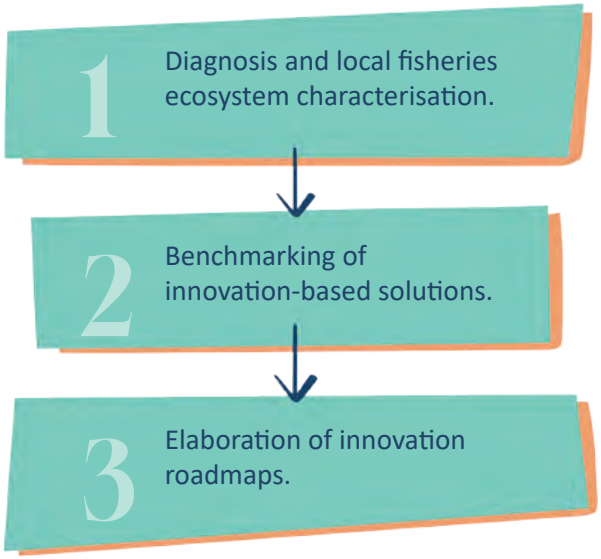


Transition towards a circular economy



Co-existence with other blue economy sectors

This project will be carried out in 3 steps :



Partners involved

5 direct partners :

Leartibai Foundazioa, Basque Country
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

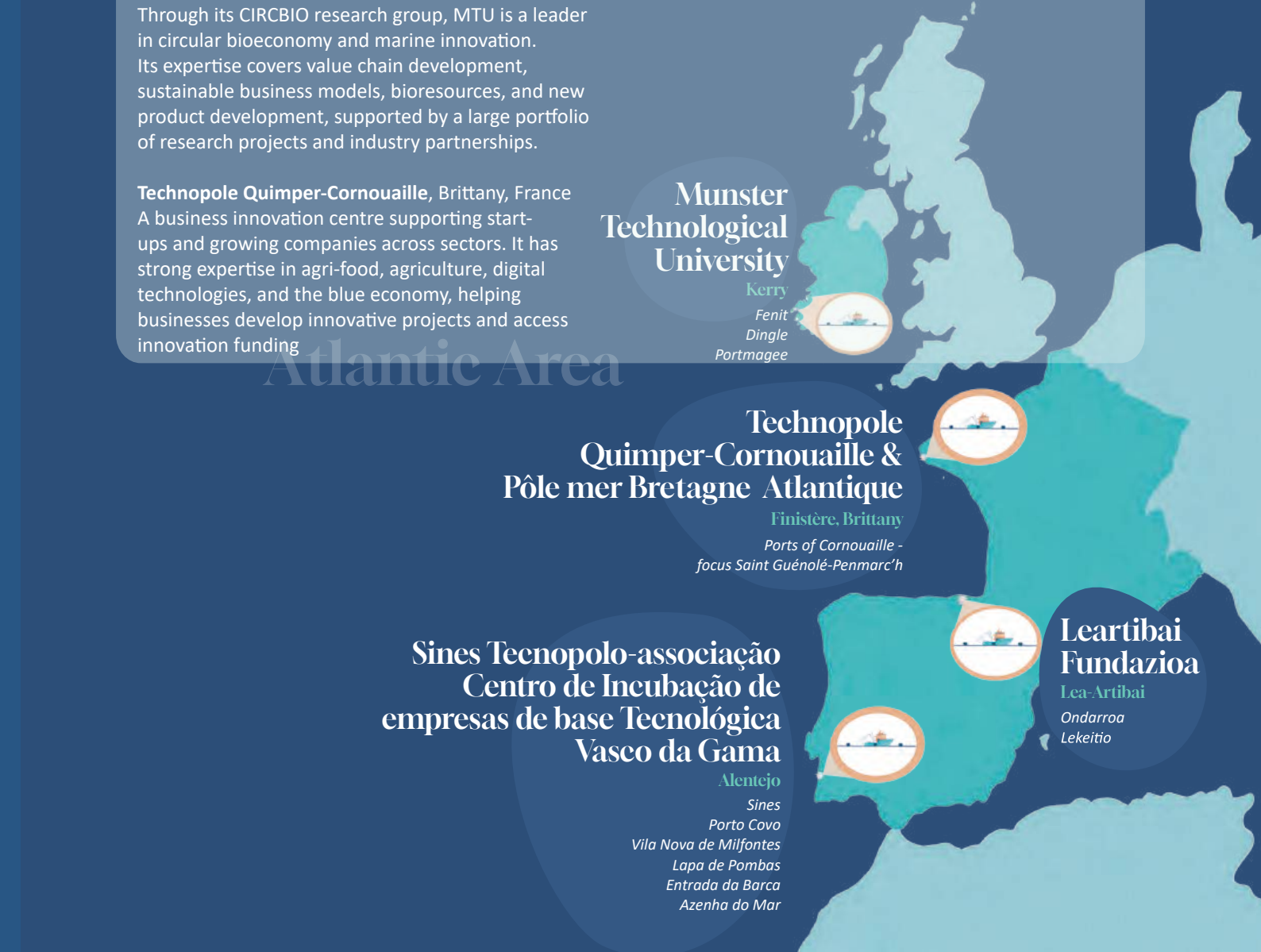
Sines Tecnopolo, Portugal
A business innovation center connecting key stakeholders from the Alentejo Litoral region. It supports entrepreneurship and blue economy businesses, promotes training for fishermen, develops innovation projects, and contributes to sustainable blue growth initiatives at regional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

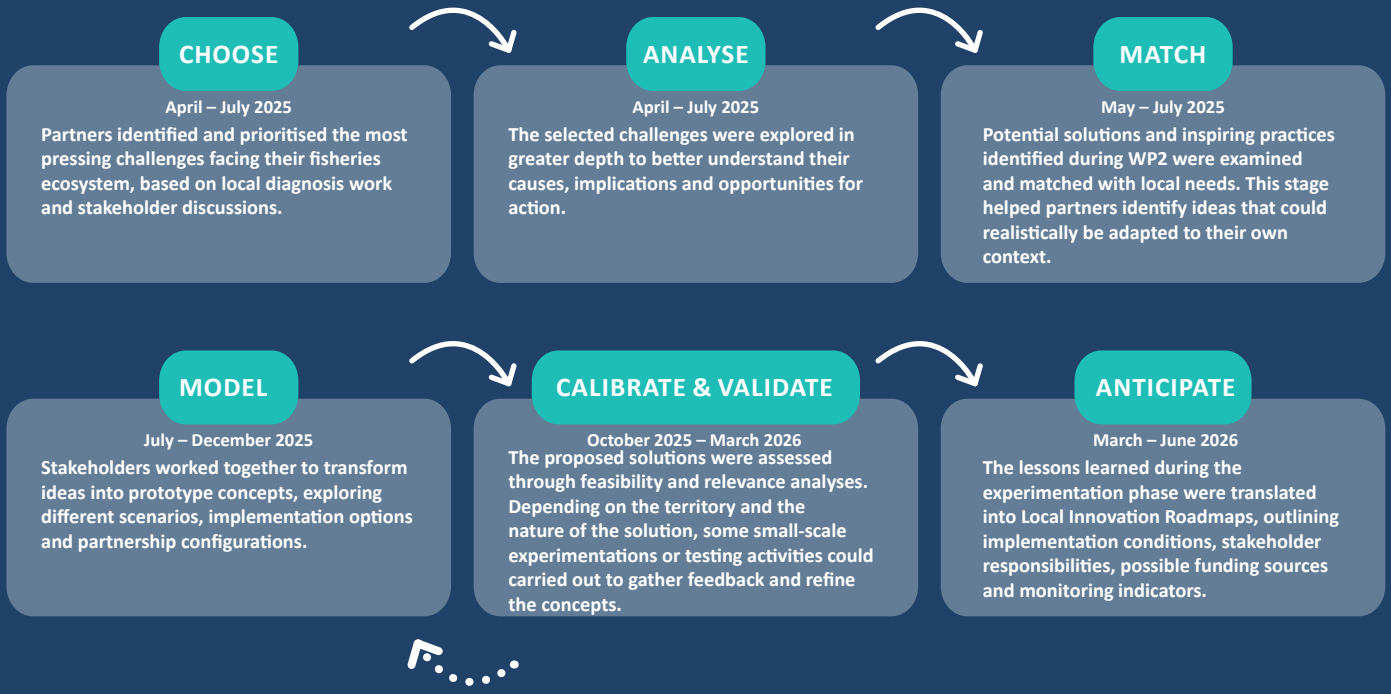
01

Fisheries Ecosystem Innovation Labs

Within the FISHINN project, the work package 3 (WP3) aims to support fisheries and blue economy stakeholders in imagining, testing and preparing solutions to address the challenges identified in their territories. Building on the diagnosis carried out in WP1 and the portfolio of inspiring practices identified in WP2, WP3 focuses on turning ideas into concrete opportunities for action.
The objective is not to produce theoretical strategies, but to help each fisheries ecosystem explore realistic pathways for innovation and identify solutions that could be implemented, adapted or transferred in the future.
To achieve this, each partner territory curried out a Local Innovation Roadmap, built around a limited number of priority challenges and supported by a collaborative mototype process involving local stakeholders.

At the heart of the methodology are the Fisheries Ecosystem Innovation Labs. One lab per region involved. These Labs were designed as spaces for dialogue, creativity and collective exploration.
They brought together fishermen, businesses, public authorities, research organisations, support structures and other local actors around a shared ambition (local innovation forum) : finding practical responses to common challenges.
Rather than working from predefined solutions, the Labs encouraged participants to question existing practices, explore new opportunities and learn from experiences developed elsewhere in the Atlantic Area. The process combined local knowledge, external inspiration and collective intelligence to shape solutions adapted to each territorial context.
Over a nine-month period, each Lab followed a common methodology, while retaining enough flexibility to reflect local realities and priorities. The aim was not to replicate solutions identically from one territory to another, but to understand how promising ideas could be adapted and tested in different ecosystems.

The Innovation Journey : The methodology was structured around successive stages:



What do we mean by a Pilot or a Prototype?

Within FISHINN, a pilot is understood as a structured experimentation process that bridges the gap between ideas and implementation.
Its purpose is not to deliver a fully operational project, but to test the relevance, feasibility and potential impact of a solution before moving to a larger scale. By experimenting in a real-world yet controlled environment, stakeholders can reduce uncertainty, learn from practice and better understand the conditions required for successful deployment and transfer.
Importantly, a pilot is not necessarily a physical or technical prototype.
Two types of prototypes emerged throughout the project:

Operational Pilots

These pilots focus on a tangible solution or concrete initiative.
Examples may include: the development of a new seafood product; an innovative training programme; a short supply chain model…
The objective is to validate practical and operational aspects of the prototype solution.

Strategic Pilots

These pilots focus on governance, coordination or long-term development approaches.
Examples may include: the creation of a blue economy hub; a cluster model; …
In these cases, the prototype concerns ways of organising, coordinating or structuring an ecosystem rather than producing a physical output.

