

AQUAFISH 0.0 INTERREG Atlantic Area 2021-2027 Project EAPA_0062/2022



Developing Innovative Marine Food Products in the Atlantic Area Region

Task 1: WP2
Regulatory and administrative aspects



Target audience

AA Joint Secretariat	X
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Public	

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CONTENTS

1.	Introduction	4
2.	Developing Innovative Marine Food Products in Ireland	4
2.1	Marine Food Regulatory Bodies and Responsibilities	5
2.1.1	Marine Food Safety Compliance – Production and Processing Sectors.....	6
2.1.2	Marine Food Safety Compliance – Shellfish	7
2.1.3	Marine Food Safety Compliance – Retail and Hospitality Sectors	8
2.1.4	Marine Food Safety Regulations	9
2.2	Supports for Marine Food Businesses	11
2.2.1	Business Advisory, Funding and Technical Expertise.....	11
2.2.2	Administrative Process for New Food Businesses	12
3.	Development Innovative Marine Food Products in Portugal	13
3.1	Marine Food Regulatory Bodies and Responsibilities	14
3.2	Marine Food Policy and Regulatory Environment.....	17
3.3	Marine Food Checks and Controls	20
3.4	Funding Supports for Marine Food Products	20
3.5	Steps Required for the Approval of Marine Food Business.....	21
3.6	References.....	22
4.	Developing Innovative Marine Food Products in Spain	23
4.1	Marine Food Regulatory Bodies and Responsibilities	23
4.2	Marine Food Policies and Regulations	25
4.3	Marine Food Checks and Controls	28
4.4	Business Advisory Supports for Marine Food Products.....	28
4.5	Funding Supports for Marine Food Products	29
4.6	Steps Required for the Approval of Marine Food Business.....	29
4.7	References.....	32
5.	Developing Innovative Marine Food Products in France	35
5.1	Marine Food Regulatory Bodies and Responsibilities	35
5.2	Marine Food Policy and Regulatory Environment.....	39
5.3	Marine Food Checks and Controls	44
5.4	Business Advisory Supports for Marine Food Products.....	44
5.5	Funding Supports for Marine Food Products	47
5.6	Steps Required for the Approval of Marine Food Business.....	53
5.7	References.....	57



1. Introduction

AQUAFISH0.0 is a European project co-financed by the Interreg Atlantic Area Programme through the European Regional Development Fund. AQUAFISH0.0 was established to promote social acceptance and raise awareness among consumers and producers on the need to reduce food loss and waste under the 'zero waste' philosophy. The goal of AQUAFISH0.0 is to use the Quadruple Helix model to work with consumers, producers, partners and stakeholders to stimulate innovative and sustainable production, processing and consumption of marine food products.

Work Package Two of the AQUAFISH0.0 project involves carrying out a detailed assessment of the regulatory and policy context for the innovation and sustainable production, processing and consumption of marine food products for each of the regions taking part in the project. This work will facilitate comparison across the participating regions, and will support Partners to ensure the environmental, economic and administrative feasibility of new circular economy products and production processes identified during the course of the AQUAFISH0.0 project.

2. Developing Innovative Marine Food Products in Ireland

The overall policy and regulatory environment for the production, processing and consumption of marine food products in Ireland is overseen by the European Commission Directorate-General for Health and Food Safety (DG SANTE)¹. DG SANTE is responsible for developing EU policy on food safety and health and for monitoring the implementation of related laws.

The principal organisations responsible for developing food policy and legislation in Ireland are the Department of Agriculture, Food and Marine (DAFM) and the Department of Health (DOH). The DOH is responsible for the development and monitoring of overall policy on food hygiene and food safety in Ireland.² The DAFM is

¹ "SANTE is responsible for EU policy on food safety and health and for monitoring the implementation of related laws.... Once the EU has adopted laws and policies on food safety and public health, it is up to national, regional and local governments to apply those laws." https://commission.europa.eu/about-european-commission/departments-and-executive-agencies/health-and-food-safety_en

² <https://www.citizensinformation.ie/en/health/food-safety/food-safety-and-environmental-health-services/#:~:text=The%20Department%20of%20Health%20is,some%20areas%20of%20plant%20health.>

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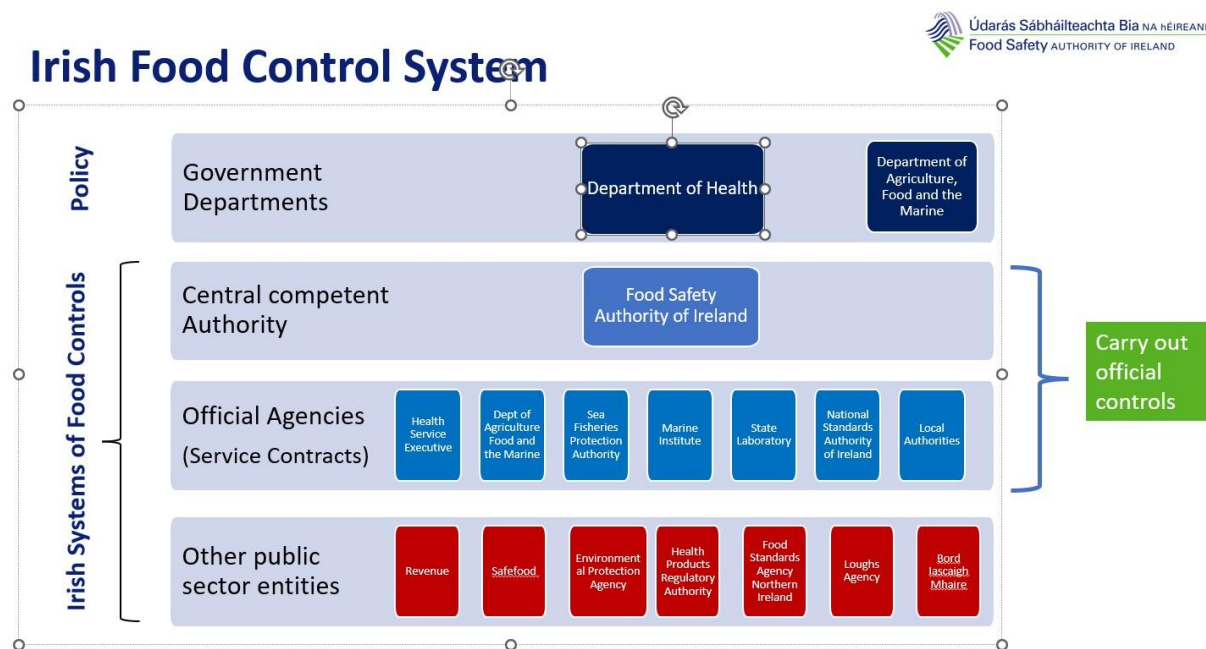
responsible for developing and regulating the agri-food sector (including marine food)³. This includes monitoring, controlling and regulating the Irish agriculture, fisheries, and food industries through national and EU legislation.

The management and enforcement of these regulations is delegated to a range of government bodies. These bodies oversee food safety regulations including regulations covering primary production and production and the marine food retail and hospitality sectors.⁴

2.1 Marine Food Regulatory Bodies and Responsibilities

The key remit of the Food Safety Authority of Ireland (FSAI) is the enforcement of food legislation in Ireland.⁵ The FSAI is responsible for co-ordinating the enforcement of the Irish Food Control System which includes marine food safety (*see Figure 2.1 below*). This is coordinated through working in partnership with other food regulatory authorities.⁶ The key food regulatory authorities involved in the enforcement of food legislation in the marine food sector are the Sea Fisheries Protection Authority (*See Section 2.1.1 below*), the Marine Institute (*See Section 2.1.2 below*), and the Health Services Executive (*See Section 2.1.3 below*). An overview of marine food regulations is also provided (*See Section 2.1.4 below*).

Figure 2.1 Irish Food Control System



function is to protect consumers' health and raise compliance through partnership, science and food law enforcement. <https://www.fsai.ie/about>

⁶ The FSAI enforces food safety legislation in Ireland through [service contracts](https://www.fsai.ie/enforcement-and-legislation/enforcement) with official agencies. <https://www.fsai.ie/enforcement-and-legislation/enforcement>

2.1.1 Marine Food Safety Compliance – Production and Processing Sectors

The Sea Fisheries Protection Authority (SFPA) is responsible for ensuring compliance with food safety regulations across all Irish fish processing plants and vessels where primary production of marine food occurs, and all transport of marine food in Ireland, up to the point of retail. The SFPA operates under a Service Contract with the FSAI and undertakes inspections, monitoring, sampling, auditing and enforcement activities to ensure seafood produced, distributed and marketed in Ireland is safe.