In both situations, the pilot functions as a learning tool. It allows stakeholders to test assumptions, identify barriers, build partnerships and generate evidence before moving towards implementation.
This is why FISHINN refers to these collaborative spaces as Ecosystem Innovation Labs: they are places where solutions are explored, challenged, adapted and progressively strengthened through collective learning.

What is a Transfer Plan ?

One of the main outcomes of the WP3 process is the development of Transfer Plans for the solutions prototyped within each Fisheries Ecosystem Innovation Lab.

A transfer plan does not seek to provide a detailed business plan or technical feasibility study. Instead, it identifies the main conditions required to move from experimentation towards implementation and, where relevant, to facilitate the transfer of the solution to other territories.

The transfer plans presented in this deliverable build on the ideas, prototypes and learning generated throughout the Innovation Labs. They describe the solution developed, analyse the opportunities and challenges associated with its deployment, and outline the key elements required for implementation.

Across the four participating territories, twelve prototype solutions were developed and explored. Together, they illustrate a wide range of responses to fisheries and blue economy challenges, from practical field-based initiatives to more strategic ecosystem-building approaches. Each transfer plan highlights:

- the challenge addressed;
- the solution developed;
- the conditions for implementation;
- the players involved;
- the resources required;
- the key implementation steps;
- the indicators that can help monitor progress and success.

Synthesis table of prototype solutions

Across our four partner countries, the partnership explored twelve prototype solutions that address diverse challenges while sharing a common ambition: to strengthen the resilience and competitiveness of Atlantic fisheries ecosystems.

COUNTRY	NAME OF PROTOTYPE SOLUTION	TYPE OF PILOT	MAIN AMBITION
Basque Country (SP)	Revitalisation of Ondarroa Port	Strategic	Increase port attractiveness and landings
Basque Country (SP)	Aquaculture industrial estate	Strategic	Activate infrastructure and attract businesses for aquaculture
Basque Country (SP)	Blue Economy Hub	Strategic	Create an innovation ecosystem
Portugal	Marine Resources Innovation and valorisation Centre	Strategic	Increase seafood valorisation by innovation
Portugal	Short seafood supply chain	Operational	Reconnect producers and consumers
Portugal	Co-management & fisheries tourism	Strategic	Diversification and governance
France	Fishing entrepreneurship toolkit a	Operational	Support fishing entrepreneurship and knowledge transfer
France	Fish-based street food concept	Operational	Develop new seafood markets
France	Seafood market	Operational	Reconnect consumers with fisheries
Ireland	BLUE-RDI cluster	Strategic	Structure the blue economy ecosystem
Ireland	MTU-BLUE	Strategic	Develop skills and talent
Ireland	SPECIES-RDI	Strategic/ operational	Create value from under-used species

Each prototype, whether strategic or operational, represents a tested pathway to address specific challenges while contributing to our broader innovation goals.

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TRANSFER PLANS FROM BASQUE COUNTRY (SP)

02

The Basque Country's fishing communities carry a paradox familiar to many Atlantic ports: a proud maritime tradition sits alongside urgent questions about modernisation, diversification and international connection. Around the ports of Ondarroa and Lekeitio in the Lea-Artibai region, three FISHINN prototypes were tested to address these questions from complementary angles — market governance, industrial land use, and the creation of a new economic ecosystem around the port. Together they trace a path from a well-established but ageing model towards a more open, better-connected and more resilient fishing economy.

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 Description of the prototype solution

Ondarroa's fish market has long been one of the busiest in the Basque Country, yet its future depends on attracting more vessels, diversifying species and markets, and rethinking how the port funds itself. The prototype tested here is a three-part roadmap built around governance, financing and market positioning.

On governance, the idea is to bring the companies operating in the fish market — traders, canneries, auxiliary services — into a single association capable of setting a shared strategy and taking decisions collectively, rather than each actor working in isolation. Regarding financing, the model will evolve from public dependency to a co-responsibility system among the participating organisations, ensuring economic sustainability and a more efficient use of resources.

In terms of the value proposition, the prototype solution focuses on:
- Attracting vessels from other regions and countries to increase landings.
- Diversifying species and markets, through international commercial connections (e.g. the opening of the Irish market for albacore tuna).
- Promoting the sales and processing capacity of the port, supported by a complete local value chain (traders, canneries and auxiliary services).
- Improving efficiency, reducing costs and investing in green and innovative measures to position Ondarroa as a competitive and future-oriented hub.

If successful, the prototype should do more than increase landings. It aims to strengthen the whole local value chain, create more stable and attractive jobs able to draw a new generation into the sector, and give Ondarroa a stronger identity as a hub for innovation and quality within Basque fisheriesand a complete processing ecosystem, increasing its national and international recognition.

1.2 Transfer conditions analysis

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

THE OPPORTUNITIES

· Strong local ecosystem: integrated fleet, traders, canneries, logistics, and auxiliary services that can support expansion.

· Established maritime identity and cultural heritage that can enhance branding and market positioning.
· Existing international connections and potential to open new markets (e.g., Ireland for albacore tuna).
· Governance model: a new association fostering trust, coordination, and long-term strategic management.

· Economic incentives: ability to attract vessels from other regions and diversify species to increase landings.

THE BRAKES / OBSTACLES

· Financial dependency: reliance on initial public funding may limit flexibility or long-term sustainability.

· Market fluctuations: international demand and price volatility for fish species could affect profitability.

· Coordination challenges: managing multiple stakeholders and achieving consensus in the association may be slow.

· Workforce limitations: difficulty attracting younger generations or skilled workers to fishing and processing activities.

· Environmental constraints and compliance with EU and national regulations: changes in fish stocks, climate impact, or local ecological restrictions could affect landings.

· Competition: other ports or regions may compete for vessels, species, or market share, limiting growth potential.

1.3 Action plan and terms of implementation

Necessary resources

Bringing this roadmap to life calls for more than infrastructure — it requires a team able to steer it. A dedicated management and coordination unit will need to work hand in hand with commercial and marketing staff experienced in reaching new ports, alongside a skilled local workforce to carry the work through on the ground. On the technical side, the port already holds much of what is required — landing infrastructure, logistics and transport systems, processing and storage capacity — but its international commercial network will need active expansion. Financially, an operational budget must cover the market's day-to-day running, backed by a contingency reserve able to absorb the price swings, environmental setbacks or regulatory shifts to which fisheries markets are inherently exposed.

The stakeholders involved and their role

Leadership naturally falls to ONARE, the Ondarroa Fish Traders' Association, best placed to coordinate the market's many actors, define a shared strategic direction and keep day-to-day operations aligned. Yet ONARE cannot carry this alone: local wholesalers, processors and auxiliary service providers — all with stake in new markets and species — are expected to bring their own expertise, commercial contacts and operational capacity to the table.
Leartibai Fundazioa adds a further, complementary layer, drawing on its experience in project management and European cooperation to connect the initiative with international networks, sustainability practices and funding opportunities.
Around this core, a wider circle of actors will shape the roadmap's success: port authorities providing regulatory oversight and logistical coordination; fleet operators and vessel owners, whose willingness to land new volumes and

test new species keeps the supply chain moving; canneries and processing facilities adding value and diversifying the product range; local and regional government bringing policy support and possible co-financing; and international trade contacts opening doors to new markets that can help turn Ondarroa into a genuine reference point for fisheries innovation.

The key steps for implementation

Since increasing landing volumes is what will ultimately make the Ondarroa fish market economically viable, implementation follows a structured, stakeholder-driven path.

The first task is to bring together everyone with a stake in the port's ecosystem — traders, wholesalers, fleet operators, processors and service providers — and gauge who is genuinely ready to commit, since a shared vision only holds if it is built collectively from the outset.

Attention then turns outward, to identifying the international and regional markets and ports most worth pursuing. This means weighing demand, mapping existing contacts and networks, and answering a few pointed questions: which countries or ports offer the greatest potential for new landings? Which species are most sought after? Which commercial relationships can realistically be built on? A financing plan follows close behind, blending public funding — European or regional grants — with contributions from the stakeholders themselves under a co-responsibility model, so that the market's sustainability does not rest on public support alone. From there, the roadmap becomes concrete. Direct missions to target ports help forge partnerships and attract vessels, while participation in trade fairs, marketing campaigns and networking events raises Ondarroa's visibility from a distance. In parallel, the port itself is strengthened — landing processes streamlined, storage and processing facilities upgraded, and digital tools introduced for traceability and supply chain management.

A first test of this approach has already taken place: in December 2025, stakeholders from Kerry visited the Ondarroa ecosystem, holding bilateral meetings with the port's fish traders and several key local agents. The aim was straightforward — to identify where Basque and Irish interests align, and to lay the groundwork for a lasting commercial relationship between the two ports.

Success indicators

Progress will be tracked through the volume and value of landings, the diversity of species and destination markets, the number of stable jobs created or maintained, and the visibility gained by the Ondarroa brand nationally and internationally.



2. Strengthening, maintaining and activating the aquaculture industrial estate of the LEA-ARTIBAI Region

2.1 Description of the prototype solution

Between Ondarroa and Lekeitio lies an industrial estate with real but untapped potential: the Mendexa offshore polygon. The prototype sets out to turn this estate into a genuine hub for the blue economy in the Lea-Artibai region.

The prototype solution will be based on a systematic identification and analysis of best practices at the Basque, Spanish and European level, including successful aquaculture industrial estates, innovative production systems, circular economy approaches and collaboration models between public authorities, research centres and private companies. This benchmarking process will allow the project to detect high-potential activities — such as hatcheries, algae and new species production, R&D and pilot plants, processing of high-value products, or services for offshore aquaculture — and to establish direct relationships with leading companies and initiatives that could use the Mendexa offshore polygon and the available port spaces as testing grounds, scaling environments or new business locations.

Bringing the estate back to life would give the region a clear, shared long-term use for currently under-exploited infrastructure, while diversifying the local fishing economy, creating qualified jobs, and positioning Lea-Artibai as a European reference in sustainable aquaculture.

2.2 Transfer conditions analysis

THE OPPORTUNITIES

· Existing strategic infrastructure: fish auction, port spaces, Mendexa polygon.

· Access to public funding and support programs for companies and entrepreneurs.

· Established local maritime ecosystem and know-how.

· International partnerships and knowledge transfer opportunities.

· Growing demand for sustainable seafood and marine products.

· Collaboration with research and technology centres.

· Positioning Lea-Artibai as a hub for sustainable aquaculture.

THE BRAKES / OBSTACLES

· Financial constraints and delayed funding.
· Difficulty attracting and retaining skilled workforce.

· Stakeholder coordination and engagement challenges.

· Regulatory and permitting hurdles.

· Technical limitations in infrastructure and offshore operations.

· Competition from other regions or aquaculture hubs. Limited visibility and regional branding.