Sea Fisheries Protection Authority (SFPA) Checks and Controls

Registration of Food Business Operators
Primary Production (Aquaculture⁷) ➤ Shellfish-Classification of Shellfish Production Areas, Biotoxin verification checks, documentary checks ➤ Finfish- no role on farms (exception follow up residue non compliances)
Approval of Establishments ➤ Aquaculture – LBM Purification and Dispatch establishments, LBM and Finfish Processing establishments
Food Safety Checks in Processing Establishments ➤ Inspections (Structures, Hygiene, FSMS, Traceability) ➤ Microbiological and Chemical testing (Products) ➤ Water and Ice testing ➤ Labelling Checks ➤ Fish Quality Checks
Food Incidents and Complaints ➤ Follow up investigation, verification of Close out and Corrective Action

⁷ “Aquaculture is the practice of cultivation of aquatic organisms in controlled aquatic environments for any commercial, recreational or public purpose. It can be described as farming seafood as it resembles agriculture but done with fish, crustacean, shellfish, aquatic plants and other aquatic organisms.”
<https://aac-europe.org/en/about-us/what-is-aquaculture/>



2.1.2 Marine Food Safety Compliance – Shellfish

The Marine Institute (MI) is the state agency responsible for marine research, technology development and innovation in Ireland. The MI operates under a Service Contract with the FSAI and is responsible for ensuring that Irish shellfish products meet approved food safety and quality standards. The MI carries out Biotoxin Monitoring and Phytoplankton Monitoring and is also the authority for the implementation of aquatic animal health controls under Regulation (EU) 2016/429.

Marine Institute (MI) Checks and Controls

Shellfish Microbiology ➤ E.coli ➤ Foodborne viruses (shellfish) ➤ Classification & monitoring of shellfish production areas
Marine Biotoxin Monitoring ➤ Diarrhetic Shellfish Toxins DST ➤ Azaspiracid Shellfish Toxin AZT ➤ Amnesic Shellfish Toxin ASP ➤ Paralytic Shellfish Toxin PSP ➤ Yessotoxin YTX ➤ Tetrodotoxin TTX ➤ Cyclic Imine Group (Spirolides, Gymnodimines, <u>Pinnatoxins</u>, Pteriatoxins, Prorocentrolides)
Statutory Monitoring & Laboratory Testing ➤ Seawater sampling and analyse ➤ HAB species identification and enumeration
Research and Scientific Advice

Regulatory and administrative aspects developing innovative marine food products

2.1.3 Marine Food Safety Compliance – Retail and Hospitality Sectors

The Health Service Executive (HSE) operates the public health service in Ireland. The HSE operates under a Service Contract with the FSAI and is responsible for ensuring compliance with food safety regulations across all Irish retail and hospitality establishments.

Health Service Executive (HSE) Checks and Controls

Registration of Food Business Operators
Inspections ➤ Catering and Food Premises ➤ Food Sample Testing
Enforcement Tools ➤ Improvement Notice ➤ Improvement Order ➤ Closure Order ➤ Prohibition Order ➤ Product Recalls / Product Withdrawals
Public Engagement ➤ Product Recall / Withdrawal Announcements ➤ Publishing Enforcements ➤ Industry Engagement (Molluscan Shellfish Safety Forum etc.)
Food Safety Guidelines and Training ➤ Production of Food Safety Guidelines ➤ Training for Food Inspectors and Food Producers



Regulatory and administrative aspects developing innovative marine food products

2.1.4 Marine Food Safety Regulations

Links to information on the specific food safety regulations relating to the production and processing of aquaculture and aquaculture products are listed in Table 2.1.4.1 below. Links to information on the specific food safety regulations relating to the production and processing of fish and fishery products are listed in Table 2.1.4.2 below. Additional information on food safety regulations relating to the production and processing of all food, including marine food are listed in Table 2.1.4.3 below.

Table 2.1.4.1 Food Safety Regulations – Aquaculture and Aquaculture Products

Aquaculture and Aquaculture Products	
➤ Requirements for Production Areas	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/aquaculture-and-aquaculture-products/requirements-for-production-areas
➤ Fish Health Rules	https://www.fishhealth.ie/fhu/
➤ Labelling of aquaculture products	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/aquaculture-and-aquaculture-products/labelling-of-aquaculture-products
➤ Hygiene Rules	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-hygiene
➤ Microbiological Criteria	https://www.fsai.ie/business-advice/running-a-food-business/food-safety-and-hygiene/microbiological-criteria
➤ Establishments Subject to Approval	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/aquaculture-and-aquaculture-products/establishments-subject-to-approval
➤ Health Standards for Live Bivalve Molluscs	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/aquaculture-and-aquaculture-products/health-standards-for-live-bivalve-molluscs

Table 2.1.4.2 Food Safety Regulations – Fish and Fishery Products

Fish and Fishery Products	
➤ Labelling of Fishery & Aquaculture Products	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/fish-and-fishery-products/labelling-of-fishery-and-aquaculture-products
➤ Hygiene Requirements	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-hygiene
➤ Microbiological Criteria	https://www.fsai.ie/business-advice/running-a-food-business/food-safety-and-hygiene/microbiological-criteria

Table 2.1.4.3 Additional Food Safety Regulations – All Food Sectors

All Food Sectors (including Marine Food)	
➤ Food Exports	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/exports
➤ Flavourings	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/flavourings
➤ Food Additives	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-additives
➤ Food Contaminants	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/contamination-of-foodstuff
➤ Food Enzymes	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-enzymes
➤ Food Fortification	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-fortification



Regulatory and administrative aspects developing innovative marine food products

➤ Food Information - FIC (Labelling)	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-information-fic-(labelling)
➤ Food Supplements – Legislation	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-supplements
➤ Foods for Specific Groups	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/foods-for-specific-groups
➤ Foodstuffs with specific restrictions – Emergency	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/foodstuffs-with-specific-restrictions-emergency
➤ General Principles of Food Law	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/general-principles-of-food-law
➤ General Product Safety	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/general-product-safety
➤ Genetically Modified Organisms (GMOs)	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/genetically-modified-organisms-(gmos)
➤ Food Imports	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/imports
➤ International Carriage Of Perishable Foodstuffs	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/international-carriage-of-perishable-foodstuffs
➤ Manufacturing And Processing Methods	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/manufacturing-and-processing-methods
➤ Materials and Articles in Contact With Foodstuffs	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/materials-and-articles-in-contact-with-foodstuffs
➤ Novel Foods	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/novel-foods
➤ Nutrition and Health Claims legislation	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/nutrition-and-health-claims
➤ Official Control Of Foodstuffs	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/official-control-of-foodstuffs
➤ Organic foodstuffs	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/organic-foodstuffs
➤ Pesticides Residues in food	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/pesticides-residues-in-food
➤ Veterinary Medicines, Remedies, Illegal Substances	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/veterinary-medicines-remedies-illegal-substances-p
➤ Zoonoses	https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/zoonoses

A full list of all current food safety regulations can be found at the following link.
<https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation>

The information on this information leaflet does not constitute legal or other professional advice, nor is it intended to provide a detailed or exhaustive statement of the current law or a definitive interpretation of any specific legal issues. ⁸

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2.2 Supports for Marine Food Businesses

2.2.1 Business Advisory, Funding and Technical Expertise

Bord Iascaigh Mhara (BIM) is the state agency responsible for developing the Irish seafood industry by providing technical expertise, business support, funding, training to start-up and expanding businesses, and by promoting responsible environmental practice.

The Figure 2.2.1.1 below gives an overview of the regulatory environment for marine food production and processing.