2.3 Action plan and terms of implementation

Necessary resources

Activating the estate calls for people able to lead as much as to coordinate: project managers to drive pilot initiatives and business attraction, trainers and support staff to build local skills and pass on knowledge, and administrative capacity to handle funding applications, regulatory compliance and reporting. On the technical side, much of the groundwork already exists. This will need to be complemented with offshore aquaculture equipment such as rafts, cages and monitoring systems, digital tools for production management, traceability and data analysis, and laboratory or R&D facilities to test new species, algae or innovative production methods. Financially, the priority is investment capable of supporting pilot initiatives and the adoption of new technologies, resources dedicated to business attraction and international outreach, and a contingency reserve to absorb the technical setbacks such projects inevitably encounter.

The stakeholders involved and their role

The project brings together public authorities, local companies, research institutions and sector organisations, each holding a distinct piece of the puzzle. AZTI, the Basque marine and food research centre, already operates within the polygon, while the Ondarroa fishermen's guild — the Kofradia — owns the site itself. Lea-Artibai Fundazioa is well placed to attract new companies and entrepreneurs, guiding them through grant applications and other funding avenues, while public authorities carry the responsibility for regulatory compliance, infrastructure management and the facilitation of funding. It is through the combined effort of these actors — rather than any one of them alone — that the industrial estate can be activated, new businesses attracted, innovation driven forward, and sustainable growth secured for the local aquaculture ecosystem.

The key steps for implementation

Everything begins with building a comprehensive roadmap: identifying and analysing the aquaculture practices, elsewhere in the Basque Country and beyond, that could realistically take root in Lea-Artibai. From this broad picture, the second step narrows the focus, prioritising the most relevant practices and the companies best placed to carry them out, reached through online research, sector fairs and professional networks alike. The final step turns outward-facing interest into concrete support: compiling a clear picture of each interested company's technical, financial and operational needs, and guiding them — on funding, infrastructure and regulatory compliance — towards a successful foothold on the industrial aquaculture estate.

The success indicators of the prototype solution

The project's success will ultimately be read in tangible terms: the number of companies and start-ups established on the estate, the growth achieved in aquaculture



3. Blue economy ecosystem hub located in the Port of Ondarroa

3.1 Description of the prototype solution

Ondarroa also has under-used port buildings that could host something new: a structured hub bringing together start-ups, established companies and researchers around the maritime and aquaculture sectors. The prototype envisages converting this space into a living lab — a place to test technologies and business models, incubate new ventures and modernise a traditional industrial sector. Beyond the buildings themselves, the hub's value lies in what it can generate: high-value jobs, support for start-ups and SMEs, and a place where talent can be trained and retained locally rather than lost to other regions. It would also give Ondarroa and Lea-Artibai a stronger profile as a centre for blue economy innovation, connected to comparable initiatives such as PortXL and Hub Azul in Portugal.

In short, this prototype project integrates innovation, industrial renewal, and sustainability to generate long-term economic, social, and environmental benefits for the local ecosystem.

3.2 Transfer conditions analysis

THE OPPORTUNITIES

· Leverage existing port infrastructure to reduce investment and speed up implementation.

· Strategic location within the Lea-Artibai maritime and aquaculture sector.

· Strong support from local authorities, port management, and regional stakeholders.

· Lessons learned from successful hubs such as PortXL and Hub Azul.

· Attract startups and SMEs with innovative maritime and aquaculture business models.

· Collaborate with universities and training centres to develop talent and support generational renewal.

· Access to EU, national, and regional funding, as well as public–private partnerships.

· Alignment with reindustrialisation, sustainability, and blue economy priorities.

· Serve as a living lab for pilot projects, technology testing, and business innovation.

· Generate economic, social, and environmental impact in the region.

THE BRAKES / OBSTACLES

· Limited availability of fully adapted infrastructure.

· High coordination needs among multiple stakeholders.

· Resistance to change within traditional maritime and aquaculture sectors.

· Talent gaps and limited generational renewal.

· Limited local awareness or visibility.

· Regulatory or administrative hurdles.

3.3 Action plan and terms of implementation

Necessary resources

Running the hub calls for a core team of coordinators overseeing operations and stakeholder engagement, business development and innovation specialists supporting start-ups and SMEs, and technical experts spanning maritime, aquaculture, seafood processing and blue economy technologies — complemented by mentors, trainers and

educators dedicated to talent development and generational renewal, and by the administrative staff needed to keep the hub running day to day. On the infrastructure side, suitable port buildings must be adapted into office, laboratory and testing space, equipped for prototyping, testing and pilot projects across the maritime and aquaculture sectors. Financing needs to work on several fronts at once: covering the initial investment in building adaptation, equipment and operational set-up; funding start-up support programmes, mentoring and incubation activities; sustaining day-to-day operational budgets for staff, utilities and maintenance; and, over time, drawing on a mix of public grants, private partnerships and revenue from hub services to make the model self-sustaining in the long run.

Stakeholders and their roles

Port authorities and local government provide governance and strategic backing; start-ups, SMEs and established maritime companies bring the innovation and business activity the hub is built for; universities and research institutions contribute talent and R&D partnerships. Fishermen's associations, cooperatives and NGOs help keep the hub aligned with social and environmental priorities, while international networks such as PortXL and Hub Azul offer mentoring, knowledge exchange and visibility.

Key steps for implementation

The process begins with assessing and preparing the right building, alongside defining the hub's value proposition — its mission, target sectors and place in the regional ecosystem. A governance structure is then set up with public authorities, companies and research institutions before outreach begins to attract start-ups and SMEs. Talent partnerships with universities and training centres, pilot projects testing technologies and business models, and work on long-term financial sustainability complete the roadmap.

Success indicators

The hub's impact will be measured through the number of companies it hosts, the investment it attracts — public, private and EU — job creation in the maritime and aquaculture sectors, the turnover generated by supported companies, and the pilot projects and collaborations it manages to bring to life.



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TRANSFER PLANS FROM PORTUGAL

03



In the Southwest Alentejo, Portugal's fishing communities are caught between the pull of tradition and the need to innovate. The three FISHINN prototypes developed here explore that tension from complementary angles: turning marine resources and by-products into new value, shortening the distance between fishers and consumers, and building a governance model that lets the sector diversify without losing its identity. Each respond to the same underlying challenge — helping small-scale fisheries capture more value locally, rather than see it flow elsewhere.

1. Centre for Innovation and Valorisation of Marine Resources

1.1 Description of the prototype solution

Much of the value in low-grade fish and marine by-products is currently lost or remains very limited due to their low commercial value and insufficient valorisation. The prototype proposes a Centre for Fish Valorisation and Blue Bioeconomy in the Southwest Alentejo, designed to turn these overlooked resources into processed seafood, nutraceuticals, cosmetics and other bio-based products.

Conceived as a shared platform rather than a single facility, the centre would bring processing, product development and research together under one roof, connecting fishers, companies, research institutions and public bodies around new value chains in the blue bioeconomy. Beyond the economic upside for fishers and local businesses, the centre is expected to reduce waste, strengthen local innovation capacity, and diversify a sector still heavily dependent on traditional markets — positioning the Alentejo coast as a genuine reference for sustainable blue economy in Portugal. The centre is designed as a scalable and collaborative solution, capable of evolving over time and integrating with other regional initiatives, contributing to a more resilient and competitive fisheries ecosystem.

1.2 Transfer conditions analysis

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

THE OPPORTUNITIES

· Strong availability of marine resources and by-products with valorisation potential

· Presence of a local fisheries sector with traditional knowledge

· Existence of relevant stakeholders (fishers, companies, R&D institutions)

· Growing interest in the blue bioeconomy and circular economy

· Access to European and national funding programmes

· Presence of innovation actors (e.g., Sines Tecnopolo, research centres)

· Potential to develop new value-added products and markets

· Strong alignment with territorial strategies and policy priorities.

THE BRAKES / OBSTACLES

· Regulatory constraints related to processing, food safety, and commercialization

· Limited technical capacity and skills for advanced processing and bioeconomy applications

· Fragmentation of the value chain and weak coordination between actors

· High initial investment needs for infrastructure and equipment

· Uncertainty regarding long-term financial sustainability

· Limited market development and commercialization channels

· Lack of awareness and market acceptance of innovative products

· Administrative complexity and bureaucratic procedures

1.3 Action plan and terms of implementation

Necessary resources

The centre needs a small multidisciplinary team — a coordinator, technical staff specialised in fish processing and product development, research and innovation experts, a business development lead able to open commercial channels, and support staff to handle operations, logistics and administration — complemented, where necessary, by external experts and research institutions. On the technical side, the minimum requirement covers processing and transformation facilities, equipment for product development and testing, systems for storage, preservation and packaging, basic laboratory and quality-control equipment, and digital tools supporting traceability, with shared or pilot infrastructure a realistic starting point. Financing needs to work across several fronts at once: the initial investment in infrastructure and equipment, the costs of human resources and project management, funding dedicated to R&D and innovation, ongoing operational costs such as energy, logistics and maintenance, and the communication and market development work needed to bring products to market — drawing on a combination of European programmes such as EMFAF, Horizon Europe and Interreg, national schemes, public support and private investment.

The stakeholders involved and their role

Sines Tecnopolo is well positioned to lead the centre, coordinating partners and overseeing its day-to-day management. Municipalities including Odemira and Sines together with the relevant Parish Councils provide institutional backing; fisheries associations and fishers supply raw material and local knowledge; processing companies and SMEs turn that knowledge into products; the University of Évora, through its Marine Sciences Laboratory (CIEMAR), a research unit of the University based in Sines, will provide scientific expertise for R&D, marine resource assessment, product development and validation; and innovation and technology organisations support the development of new solutions and business models within the blue bioeconomy. Local development associations including TAIPA and ADL – Associação de Desenvolvimento do Litoral Alentejano and funding bodies complete a partnership designed to combine knowledge, resources and capability.

The key steps for implementation

The roadmap moves from stakeholder mobilisation and co-creation workshops, through a feasibility study covering technical, economic and regulatory aspects, to the formal structuring of partnerships and funding applications. Once the location and equipment are in place, a pilot phase tests processing and product development before the centre moves to full operation, expanding its offer and, eventually, exploring replication elsewhere.

Success indicators

Economic progress will be tracked through the number of new products developed, the value uplift achieved, and the companies and fishers benefiting from the centre; innovation through R&D projects and validated technologies; social impact through stakeholder engagement and training delivered; environmental performance through the share of resources fully valorised rather than wasted; and territorial impact through the centre's contribution to the local economy and employment, and the visibility and partnerships it builds at regional, national and international level.



2. A short supply chain for local seafood – Southwest Alentejo

2.1 Description of the prototype solution

Too much of the value fishers create is absorbed by intermediaries before seafood reaches the consumer. This prototype explores a short supply chain model for the Southwest Alentejo, cutting out unnecessary steps and building direct relationships between fishers and buyers through pre-orders, direct sales and partnerships with local markets and restaurants, supported by simple logistics to keep quality and traceability under control.

Done well, the model should improve fishers' margins, bring producers and consumers closer together, and strengthen a more sustainable, lower-impact way of distributing local seafood — while reinforcing the territorial identity that comes with eating what is caught nearby.