Figure 2.2.1.1 Regulatory Environment – Marine Food Production and Processing



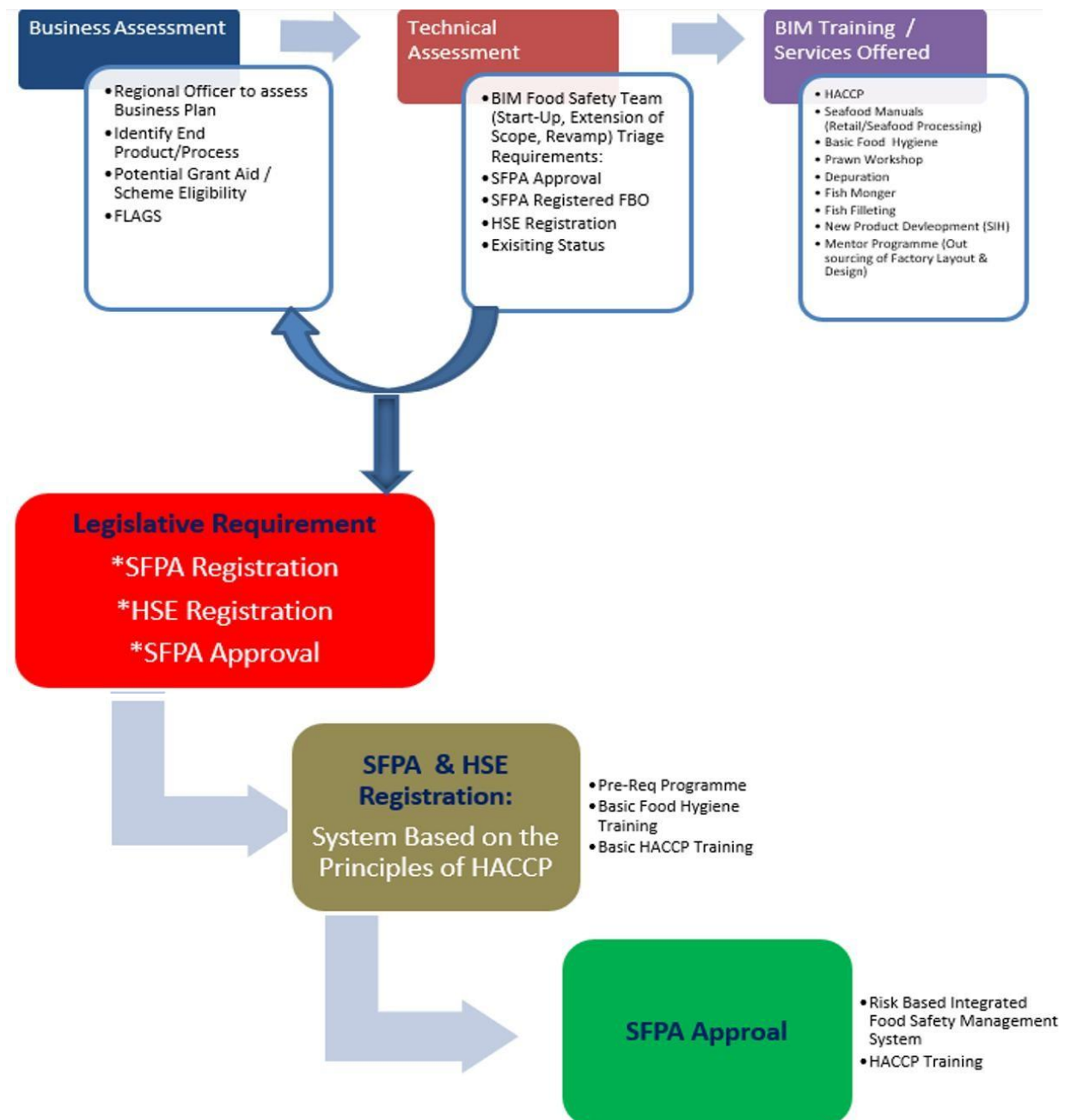
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Regulatory and administrative aspects developing innovative marine food products

2.2.2 Administrative Process for New Food Businesses

Figure 2.2.2.1 below shows the steps that BIM go through in the approval of a new marine food production or processing business.

Figure 2.2.2.1 Steps for the Approval of Marine Food Business



or similar information to for their regions.

b. Review with client and partners and amend as required.

3. Development Innovative Marine Food Products in Portugal

The European Commission formally approved the MAR 2030 Program through the Implementing Decision of 1/12/2022 which adopts the Program financed by the European Maritime, Fisheries and Aquaculture Fund (EMFAF) for Portugal. Following the adoption of the Portugal 2030 Partnership Agreement, which includes a good part of the interventions to be supported under the European Funds for the 2021/2027 period, the fisheries and aquaculture sector rely on the MAR 2030 stimulus, by renewing its opportunities for financing modernization. MAR 2030 aims to promote the competitiveness and resilience of the fishing, and aquaculture sectors in order to meet food supply and security needs, as well as promoting sustainable fishing and aquaculture, development of maritime tourism, marine renewable energy, and support for research and innovation in the blue economy.

The MAR 2030 Programme contributes towards implementing the Common Fisheries Policy and the EU Maritime Policy. It is structured into 4 priorities:

1. Foster sustainable fisheries and to restore and protect ocean biological resources, where investments on board in terms of occupational safety hygiene and conditions are supported, as well as those to improve energy efficiency and reduce pollution from vessels, alongside investments in port infrastructure and initiatives for young fishermen;
2. Foster sustainable aquaculture activities and the processing and sale of fishery and aquaculture products, thereby contributing to the Union's food security, highlighting the benefits of investments in productive innovation, decarbonization and digitalization of aquaculture and fish processing, which can make sector companies more efficient, resilient, and competitive; but also to apply measures to promote the consumption of fish and aquaculture products and to market/consolidate existing markets and reach new markets for fishery, processing and aquaculture products;
3. Promoting a sustainable blue economy in the coastal, Island and inland regions and fostering the development of fisheries and aquaculture communities, with assistance for local development strategies focused on entrepreneurship, creating jobs and diversifying activities and income;
4. Strengthening international ocean governance and promoting safe, protected, clean and sustainably managed seas and oceans, aiming at improving knowledge of the marine world and maritime surveillance and cooperation among coast guards.



3.1 Marine Food Regulatory Bodies and Responsibilities

Food safety is a high priority area for the EU and all its citizens. The EU's food safety policy, based on the primary responsibility of private operators, aims to protect people from diseases caused by the food they eat. Food safety can affect the health of all citizens and is closely linked to ensuring the free movement of food and feed within the Union and promoting world trade in safe feed and safe and wholesome food.