2.2 Transfer conditions analysis

THE OPPORTUNITIES

· Strong demand for local, fresh, and traceable seafood products

· Increasing consumer interest in short supply chains and sustainable food systems

· Presence of a local fisheries sector with capacity to supply fresh products

· Proximity between production areas and local markets and consumers

· Existing restaurants and tourism sector interested in local sourcing

· Availability of digital tools and platforms to support distribution and coordination

· Access to European and national funding programmes supporting short supply chains and local food systems

· Alignment with territorial strategies promoting local products and sustainability

• Alignment with the Community-Led Local Development (CLLD) strategy

THE BRAKES / OBSTACLES

· Irregular supply of seafood, due to variability of fishing activity

· Logistical challenges, particularly in collection, storage, and distribution

· Lack of organization and coordination among fishers

· Mismatch between supply and consumer expectations (variety, price, regularity)

· Limited consumer awareness and engagement
High operational costs at small scale

· Regulatory constraints related to direct sales, traceability, and food safety

· Limited experience with direct commercialization models

2.3 Action plan and terms of implementation

Necessary resources

A lean operational team is enough to run the model: a coordinator, a logistics led to organise supply and delivery, fishers acting as suppliers, and someone dedicated to customer relations and promotion. Refrigeration, packaging, transport and simple digital tools for order management cover most technical needs. Financing is comparatively

modest — mainly logistics set-up, basic equipment and running costs — and will draw on funding opportunities under the MAR 2030 Programme (EMFAF), Interreg programmes, Community-Led Local Development (CLLD) instruments and private contributions

Stakeholders and their roles

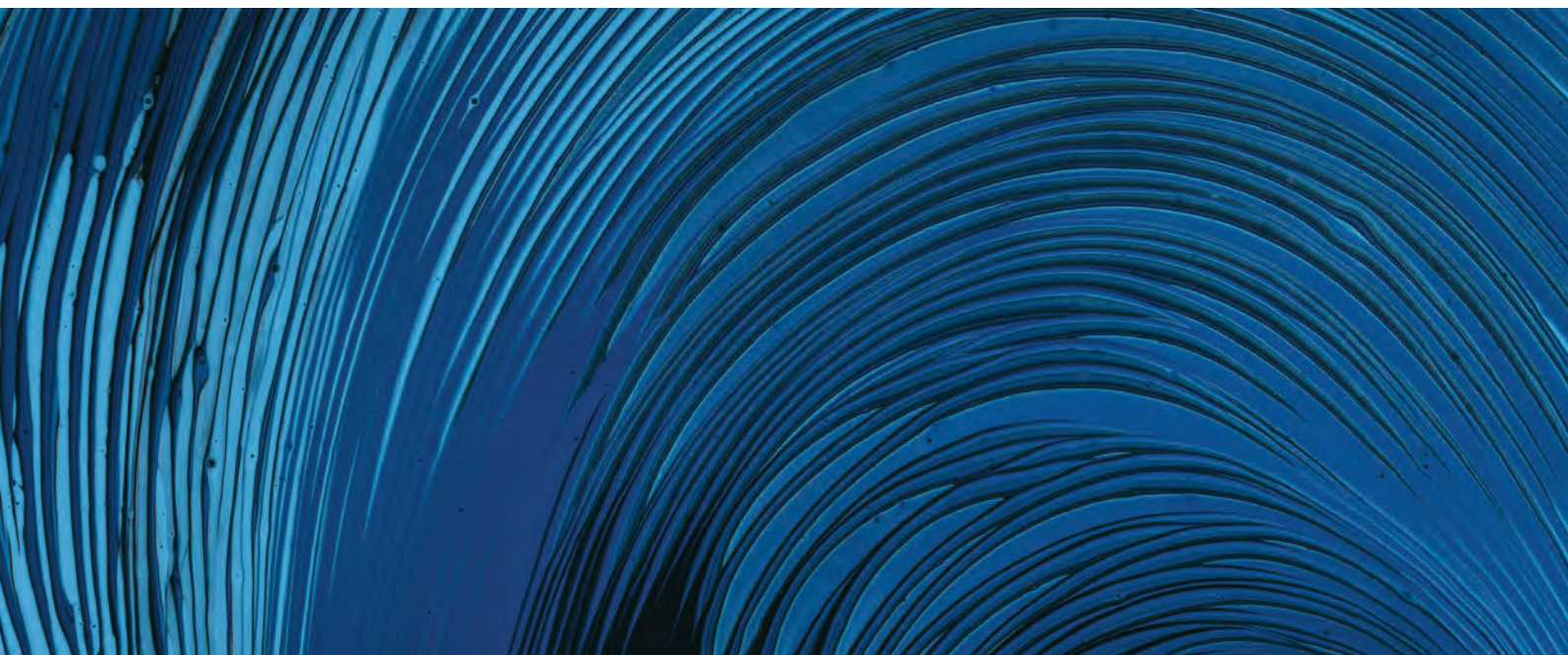
Docapesca will play a central role in coordinating the pilot and facilitating its integration with existing fish landing and first-sale structures. The Municipalities of Sines and Odemira and the relevant Parish Councils will provide institutional support and facilitate local implementation. The Southwest Fishermen Association will mobilise and coordinate participating fishers, who will supply the seafood and test the short supply chain model. Local development organisations, including TAIPA and ADL, will support stakeholder engagement, local coordination and access to Community-Led Local Development (CLLD) instruments. Local restaurants and markets will act as key commercial partners and test direct purchasing channels, while logistics and digital partners will support order management, distribution and traceability.

Key steps for implementation

The process begins by mobilising fishers, associations, local markets and restaurants around a shared operating model, before moving into a feasibility phase that weighs logistics, regulation and demand while shaping the model itself — the products and volumes on offer, the target customers, the distribution format and the pricing strategy. Benchmarking of similar projects will be carried out. Once these foundations are set, the pilot is prepared in practical terms: selecting participating fishers and partners, agreeing coordination mechanisms, and putting the necessary logistics and communication tools in place. A small-scale pilot then tests the model in real conditions, with the results feeding directly into adjustments — to logistics, pricing, communication or product offer — before the model is scaled to more fishers, products and customers, and eventually explored as a template for other coastal areas.

Success indicators

Economic progress will be read in the prices fishers receive, the total revenue generated through the short chain, the number of fishers taking part, and the volume of seafood sold through direct channels — complemented by market and operational indicators such as the number of consumers and restaurant partners engaged, the regularity of distribution cycles, the efficiency of logistics, and how well customers are retained over time. Socially, the model's success shows in stakeholder engagement, consumer satisfaction and the strength of the relationship rebuilt between producers and consumers; environmentally, in shorter transport distances and a shift towards local, seasonal consumption; and territorially, in the strengthening of local food systems, the visibility gained by local seafood, and the new partnerships the model helps create.



3. Co-management and Fisheries Tourism Diversification Model – Southwest Alentejo

2.1 Description of the prototype solution

The third Portuguese prototype tackles governance and diversification together. It proposes a co-management framework in which fishers, public authorities and local stakeholders share responsibility for decisions affecting the sector, alongside a parallel effort to develop fisheries tourism — fishing trips, cultural activities and environmental interpretation — as a genuine new income stream for fishers.

Beyond the economic diversification this brings, the model is expected to strengthen community cohesion, make fishing a more attractive career for younger generations, and give proper value to the maritime heritage and identity of the Southwest Alentejo

2.2 Transfer conditions analysis

THE OPPORTUNITIES

· Strong cultural and natural potential for fisheries tourism and experiential activities

· Presence of a traditional fisheries sector with strong local identity and heritage

· Increasing demand for authentic, experience-based tourism

· Existence of local stakeholders (fishers, municipalities, tourism actors) willing to collaborate

· Alignment with regional and national strategies promoting sustainable tourism and diversification

· Growing recognition of participatory governance and co-management approaches

· Availability of European and national funding programmes supporting diversification and community-led initiatives

· Potential to strengthen links between fisheries, tourism, and local development

THE BRAKES / OBSTACLES

· Regulatory constraints related to fisheries tourism (licensing, safety requirements)

· Limited experience and skills among fishers for tourism activities

· Resistance to change in governance practices and traditional ways of working

· Lack of structured co-management frameworks and coordination mechanisms

· Fragmentation of stakeholders and potential conflicts of interest

· Seasonality of tourism demand, affecting economic viability

· Limited organizational capacity and facilitation mechanisms

· Administrative complexity and bureaucratic procedures

2.3 Action plan and terms of implementation

Necessary resources

The model needs a coordinator and a facilitator able to guide co-management discussions, alongside fishers themselves as both decision-makers and tourism providers, tourism development expertise, trainers to deliver safety and business skills programmes, and support staff to handle coordination and administrative tasks. Equipment needs are light but varied — basic safety gear, any necessary vessel adaptations, meeting spaces and facilitation tools, training materials, digital tools for promotion and bookings, and simple systems ensuring safety and regulatory compliance. Funding requirements are moderate, covering facilitation and coordination, training and capacity-building, pilot testing of tourism activities, communication and promotion of the tourism offer, and support for regulatory adaptation — rather than heavy infrastructure.

Stakeholders and their roles

Sines Tecnopolo could lead the initiative, mediating between interests and structuring the co-management framework. Municipalities of Sines and Odemira, the relevant Parish Councils provide institutional backing and help align the model with tourism strategy; the Southwest Fishermen Association represents and coordinates fishers; local development associations such as Taipa and ADL support community engagement; tourism operators including Associação Casas Brancas help structure and promote the offer; the University of Évora through its Marine Sciences Laboratory (CIEMAR), based in Sines. contributes technical and scientific support to governance design and monitoring; and innovation and support organisations help develop new governance approaches, training programmes and innovative tourism solutions.

Key steps for implementation

The prototype begins with stakeholder mobilisation and trust-building, followed by the formal definition of the co-management framework — roles, responsibilities and decision-making processes. A key aspect will be to ensure compatibility and identify appropriate mechanisms to reconcile the needs and activities of fishers with tourism activities. In parallel, tourism activities are assessed for feasibility and designed around clear target markets, with training delivered to build fishers' tourism and business skills. A pilot phase then tests both the governance practices and the tourism activities together, with results evaluated and feeding into adjustment. From there, co-management practices are formalised into lasting governance structures as tourism activities scale and integrate further into the market, before the model is secured through long-term governance mechanisms and, ultimately, embedded in local development and tourism strategy. At this stage, and for the purposes of the prototype, given the legal and regulatory constraints affecting the implementation of the tourism component, the objective is to develop a model and establish a collaborative network in which stakeholders can coordinate, exchange views and work towards the common goal of managing marine resources sustainably while creating shared added value for all those involved.

Success indicators

Governance progress is measured through the number of stakeholders actively involved and decisions taken collaboratively; economic impact through fishers engaged in tourism activities and the revenue generated; and social impact through stakeholder satisfaction and training delivered — alongside tourism indicators such as the number of experiences run and visitors welcomed.


CP : Francesco Ungaro

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TRANSFER PLANS FROM FRANCE

04



France's fisheries ecosystem, particularly in Brittany, faces contemporary challenges around entrepreneurship, market development, and consumer connection. The three prototypes respond with practical, market-oriented solutions that build local strengths and traditions.

1. Fishing Entrepreneurship toolkit

1.1 Description of the prototype solution

Taking over or setting up a fishing business is not straightforward. Between generational renewal, the growing complexity of running a fleet, and a lack of practical support tools compared to other trades such as farming, many young or incoming professionals feel they are learning largely on their own. FISHINN's Local Innovation Forum identified this gap clearly, pointing to the need for better support in business management, knowledge transfer, and visible career pathways into leadership roles.

The initial idea — a pedagogical kit built on real case studies of different entrepreneurial models in fishing — remained the ambition, but the context shifted how it was pursued. Fuel-price volatility linked to tensions between Iran and the United States made it difficult to work directly with fishers on this topic during the test period, so the project pivoted towards a close partnership with Brittany's Regional Committee for Maritime Fisheries and Aquaculture (CRPMEM).

CRPMEM already runs the START project, which supports the setting up and takeover of fishing businesses across Brittany, and since late 2025 has delivered a well-attended series of webinars on subjects from quotas to licensing to legal status. The recordings, however, sit in an archive that is neither accessible nor practical — too long to search through or revisit. The prototype's answer is to turn this material into a short-form video and podcast series distributed through CRPMEM's digital channels, making the same expertise available in a format people can actually use. These series target the fishers support organisations and directly the fishers. The first topic tested was fishing licences.

1.2 Transfer conditions analysis

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

THE OPPORTUNITIES

· Overwhelming responsibilities: The role of fishing boat captain is perceived as burdensome and risky, particularly due to a lack of visibility and the increasing complexity of the entrepreneurial aspect of the business = a need

· Unlike other professions (craftsmen, farmers, etc.), there seems to be a lack of support tools for entrepreneurship in the fishing industry. The technical aspects of fishing/boat operation are more heavily invested in.

· Errors have been observed in the advice given to fishermen by operators (management cen-ters, compliant organizations, etc.): it seems there is a lack of understanding of the realities on the ground (e.g., fishermen are encouraged to create sole proprietorships, with all the risks that entails, etc.).

· The CRPMEM has launched the START program, within which an initial series of webinars dedicated to fishing businesses is being organized for fishermen. The first webinars were well attended, particularly by operators involved in supporting fishermen (management centers, accountants, etc.), which demonstrates an interest in the entrepreneurial aspect (a real potential of mobilization).

THE BRAKES / OBSTACLES

· The willingness of fishermen to reflect on and develop their skills in this entrepreneurial area.

· A tense fishing environment: Economic, regulatory, and political uncertainties, a tarnished image, and difficult working conditions (remoteness, arduousness, and a preference for coastal fishing (already saturated)): all these trends blur the lines of the profession and hinder its attractiveness.

· The internal effort of CRPMEM to get involved in such approach : time, technical know-how, financial resources even if the idea is to rely on AI

1.3 Action plan and terms of implementation

Necessary resources

Turning webinar archives into short videos takes time before it can be streamlined: staff hours, some in-house expertise in AI-assisted content production, and a subscription budget for the tools involved. A first test, run between June and July 2026 in partnership with Technopole Quimper-Cornouaille, covered scriptwriting, an initial storyboard, testing of relevant AI applications, and early graphic design work for the series.

The stakeholders involved and their role

CRPMEM leads the initiative, drawing on its role as the representative body for Breton professional fishermen and on the momentum already built through the START project, which is working towards a single point of contact to support fishing business installation and takeover across Brittany's departmental fishing committees.

The key steps for implementation

The June–July 2026 test focused on proving the format works: extracting reliable, verified content from START webinars, testing AI tools to support video production, and defining a visual identity for the series that feels credible and well marketed rather than makeshift. The aim is to continue the test and gather feedback from the video viewers.

Success indicators

Success will be judged qualitatively — how clear and fluid the videos are, how much interest they generate among support and training organisations, how well a non-expert audience understands the content, and how much useful learning can be carried forward into the rest of the programme. In a second time, the importance of the audience will be assessed.



CP : Bedis Elacheche

2. Fish Churros : development of a street food product built on local fish

2.1 Description of the prototype solution

Getting younger generations to eat more local seafood was one of the levers identified by the Local Innovation Forum, alongside the search for sales formats that fit modern consumption habits. This prototype responds with a simple idea: crispy fish sticks made from locally caught fish, served in cones at ports, seaside cafés, markets and restaurants — a format built for snacking and mobility rather than a sit-down meal.
The concept trades on familiarity: it looks and feels like the fast, convivial food younger consumers already choose, but built around a distinctly local, “100% Cornouaille” product. Early recipe trials have taken place at Océane Alimentaire, a family-run cannery in Saint-Guénolé, with a possible launch there before expanding across Cornouaille and, eventually, more widely.



CP : Jonas Jacobsson

2.2 Transfer conditions analysis

THE OPPORTUNITIES

Target audience & attractiveness
· Young generations and families: The street food concept is particularly appealing to young people (18-35) and families seeking quick, fun, and accessible dining options. Fish churros offer an original alternative to traditional snacks (fries, burgers) while introducing fish consumption to audiences that may otherwise overlook it.
· Modernizing fish consumption: The «mobile» and «trendy» format breaks traditional perceptions of fish as formal or complex, making it attractive to consumers accustomed to fast food or sweet/ savory snacks.

Concept & feasibility
· Simplicity and flexibility:
The street food model does not require heavy infrastructure (like a restaurant), reducing fixed costs and enabling rapid deployment across various sites (markets, ports, events).
· Adaptability: The product can be customized with different sauces and sides to cater to local or seasonal tastes and adapt to customer feedback.

Potential market
· Competitive pricing: Positioned as an affordable snack, this concept can attract a broad customer base, including tourists and workers on lunch breaks.
· Complementarity with existing offerings: The product can be sold alongside other snacks to increase average spending or in partnership with bars/guinguettes for a «mobile apéro» experience.
· Market trends: Street food is a growing sector in France (+12% between 2019 and 2023), with strong demand for local and innovative products.

Innovation et territorial anchorage
· Territorial promotion: The product highlights local fishing and Breton culture, appealing to tourists seeking authenticity and locals proud of their region.
· Knock-on effect: Success could inspire other seafood promotion initiatives in Brittany and enhance Cornouaille's appeal as a gourmet destination.
· Promising recipe trials are conducted in Saint Guénolé at a cannery at the moment (see below)

THE BRAKES / OBSTACLES

Resource Availability and regularity
· Seasonality: Fish species availability varies by season, impacting supply consistency and product uniformity.
· Variable volumes: Fishing uncertainties (weather, quotas) can lead to stock shortages or cost fluctuations, which are difficult to anticipate for a street food business.

Partners engagement
· Fishermen involvement: Some fishermen may be reluctant to commit to fixed volumes due to concerns about fulfilling deliveries or lack of familiarity with the project.
· Limited experimentation: Without strong partner engagement, the project may remain a prototype without scalability.

Operational complexity
· Cold chain: Fish requires strict cold chain management, leading to high logistical costs (mobile refrigeration, storage) and rigorous temperature control to ensure food safety.
· Mobile preparation: Frying fish outdoors presents technical challenges (used oil management, cleaning, limited space) and regulatory hurdles (hygiene standards for mobile stands).

Quality/price Perception
· Price justification: If fish churros are perceived as too expensive compared to other snacks, customers may opt for cheaper alternatives, even if quality is high.
· Competition: The street food market is highly competitive. Without clear differentiation (taste, local storytelling), the product may struggle to stand out.

Perishability & Stock Management
· Product freshness: Fish perishes quickly, requiring rapid stock turnover and risking financial losses if sales fall short of projections. Unless working with frozen fish.

Financial risks
· Raw material costs: Fish is more expensive than typical street food ingredients (potatoes, processed meat). Price increases could reduce profit margins.
· Initial investment: Depending on the sales and production model, costs may include purchasing a truck, a churro machine, etc.

2.3 Action plan and terms of implementation

Necessary resources

A pilot ran from February to May 2026 in Saint-Guénolé-Penmarc'h, working through the experimentation framework, a concept brief, species and recipe testing at Océane Alimentaire, and an initial look at market opportunities. We have worked especially with Les Paniers de la Mer, a social inclusion that uses unsold fish for processing to food banks, has been involved at the beginning regarding the preparation of fish. Taking the concept further will require a local project leader, technical work to finalise the recipe and its sanitary compliance, and a clear choice of business model — from a simple product-only approach to a full mobile guinguette concept — since this choice determines the equipment and financing actually needed: preparation and cooking equipment, a cold chain, and, if a mobile format is chosen, a truck or kiosk compliant with hygiene regulations.

Stakeholders and their roles

Océane Alimentaire supported the recipe trials but will not lead the project going forward. The Loctudy Fishing Port Interprofessional Association — bringing together fishers, wholesalers, cooperatives and other port businesses — experesses an interest. Local food technical centre such as ADRIA or the Centre Culinaire Contemporain in Rennes, could support formulation, recipe development and packaging. A project leader still needs to be identified to take the concept forward.

Key steps for implementation

The pilot phase confirmed the potential, the test scope, ran market and product research, explored species options, and produced an initial recipe. A concept sketchbook with market opportunities and marketing sketchbook were carried out. The next phase moves to full-scale consumer testing: finalising the technical and sanitary aspects of the product, settling on a business model, and recruiting a project leader to carry the concept beyond the pilot.

Success indicators

Feedback will be judged on taste, texture and ease of consumption, how well the concept is understood and accepted, how feasible it proves in practice, and how relevant local stakeholders and the wider fishing industry consider both the product and the business model behind it.



3. Food market targeted to fish : Reconnecting the Port with Its Community

1.1 Description of the prototype solution

Also built on new ways to market and add value to seafood, this prototype proposes a recurring food market in the port district of Saint-Guénolé — a "Marché à Manger" celebrating local fish and the people who catch it. Local restaurateurs cook seasonal seafood dishes on site at a single, affordable price, served either at shared tables for those who want to stay, or in reusable containers for those who prefer to take their meal away. The format, inspired by a similar initiative running successfully in Rennes since 2016, could take place in the Saint-Guénolé–Penmarc'h fish auction hall itself, turning a working space into an unusual and memorable setting.

Beyond the meal itself, the ambition is to rebuild a direct connection between fishers, residents and visitors, promote short-chain seafood sales, and test a new kind of recurring, community-rooted port event.

1.2 Transfer conditions analysis

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

THE OPPORTUNITIES

· The main appeal of this project lies in its convivial and original nature, offering the possibility of large communal tables and responding to a desire for social interaction. This concept is validated by its success elsewhere (in Rennes once a month since 2016 and in other European cities, although not specifically focused on seafood).