The legislative process in Portugal has been developed in line with the law of the European Union (EU), mostly through Regulations, which are directly applicable in the Portuguese legal system. The promotion of foodstuffs is not regulated by a specific document. There are several Portuguese official bodies, each with distinct responsibilities to ensure food safety, quality, and compliance with both national and European Union standards that guide Food industry. The following organizations play crucial roles in maintaining the integrity of food production, distribution, and consumption across the country:

Direção-Geral de Alimentação e Veterinária (DGAV)

As part of the Ministry of Agriculture, the DGAV is the principal government body responsible for overseeing food safety and veterinary health in Portugal. It ensures the implementation and compliance with EU food safety regulations. DGAV functions include:

- **Food Safety:** by monitoring the safety of food products from production to consumption, ensuring that both imported, and locally produced goods meet established safety standards;
- **Animal Health and Welfare:** by regulating the health and welfare of animals, which is critical for food production, through the application of veterinary public health standards.
- **Plant Health:** by overseeing phytosanitary measures to prevent the spread of pests and diseases affecting plants, contributing to the safety of plant-based food products.

Autoridade de Segurança Alimentar e Económica (ASAE)

ASAE is the national specialized administrative authority in the context of food safety and economic surveillance. ASAE is responsible for the discipline of the exercise of economic activities in the food and non-food sectors, by monitoring and preventing the enforcement of regulation legislation. ASAE is a national authority, with administrative autonomy, that acts as a police and law enforcement body. Its key functions include:

Regulatory and administrative aspects developing innovative marine food products

- **Market Surveillance:** Conducts inspections to ensure that the food products on the market comply with national and EU regulations.
- **Fraud Prevention:** Involved in preventing fraudulent practices in the food industry, safeguarding consumer interests by ensuring product authenticity.
- **Consumer Rights:** Protects consumer rights by monitoring commercial practices and handling consumer complaints related to food safety and quality.

Instituto Português do Mar e da Atmosfera (IPMA, I.P.)

IPMA, IP is a public institution, part of the indirect administration of State, endowed with administrative and financial autonomy and its own assets. IPMA, I. P. carries out the duties of the Ministry of Economy and the Ministry of Agriculture and Fisheries, under the supervision and tutelage of the respective ministers. The definition of strategic guidelines and the setting of objectives for IPMA, I. P., as well as the monitoring of their implementation, are coordinated with the Ministry of Education, Science and Innovation and the Ministry of Environment and Energy.

IPMA has responsibilities at national territory level in the areas of the sea and atmosphere. Focusing its research efforts on projects that accrue to direct applications for use in operating activities, pursuing continuous improvement in the information made available to its users whether for commercial use or public service and in particular directed to the safeguard of people and property. Its functions include:

- **State Laboratory and National Reference Laboratory for** National Reference Laboratory for Marine Biotoxins, Microbiology in Bivalve Molluscs and Contaminant Metals in Fisheries and Aquaculture Products.
- Promotion and coordination of scientific research, technological development, innovation and service on the sea and atmosphere,
- Implementation of national strategies and policies in their areas of expertise
- **Cooperation and coordination with national and international target organizations**

Instituto Nacional de Saúde Doutor Ricardo Jorge (INSA)

INSA is a public body within the indirect administration of the Portuguese State, under the supervision of the Ministry of Health, with scientific, technical, administrative and financial autonomy and its own assets. INSA carries out its mission with the following main attributes:

- **State Laboratory and National Reference Laboratory for Health**
 - ISO/IEC 17025 accreditation for the Laboratories of the Department of Food and Nutrition (DAN) and Laboratories of the Department of Environmental Health (DSA)



Regulatory and administrative aspects developing innovative marine food products

- ISO 15189 accreditation for the Laboratories of the Department of Infectious Diseases (DDI), Laboratories of the Department of Human Genetics (DGH) and Laboratories of the Department of Health Promotion and Prevention of Non-Communicable Diseases (DPS)
- **Research and development in the field of health sciences.**
- **National health observatory.**
- **Cooperation and coordination with national and international health organizations.**

Instituto Nacional de Investigação Agrária e Veterinária (INIAV)

INIAV is focused on research and development to support the agricultural and veterinary sectors, thus contributing to the food industry by providing scientific and technical support. Its main activities include:

- **Research and Development:** by conducting research to improve agricultural practices and animal health, thereby enhancing food safety and sustainability
- **Technical Support:** by offering technical expertise and support for the implementation of agricultural innovations and veterinary practices.