· It strengthens ties with the fishing industry by providing a platform, a space to discover new products and promote new species.

· If the event takes place in the fish market auction hall: an unusual and «exotic» location that can attract

THE BRAKES / OBSTACLES

· Adapting to constraints: weather conditions if outdoors, scheduling within an event calen-dar, seasonal traffic patterns, etc.

· Organizational costs

· Setup and logistical constraints: Equipment requirements, accessibility, hygiene, safety

· Organizational time and human resources required

1.3 Action plan and terms of implementation

Necessary resources

Running the event requires funding for logistics and equipment rental, safety, hygiene and insurance, communication, and raw materials where these are not provided directly by producers. On the human side, success depends on a dedicated coordinator, a manageable recurrence that keeps the event special rather than routine, a genuinely diverse proposition of menus reflecting seasonal catches, accessible pricing and location, and a pool of volunteers to support each edition.

The stakeholders involved and their role

Saint-Guénolé-Penmarc'h town hall plays a central role — issuing permits, providing logistical support and acting as a political and media relay for a town of around 4,400 residents. The Cornouaille Ports Syndicate, which brings together the Finistère Department, the Brittany Region and several local authorities, manages the fish market and

is essential for site access and secure logistics. Volunteer fishers contribute to supply, sales and public engagement, while restaurants, food trucks and caterers prepare and sell the dishes. As in Rennes — where the model was founded by two private individuals, Olivier Marie and Franck Maciag — a dedicated project leader, a NPO, is still needed to coordinate and drive the initiative.

Key steps for implementation

Getting started means forming a small project team to define the right format, mobilising stakeholders around a pilot edition, and drawing directly on the experience of the Rennes team. From there, the practical work follows: securing the necessary permits, organising logistics around safety and hygiene, and building a proactive communication plan to bring the public in.

Success indicators

A first pilot will test several assumptions: whether the port setting and friendly format draw genuine public participation, whether the model holds up economically and organisationally at a small scale, and whether it succeeds in making local fish feel both more accessible and more rooted in its place. A second phase would then track attendance, the benefits felt by participating professionals, and the smoothness of the event's organisation.



CP : JTaryn Ellio

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TRANSFER PLANS FROM IRELAND

05



Along Ireland's West and South-West coast, real strength in fisheries, aquaculture, marine technology and seafood processing remains scattered across institutions, regions and initiatives, with no single platform connecting it into a coherent whole. The three FISHINN prototypes developed here address that fragmentation from complementary angles: building a formal cluster to coordinate the ecosystem, developing the skills and talent pipeline it needs to grow, and creating new commercial value from under-used species.

Over the course of the project these three prototypes converged, and two of them have moved beyond concept into early-stage development. The cluster work has led to the formation of a national cluster and steering group bringing together the major parties in the Irish sector. The skills work has produced Innovate Blue, a marine bioeconomy venture programme submitted to Enterprise Ireland that links universities, clusters, accelerators and industry along the Atlantic coast from Ireland to Iceland. Both remain at an early stage, and neither is yet resourced or formally constituted, but both represent tangible progress arising from Ireland's participation in FISHINN.

1. National Blue Cluster

1.1 Description of the prototype solution

Ireland's West and South-West coast holds real strength across fisheries, aquaculture, marine renewables, seafood processing and ports.

That strength remains scattered, with no single platform connecting it into a coherent whole. The Blue Cluster addresses this through a formalised Atlantic Blue Economy Cluster, developed collectively by partners across the sector, which aims to bring this fragmented landscape together and position the region as a coordinated, internationally connected marine innovation ecosystem. MTU is a key partner in this work and provides the South-West node, drawing on the stakeholder base built through FISHINN.

The cluster rests on three pillars working in tandem. A formal governance framework sets clear direction and accountability across the partnership. A network of strategic partnerships connects MTU, University of Galway, Atlantic Technological University, BIM, BiOrbic, the Centre for Applied Biotechnology Research, Bantry Marine Research Station, Donegal County Council, Marine Cluster Killybegs and RDI Hub Killorglin, extended internationally through FISHINN, Hatch Blue, MATIS and Iceland Ocean Cluster. Thematic working groups drive action on fisheries innovation, aquaculture, seafood processing and blue digitalisation.

Financial sustainability rests on a blended model combining membership contributions, EU programme leverage through Interreg Atlantic Area, Horizon Europe and EMFAF, and public co-financing. The value this creates runs across several fronts. The cluster consolidates a fragmented innovation landscape into a single, navigable entry point for SMEs, researchers and public authorities. It bridges the TRL 4 to 6 gap by connecting research from the partner institutions with processors, SMEs and investors through accelerator-style support. It establishes recognised regional nodes along Ireland's Atlantic coast, with MTU Kerry anchoring activity in the South-West, and creates qualified roles in fisheries technology, aquaculture innovation, marine engineering and digitalisation in peripheral coastal communities. It also formalises Ireland's place alongside the FISHINN partners and Icelandic blue economy hubs, building a credible cooperation axis across the Atlantic Arc.

Progress during the project period

The cluster set out in this transfer plan has begun to take shape during the project period. A national cluster and steering group has been convened, bringing together the major parties in the Irish fisheries and blue economy sector. It remains at an early stage of formation.

The steering group brings together Bord Iascaigh Mhara; BiOrbic, the national bioeconomy research centre; the Department of Agriculture, Food and the Marine; the main Irish universities; and Donegal County Council. Kerry County Council is in the process of joining. Participation therefore already spans the state seafood development agency, the national bioeconomy research centre, the responsible government department, the higher education sector, and local authorities on both the North-West and South-West coasts.

This is the direction the National Blue Cluster prototype was designed to move in. MTU is a key partner in this national structure rather than its lead, and the contribution FISHINN has made is specific: the project's work with fisheries and blue economy stakeholders across the South-West, through the Ecosystem Innovation Lab and the wider engagement around it, built the regional evidence base and the stakeholder relationships that established MTU's position in the national cluster. Bringing government, agency, research and local authority actors around the same table is a meaningful step from a fragmented starting point, and it is the step that has proved hardest for comparable initiatives elsewhere.

It should be stated plainly that this is a beginning rather than a completed outcome. The steering group is newly convened. The governance charter described below has not yet been drafted or adopted, the cluster has no legal standing, membership categories and financial rules remain to be agreed, and no dedicated funding is yet in place. The action plan set out in section 5.1.4 therefore describes work still to be done, collectively and not by any single partner, rather than work already delivered. What has changed during the project period is that the partnership base now exists, which is the precondition for everything that follows.

1.2 Transfer conditions analysis

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

THE OPPORTUNITIES

· Strong anchor institution: MTU Kerry offers governance credibility, operational continuity and an available physical base. Existing delivery platform: the Circular Bioeconomy Cluster Southwest already provides innovation services, reducing start-up risk. Partnerships identified and warm: UG, ATU, BIM, Donegal CoCo, Marine Cluster Killybegs, RDI Hub Killorglin, FISHINN, MATIS, Iceland Ocean Cluster.

· Policy alignment: strong fit with Ireland's Smart Specialisation Strategy, Atlantic Maritime Strategy, EU Green Deal and blue economy priorities.

· Validated market need: fragmentation and commercialisation gaps are widely acknowledged regionally. First-mover advantage: no competing Atlantic-facing Irish cluster currently exists.
 Access to EU funding: Interreg Atlantic, Horizon Europe, EMFAF and Enterprise Ireland routes.

THE BRAKES / OBSTACLES

· Funding dependency: early-stage viability depends on blended and sometimes competitive funding sources.

· Industry engagement risk: traditional maritime sector actors may be slow to commit to a new cluster model.

· Coordination complexity: multi-county coordination across Kerry, Galway, Mayo and Donegal, plus cross-border MoUs, demands dedicated management capacity.

· Talent and skills shortages: limited visible career paths into marine innovation roles

· Resource intensity: requires a dedicated cluster manager and thematic coordinators from day one.

· Regulatory and governance set-up: formalising a cluster entity involves legal, administrative and governance lead times.

1.3 Action plan and terms of implementation

Necessary resources

Running the cluster calls for a full-time Cluster Manager to lead strategy, governance and external relations, thematic working group coordinators across fisheries, aquaculture, seafood processing and blue digitalisation, administrative and project support for funding applications, events and reporting, and a governance board drawn from partner institutions to provide oversight.

On the infrastructure side, office space is already available within MTU Kerry. This is complemented by a digital collaboration platform for members spread across regional nodes, the existing Circular Bioeconomy Cluster's training, laboratory and project management services, and access to partner facilities at University of Galway, ATU, BIM, Bantry Marine Research Station and RDI Hub Killorglin.

Financially, an initial operational budget needs to cover staff, events, branding, travel and governance set-up costs, alongside seed funding for early pilot demonstrators that build visibility in year one. Over the longer term, a blended model combining membership fees, EU project overheads, Enterprise Ireland support and marine corporate sponsorship, backed by a contingency reserve for funding timing risk, underpins the cluster's sustainability.

The stakeholders involved and their role

MTU Kerry acts as a key partner and as the cluster's South-West node, contributing the Circular Bioeconomy Cluster Southwest as a delivery platform, convening regional stakeholders, participating in thematic working groups, and representing the South-West in EU and Atlantic Arc networks. Governance and strategic direction rest with the partnership collectively through the steering group rather than with any single institution.

University of Galway and Atlantic Technological University bring research capacity in marine science, aquaculture and biotechnology, feeding mid-TRL innovation into the commercialisation pipeline. BIM contributes sector expertise, market intelligence and access to producers, fleet operators and processors. BiOrbic, the national bioeconomy research centre, connects the cluster to national bioeconomy research capacity. The Department of Agriculture, Food and the Marine provides the policy interface. The Centre for Applied Biotechnology Research supports circular bioeconomy innovation and biotech-led product development, and Bantry Marine Research Station adds applied marine research capacity in aquaculture, marine biotechnology and ecosystem monitoring, together with pilot-scale facilities on Bantry Bay. Donegal County Council and Marine Cluster Killybegs anchor activity on the North-West coast around the Killybegs fisheries hub, with Kerry County Council joining to strengthen the South-West. RDI Hub Killorglin adds enterprise acceleration and digital innovation capacity within County Kerry.

Internationally, the FISHINN partners support knowledge transfer, species and market diversification and joint EU proposals, drawing on relationships already active through bilateral exchanges. Hatch Blue contributes aquaculture and blue economy accelerator expertise and access to international investment networks. MATIS and Iceland Ocean Cluster bring the full-utilisation circular value model and Nordic cluster experience. Primary producers, seafood processors, port authorities, fishermen's associations, marine corporate sponsors and EU programme managers complete the partnership as complementary stakeholders.

Key steps for implementation

The next step is a formal stakeholder roundtable of the convened partners to confirm strategic direction, validate the governance model and secure commitments, building on the relationships already established through the steering group and, on the South-West side, through the FISHINN consortium.
A governance charter is then drafted and adopted, setting out the cluster's legal structure, membership categories, decision-making protocols and financial rules, and giving BLUE-RDI standing as a formally recognised entity able to contract, fundraise and represent its members externally.