Laboratório Nacional de Referência (LNR)

As a national reference laboratory, LNR is essential for ensuring the reliability of food safety testing. Its main tasks include:

- **Analytical Testing:** by performing high-standard analytical testing of food products to detect contaminants and ensure compliance with safety regulations
- **Standardization:** by developing and maintaining testing standards to ensure uniformity and reliability across the industry.

As a member of the European Union, Portugal follows several EU regulations regarding food safety and quality. These regulations are enforced by the aforementioned National bodies to ensure that Portuguese food products are safe, correctly labelled and of high quality. This integration with EU standards facilitates international trade and reassures consumers about the safety of the food products available in Portugal.

The concerted efforts of these regulatory bodies ensure that the Portuguese food industry operates under strict safety and quality standards, safeguarding public health and supporting the sector's economic growth. Their roles are crucial to maintaining consumer confidence and meeting international trade requirements, allowing Portugal to participate effectively in the global food market.

Regulatory and administrative aspects developing innovative marine food products

Madeira constitutes an autonomous region of the Portuguese Republic, with legal authority under public law. The political, administrative and financial autonomy of the Autonomous Region of Madeira does not affect the integrity of the State's sovereignty and is exercised within the framework of the Constitution of Portugal and its Statute. Within this political and legal framework, Madeira has public institutions for food safety regulation, as follows:

Laboratório Regional de Veterinária e Segurança Alimentar (LRVSA)

This unit is integrated in the Regional Secretary of Agriculture, Fisheries and Environment. The laboratory's main focus is to provide a technical and laboratory support in the conception, design, implementation and development of practices in the fields of food safety and veterinary control.

Autoridade Regional das Atividades Económicas (ARAE)

The Regional Authority for Economic Activities (ARAE) is a service of the Regional Secretary for Economy, Tourism and Culture with authority to ensure compliance with the legal norms that regulate the exercise of economic activities in the Autonomous Region of Madeira. ARAE promotes, on its own initiative or as a result of complaints or reports filed by economic agents and consumers, preventive and repressive actions, aimed above all at combating anti-economic and public health crimes.

3.2 Marine Food Policy and Regulatory Environment

The *Codex Alimentarius*, or “food code”, is a collection of standards, guidelines and codes of conduct adopted by the *Codex Alimentarius Commission* (CAC). The CAC is the central part of the joint FAO-WHO program on food standards and was created to promote food safety, protect the health of consumers and guarantee fair practices in the food trade. In 1963, the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) created the CAC, which includes the associate members of the FAO and/or the WHO. In the same year, Portugal joined as one of the founding members, but it wasn't until 1991 that the EC joined and in 2003 the EU became a member of the CAC. In each EU member state, there is a National Contact Point, which in Portugal is the responsibility of the DGAV, that is responsible for ensuring that there are delegates to represent the country on the various committees. DGAV liaises between Codex, the EU and the various national bodies and stakeholders.

Food safety is a high priority area for the EU, it affects all citizens and is closely linked to trade policies. The EU's food safety policy aims to ensure a high level of protection for human life and health and seeks to protect its citizens from the three types of hazards in food: physical, biological and chemical. Therefore, Portugal follows several national and EU regulations regarding food safety and quality:



Regulatory and administrative aspects developing innovative marine food products

Decree Law (Portugal) No 69/2005

This law stated the duties of producers and distributors:

- Producers must provide information on the risks of using the product, to enable consumers to take precautions against those risks; take measures and inform the competent bodies of the measures taken when they identify a risk involving one of their products, whether withdrawal from the market, a consumer warning or a product recall; and analyze and keep up-to-date records of any claims they receive;
- Distributors must safeguard the integrity of products during transport, storage and display, to avoid compromising safety requirements; not sell products which they know do not meet the safety requirements; notify the Directorate-General for Consumers (DGC) of any potential risks relating to products; keep documentation enabling products to be traced back to their origin and which can be provided to the competent authorities on request; take appropriate action to eliminate consumer risk, whether withdrawal from the market or recall from consumers; and cooperate in any actions taken to avoid risks to consumers.

In Portugal, producers or distributors who identify a dangerous product notify the DGC, identifying the measures taken in relation to the products placed on the market. The information received by the DGC is then communicated to the European Commission via the RAPEX system.

Regulation (EU) 178/2002:

This EU regulation establishes the General Requirements for:

- Food safety (defines unsafe food);
- Traceability;
- Operators' responsibility;
- Crisis Management.

And aims to protect the consumers' interests to prevent:

- Fraudulent or deceptive practices;
- Adulteration of foodstuffs;
- Any other practices that may mislead the consumer.