Cross-regional memoranda of understanding follow with Lea-Artibai Fundazioa, Iceland Ocean Cluster and MATIS, creating the formal international platform that distinguishes BLUE-RDI from existing informal networks and opens the door to joint Interreg, Horizon Europe and EMFAF bids.

Sustainable funding is then secured, blending seed support from Enterprise Ireland, Interreg Atlantic Area and regional development funds with a membership model built for long-term resilience, alongside early EU proposals prepared in parallel to demonstrate funding leverage.

Thematic working groups on fisheries innovation, aquaculture, seafood processing and blue digitalisation are launched, each with a one-year action plan shaped by industry priorities.
Finally, the cluster delivers early pilot demonstrators, meaning visible and commercially credible projects that prove it can move quickly. The Kerry to Ondarroa albacore tuna market-opening, the spider crab valorisation work under SPECIES-RDI, and the skills partnerships under MTU-BLUE stand out as natural first candidates.

Success indicators

Progress will be tracked through cluster membership across industry, research and public-sector categories; the value of Interreg, Horizon Europe and EMFAF funding secured through the cluster over its first three years; the number of research outputs advanced from TRL 4 to 6 up to TRL 7 and above with cluster support; the formal memoranda of understanding and joint bids signed with Basque, Icelandic and wider Atlantic Arc partners; the SMEs, start-ups and primary producers supported through cluster activities and pilots; the qualified jobs created within cluster-supported enterprises; and the cluster's visibility and recognition within the Atlantic Arc ecosystem.



2. Innovate Blue Programme : Skills & Talent for the Blue Economy

2.1 Description of the prototype solution

Across the Kerry, Galway, Mayo and Donegal footprint, the blue economy faces a quieter but no less pressing challenge than fragmentation: too few qualified entrants are coming into fisheries, aquaculture and marine technology roles. Innovate Blue responds by building a coordinated skills and talent pipeline for the region, drawing together training capacity already present at MTU Kerry, RDI Hub Killorglin and partner institutions into a single, visible pathway from schools and further education through to careers in the blue economy.

The prototype brings three elements together. A shared careers and outreach programme introduces the sector to second-level and further-education students, well before career choices are made. Short, modular upskilling courses, co-designed with employers such as BIM, processors and aquaculture operators, target the specific skills gaps those employers face rather than generic training content. A mentoring and work-placement scheme connects students and career-changers directly with companies hosted or supported by National Blue Cluster, turning interest into professional experience. MTU has also developed a Level 9 programme in blue bioeconomy innovation, which anchors the higher end of the pathway.

The value this creates is closely tied to the national Blue Cluster itself. It gives young people and career-changers a credible, coordinated route into marine and fisheries careers, and aligns training directly with what employers say they need. By offering genuine local career paths, it supports generational renewal in peripheral fishing and aquaculture communities, while feeding trained talent into the National Blue Cluster's member companies and thematic working groups. Beyond the region, it strengthens Kerry and the wider South-West's visibility as a place to build a career in the blue economy, supporting both recruitment and inward investment.

Innovate Blue: From prototype to venture programme

The most significant development under Innovate Blue, and arguably the clearest demonstration of what FISHINN set out to achieve, came in mid-2026 with the development and submission of Innovate Blue to Enterprise Ireland under the Innovators' Initiative II fellowship programme.

Innovate Blue is a marine bioeconomy venture programme. It selects experienced professionals with entrepreneurial ambition,



rather than researchers, and places them in an immersion model in which Fellows spend short periods in multiple host companies, rotating between them rather than sitting in a single host for an extended block. The intended outcome in each case is a new venture: a start-up creating a new product, service or technology with export potential.
The programme is structured around four industry pillars: Seaweed and Marine Biomass Systems; Marine Ingredients and Bio-based Products; Seafood Processing, Circular Manufacturing and Resource Recovery; and Aquaculture, Aquatech and Sustainable Production Systems.

The partnership behind the submission is what makes it relevant to this deliverable. MTU leads and owns the programme and its curriculum. Atlantic Technological University participates in conjunction with MTU. Hatch Blue, the global aquaculture and blue economy accelerator, and Bord Iascaigh Mhara collaborate on delivery, with Hatch Blue contributing specialist commercial modules and access to international investment networks. The Centre for Applied Biotechnology Research and University of Galway contribute research and technical capacity. Iceland Ocean Cluster brings the full-utilisation circular value model and Nordic cluster experience. Kerry Group Ingredients and Carbery act as immersive environments and downstream customer discovery partners. Complementary international relationships with SOSV and EuroQuity-Bpifrance extend the programme's investor reach.

Innovate Blue was submitted to Enterprise Ireland in July 2026, supported by 28 signed letters of intent and support and 35 confirmed partner organisations across the four pillars. MTU was called to interview with the Enterprise Ireland assessment panel in August 2026. At the time of writing the outcome of that application is not known, and the programme is not yet funded or operational. What exists at this stage is a developed programme design and a partnership assembled around it.
For FISHINN, the significance is twofold, and holds irrespective of the funding outcome. First, the programme design addresses directly the skills shortage identified through the Innovation Lab as a constraint on improving seafood value chains, by building venture and commercialisation capability rather than technical training alone. Second, assembling the partnership required the transnational connection the project set out to achieve, linking universities, clusters, accelerators and industry along the Atlantic coast from Kerry through Galway and Donegal to Iceland, with the Basque, Breton and Portuguese relationships built through FISHINN providing the wider Atlantic Arc context. It began as a skills prototype and has become an ecosystem-building instrument, though one whose delivery still depends on securing funding.

2.2 Transfer conditions analysis

THE OPPORTUNITIES

· Existing training infrastructure at MTU Kerry and RDI Hub Killorglin;

· Strong employer relationships already established through the National Blue Cluster and the Circular Bioeconomy Cluster Southwest;

· National policy support for STEM and marine skills (Human Capital Initiative, Marine Institute); clear employer demand signalled by BIM and processors.

THE BRAKES / OBSTACLES

· Fisheries and aquaculture are not widely seen as attractive careers among young people;

· Funding for training programmes is often short-term and project-based;

· Coordinating across multiple education providers and employer groups takes sustained effort;

· Measuring long-term employment outcomes is difficult within typical project timeframes.

2.3 Action plan and terms of implementation

Necessary resources

Delivering the pipeline calls for a skills and outreach coordinator to run the programme and act as the point of contact with schools, colleges and employers, supported by employer liaison contacts within each of BLUE-RDI's thematic working groups who help define the skills actually needed. Guest trainers and mentors drawn from partner companies and institutions bring practical experience into the courses, while careers guidance staff already in place within partner schools and colleges provide the outreach channel to students. On the infrastructure side, the programme draws on existing teaching facilities at MTU Kerry and the enterprise and digital training spaces at RDI Hub Killorglin, an online course and booking platform shared with National Blue Cluster's digital collaboration platform, careers materials such as videos and case studies for schools outreach, and formal work-placement agreements with partner companies.

Financially, initial funding needs to cover the coordinator role and course development, alongside bursaries or expense support to remove participation barriers for students from under-represented backgrounds. Over the longer term, funding through Human Capital Initiative-type schemes, Enterprise Ireland and employer co-contribution, backed by a contingency reserve to scale delivery as demand grows, underpins the programme's sustainability.

The stakeholders involved and their role

MTU Kerry leads Innovate Blue Programme, drawing on its existing teaching capacity and the Circular Bioeconomy Cluster Southwest to design and deliver the programme, while coordinating directly with schools and employers. RDI Hub Killorglin contributes enterprise-facing training space and start-up mentoring capacity for career-changers and early-stage entrepreneurs. BIM defines sector skills needs and supports placements with fleet operators and processors.

Second-level schools and further-education colleges across Kerry, Galway, Mayo and Donegal provide the direct channel to students, and employers hosted or supported by National Blue Cluster offer placements, mentoring and input into course design. University of Galway and Atlantic Technological University add academic content and clear progression routes into higher education, with ATU also participating directly in Innovate Blue. Hatch Blue and Iceland Ocean Cluster bring international commercial and accelerator expertise through the Innovate Blue partnership.

Beyond this core partnership, FISHINN and partner labs share training materials and outreach approaches across the Atlantic Arc, local development bodies and Enterprise Ireland support funding and business start-up pathways for graduates, and parents' associations and community groups help build local awareness and trust in the programme.

Steps for implementation

The roadmap begins by mapping existing training provision and employer skills needs across the four counties, avoiding duplication of courses that already exist. A small number of pilot modules are then designed with two or three anchor employers, testing both content and delivery format before wider rollout. A schools and careers outreach campaign follows, using the National Blue Cluster's pilot projects as visible, tangible examples of what a blue economy career actually looks like. A mentoring and work-placement scheme is then established, linking participants directly with host companies, while recurring funding is secured by combining Human Capital Initiative-type schemes, Enterprise Ireland supports and employer co-contribution.

In parallel, the outcome of the Innovate Blue submission to Enterprise Ireland will determine the scale at which the venture-creation end of the pathway can operate. Successful modules are then scaled across the wider partner network, and Innovate Blue Programme is formally integrated into the National Blue Cluster's thematic working groups, turning a pilot into a lasting part of the cluster's activity.

Success indicators

Progress will be tracked through the programme's reach, meaning the number of students and career-changers engaged through outreach and courses, alongside course completion rates, the number of work placements and mentoring matches arranged with partner companies, and the number of employers contributing to course design, mentoring or placements. Longer-term impact will be measured through progression, with participants moving into blue economy employment or further education, through regional coverage across Kerry, Galway, Mayo and Donegal, and through the number of ventures created where the Innovate Blue programme proceeds.

3. Seafood Value Chain Development

3.1 Description of the prototype solution

This solution develops the commercial value chain for under-utilised and emerging seafood species landed along Ireland's West and South-West coast, connecting research on new species and by-products with processors, chefs and export markets. It responds to the gap between research capacity at MTU, University of Galway and ATU and the commercialisation support needed to bring new products to market.

The solution consists of a consolidated Seafood Innovation and Value Chain Development Programme led by MTU Kerry, unlocking commercial value from under-utilised Irish species, building new product development capability, and turning processing by-products into high-value food-grade ingredients.

It rests on three streams. The first is spider crab valorisation, building a full-utilisation pathway from claw meat to bisques, sauces and ingredient-grade outputs, drawing on the Finnish SuperGround model. The second is sardine and anchovy market development, opening Irish routes to market for small pelagic species through the Kerry to Ondarroa relationship and Basque canning expertise, with Shines Seafood in Killybegs already proving the model. The third is a Circular Seafood Innovation Lab at MTU Kerry, providing shared pilot-scale processing infrastructure for both streams and the wider sector.
Together they address three gaps: species that remain commercially underdeveloped, limited new product development capability in a commodity-oriented sector, and by-products that go unused as a circular bioeconomy resource. In 2024, Irish vessels landed 264,582 tonnes into Irish ports with an estimated first-sale value of EUR 432 million, with a further EUR 42.2 million landed abroad (Marine Institute, citing SFPA 2025: https://marine.ie/site-area/areas-activity/fisheries-ecosystems/fisheries-overview). The pressure on that base is intensifying. BIM's Business of Seafood report records landing volumes falling 11 per cent in 2025 while value rose 7 per cent to EUR 346 million, and quota reductions agreed for 2026 cut volumes by a further 28 per cent, with the value of pelagic quotas falling 37 per cent (BIM, Business of Seafood: https://bim.ie/a-seafood-way-of-life/insights/business-of-seafood/). Against tightening quotas on established species, developing commercial pathways for under-used species is no longer optional.

The value this creates runs across several fronts. It captures margin currently lost from the Irish chain by shifting output from commodity and fish-meal grade into premium and ingredient formats. It opens sales pathways for species moving into Irish waters, offsetting quota losses on pollack, brown crab, hake and mackerel. It turns shells, frames and residual flesh into food-grade ingredients, cutting waste costs while generating new revenue. It opens structured Irish to Basque export routes into established European markets. And it establishes the first shared pilot-scale seafood innovation facility on Ireland's Atlantic coast, de-risking innovation for processors who currently have no domestic access to this capability.

Progress during the project period :

The spider crab stream has moved furthest during the FISHINN period and now sits ahead of the other two. MTU is conducting food innovation trials on spider crab, developing and testing product formats from the species and its processing residues. This work is supported by the development of promotional content for the resulting products, and by attendance at public events where the product is showcased directly to consumers, chefs and trade buyers. Taking prototype products in front of a public audience at this stage has proved valuable in two ways: it generates direct feedback on taste, format and price expectation, and it builds the visible market interest that processors need to see before committing to co-investment.

In parallel, MTU is writing the Tralee Bay area into Horizon Europe proposals under the By fishers, for fishers call, with spider crab valorisation included as a topic. This positions the work developed under FISHINN to continue and scale beyond the life of the project, with Tralee Bay as a living lab site and the local inshore fleet as direct participants rather than subjects of study. Securing follow-on Horizon Europe funding would move the spider crab stream from prototype trials into a properly resourced development programme.

This progression, from a prototype concept identified in the Innovation Lab, through food innovation trials and public showcasing, to inclusion in a Horizon Europe proposal, illustrates the transfer pathway this deliverable sets out to describe.

3.2 Transfer conditions analysis

THE OPPORTUNITIES

· Significant underutilised resource base: spider crab, sardines and anchovies occur in large volumes in Irish waters and are substantially under-commercialised.

· Established international benchmarks: Iceland Ocean Cluster 100% Fish, Finnish SuperGround by-product processing, and Nordic prepared-seafood innovation models provide credible technical and commercial references.

· Live Basque partnership: the December 2025 Kerry–Ondarroa exchange created direct commercial relationships with traders, processors and canneries;first albacore tuna sales to Ireland have already been delivered.

· Proven Irish precedent: Shines Seafood (Killybegs) is already using Basque canning capacity, demonstrating a workable commercial model.

· Climate-driven supply shift: species moving northwards create a timely opportunity to build new channels ahead of competitors.

· Access to innovation funding: Enterprise Ireland, Circular Bioeconomy Cluster routes at MTU, and EU instruments including EMFAF are aligned with productivity, product development and capital investment objectives. MTU research and infrastructure base: existing Circular Bioeconomy Cluster capability provides a strong foundation for the Innovation Lab.

THE BRAKES / OBSTACLES

· Weak domestic market familiarity: limited retail and consumer demand in Ireland for sardine, anchovy and spider crab product formats creates a soft home market.

· Processor risk aversion: primary producers and processors are reluctant to commit capital without clearer policy signals and demonstrated demand.
· No domestic canning or artisan preserved-seafood capacity: Irish processors currently de-pend on Basque facilities for higher-value pre-served formats.

· Capital intensity: cooking systems, separation technologies and ingredient processing equipment require meaningful CAPEX.

· Regulatory and food safety lead times: new in-gredients, particularly shell-derived streams, re-quire rigorous compliance and validation.

· Seasonality and supply variability: small pelagic and crustacean supply patterns constrain pro-cessing economics and require flexible production models.

· Policy gap: the absence of government recogni-tion of climate-driven species shifts limits strategic support for activation.

3.3 Action plan and terms of implementation

Necessary resources

Delivering the programme calls for a Programme Lead at MTU Kerry holding accountability across all three streams, supported by technical leads for spider crab processing, small pelagic product development and by-product valorisation, industry engagement staff to coordinate with producers, processors, buyers and the Basque partnership, food scientists for prototype work and buyer validation, regulatory and food safety expertise for new ingredient authorisation, and administrative support for funding and reporting.
On the infrastructure side, the centrepiece is the Circular Seafood Innovation Lab at MTU Kerry, equipped for pilot-scale cooking, extraction, mechanical separation and ingredient processing across both the crustacean and pelagic streams. This is complemented by existing MTU and Circular Bioeconomy Cluster facilities for analytical, sensory and food safety work, partner processing capacity in Ireland, a knowledge-exchange link with Brittany partners on extraction machinery, and access to Basque canning and artisan processing expertise through Lea-Artibai Fundazioa. Supply is secured through BIM, fleet operators and port-based traders.
Financially, the programme needs initial investment to cover feasibility, market assessment and pilot trials, capital expenditure for the Innovation Lab's cooking, separation and processing equipment, an operational budget for staff, consumables and buyer engagement, and a long-term blended funding model combining Enterprise Ireland supports, Circular Bioeconomy Cluster routes, EMFAF, Horizon Europe and processor co-investment, backed by a contingency reserve to absorb capital timing risk, regulatory lead times and supply variability.

The stakeholders involved and their role

MTU Kerry leads the programme, contributing research capacity, the Circular Bioeconomy Cluster delivery platform and the Innovation Lab itself, while providing technical leadership, cross-stream coordination, industry brokerage and external representation. BIM brings sector expertise, market intelligence and access to producers and processors. Irish seafood processors act as the commercial partners for both product streams, contributing processing capacity, capital co-investment and routes to market, and Shines Seafood in Killybegs stands as a reference partner already running a proven Irish to Basque artisan model. Primary producers and fleet operators underpin the whole programme by securing consistent volumes of spider crab, sardine and anchovy, with the Tralee Bay inshore fleet central to the spider crab stream. The Circular Bioeconomy Cluster hosts the Innovation Lab within its existing services, and sector representative organisations help engage the wider producer base. Bantry Marine Research Station contributes applied marine research capacity and pilot facilities. Internationally, FISHINN partners sustain the live commercial relationships already built through knowledge exchange, including trader introductions, canning and artisan processing collaborations and joint market development. SuperGround in Finland serves as technical reference for industrial by-product processing, while Iceland Ocean Cluster and other Nordic innovators offer benchmark models for full-utilisation processing and circular value maximisation. Foodservice, retail and export buyers, specialist processing technology suppliers, and food safety and novel-ingredient regulatory bodies complete the picture as complementary partners.

Steps for implementation

The programme opens with feasibility and market assessment across all three streams, mapping spider crab product-market fit, sardine and anchovy distribution channels, and by-product ingredient opportunities, to validate demand and prioritise the formats with the strongest buyer and export potential. This feeds into deeper buyer and processor engagement, turning the existing Basque relationships and Irish processor interest into written commitments to trial, co-invest and, where possible, commit to offtake volumes. This is essential to de-risk the programme and unlock investment.

Pilot processing trials follow at MTU Kerry and partner facilities, producing prototype spider crab lines including claw meat, bisques, stocks, sauces and condiments, alongside sardine and anchovy preserved formats and ingredient outputs from residual biomass and shell. Trials on the spider crab stream are already under way, supported by public showcasing of prototype products.

In parallel, the Circular Seafood Innovation Lab is established as a shared pilot-scale facility, with its infrastructure, capital expenditure, governance and operating model overseen by a steering group drawn from participating processors, BIM and the Circular Bioeconomy Cluster.

With the Lab in place, the programme secures its funding package, blending Enterprise Ireland supports, Circular Bioeconomy Cluster routes, EMFAF, Horizon Europe and industry co-investment, and prepares an investable processing plan for each stream to support scale-up. The inclusion of the Tralee Bay area and spider crab valorisation in Horizon Europe proposals under the By fishers, for fishers call forms part of this funding pathway.

Commercial rollout then follows, opening Irish, Basque, French and Portuguese market channels through first commercial runs, structured trade activity and regulatory submissions for any novel ingredients. Finally, the programme consolidates its learning, using the Innovation Lab to bring in wider Irish processor adoption, expand the species and product portfolio, and establish itself as a repeatable model for activating under-used species along the Atlantic coast of Ireland.

Success indicators

Progress will be tracked through the tonnage of spider crab, sardine and anchovy converted into new product formats against baseline landings; the value captured by prototype and commercial products relative to commodity and fish-meal reference prices; the number of market-ready products launched across prepared foods, preserved formats and ingredients; the number of Irish processors engaged in trials, capital co-investment and rollout; the Irish to Basque and wider European market channels opened; the share of spider crab residual flesh and shell converted into food-grade ingredients rather than disposed of; the Innovation Lab's operational status and its use by processors beyond the programme partners; and the innovation and capital funding secured, including Enterprise Ireland, EMFAF, Horizon Europe and industry co-investment.

Conclusion

The twelve transfer plans developed through FISHINN demonstrate the value of experimentation as a driver of innovation in fisheries and blue economy ecosystems. Beyond the diversity of themes addressed, a common lesson emerges: meaningful innovation rarely starts with a fully defined solution. Instead, it develops through dialogue, testing, adjustment and collective learning within real territorial contexts.
The Fisheries Ecosystem Innovation Labs played a central role in this process. They created spaces where stakeholders could collectively explore challenges, compare perspectives and translate ideas into actionable prototypes. Some prototypes are highly operational and close to the field, while others focus on governance, strategy or ecosystem coordination. This difference is not a weakness but rather reflects the position of each FISHINN partner within its own ecosystem, the maturity of local initiatives and the challenges identified during the lab process.

Several transversal observations can be drawn from the transfer plans. First, successful solutions rely on strong local leadership and a clear capacity to mobilise stakeholders. Secondly, prototyping creates value even when implementation remains at an early stage, because it helps partners validate assumptions, identify barriers and build shared ownership. Finally, transferability depends less on replicating identical actions than on adapting common principles to local realities.

Taken together, these transfer plans constitute a portfolio of tested pathways rather than fixed models. They provide practical references for future initiatives while illustrating the importance of experimentation, cooperation and continuous learning in supporting the long-term resilience and innovation capacity of Atlantic fisheries communities.



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.

• **ADRIA :** French agri-food technical institute and technology resource center providing expertise, training, applied research, and innovation services to support food industry quality, safety, and competitiveness.

• **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.