Fishery and Aquaculture Products Regulation:

Direção Geral de Recursos Naturais, Segurança e Serviços Marítimos (DGRM) is the competent authority in Portugal for Article 35 of **Regulation (EU) No 1379/2013** on the provision of information to consumers concerning fishery and aquaculture products. This regulation establishes a list of commercial names authorized on its territory for fishery and aquaculture products in which, for each species, the scientific name, the most commonly used commercial



Regulatory and administrative aspects developing innovative marine food products

name and the FAO code are indicated. Additionally, Order No. 587/2006, establishes a list of commercial names authorized in Portugal for fishery and aquaculture products.

Novel Foods Regulation:

The first provisions on novel foods entered into force in the EU in 1997, in the form of **Regulation (EC) N° 258/97**. The general criteria for defining novel foods (or new ingredients) have remained unchanged since that date: foods and food ingredients that had not been consumed to any significant degree in the EU before May 15th 1997. These may be newly developed foods, foods that use new technologies and production processes, as well as foods traditionally consumed outside the EU.

The legislation on novel foods, **Regulation (EU) 2015/2283**, was adopted on November 25th 2015, and its rules for placing novel foods on the Union market have been fully applicable since January 1st 2018. In Commission Implementing **Regulation (EU) 2017/2470** establishing the Union list of novel foods compiling all the authorized novel foods in the European Union to date: this list contains all novel foods and traditional foods from third countries authorized in the EU that includes the name, conditions of use, labelling and other requirements, as well as their specifications.

Following the entry into application of the new regulation, the following also came into application:

- **Implementing Regulation (EU) 2017/2469**, which lays down the requirements concerning both administrative and scientific data relating to applications for authorizing the placing on the Union market of a novel food, referred to in Article 10(1) of the aforementioned regulation. This implementing act contains provisions on the structure, content and presentation of an application, including the template for the letter to be sent to the Commission, the technical dossier and the public summary of the application.
- **Implementing Regulation (EU) 2017/2468**, which lays down the requirements for the preparation and submission of notifications for the placing on the Union market of a traditional food from a third country and applications for authorization of a traditional food from a third country. This implementing act, thus, contains provisions on the structure, content and presentation of a notification, including the template of the letter, the technical dossier and the public summary of the notification or the request for placing on the market of a traditional food from a third country.
- **Commission Implementing Regulation (EU) 2018/456** of 19 March 2018, on the procedural steps of the consultation process for determination of novel food status.

Algae (seaweeds and microalgae) Regulation:

In EU, algae, as food products, are subject to the General Food Law **Regulation (EU) No. 178/2002** which is implemented in all member countries (Table 1). Furthermore, the entry of novel algae species into the EU market is regulated by the Novel Food **Regulation (EU), No. 2015/2283**. The rules applied to algae-



Regulatory and administrative aspects developing innovative marine food products

based products are regulated by **Directive 2002/46/EC**, which aims to protect consumers against the potential health risks associated with toxicity or misinformation. In Portugal, the commercial designation for different algae was revised on 6th December 2024. When algae are used for human consumption, the quality and safety must comply with the public health regulations (EU and Portugal).

Table 1 - Legislation on edible algae species as food products in Europe.

Categories	Organizations	Regulations
Foods, food supplements, and food additives	Scientific Committee on Food; European Food Safety Authority; European Committee for Standardization	General Food Law Regulation (EU) No 178/2002; Novel Food Regulation (EU) 2015/2283; Directive 2002/46/EC; SANCO/2006/E4/018 report; SEC (2008) 2976; SEC (2008) 2977; (EC) 1333/2008 and (EU) 231/2012 legislations

3.3 Marine Food Checks and Controls

Novel foods are controlled through the implementation of the PACE, PCAI and PCSA control plans and at the time of import.

3.4 Funding Supports for Marine Food Products

As part of Portugal 2030, which materializes the Partnership Agreement established between Portugal and the European Commission for the application of cohesion policy funds (ERDF and ESF+) for the 2021-2027 programming period, the Innovation and Digital Transition Programme (COMPETE 2030) has a budget of 3.9 billion euros to pursue various strategic objectives, including support for investment in research and innovation, digitalization, competitiveness and internationalization of companies, skills for smart specialization and industrial transition. This objective aims to develop and strengthen research and innovation capacities and the adoption of advanced technologies (FEDER), through:

- **Scientific and Technological Research:**

To support internationally recognized scientific and technological production, stimulating a high value-added economy, as well as excellence, cooperation and internationalization, by enabling SCTN entities to develop research processes, with the aim of producing and expanding knowledge in scientific and technological areas that support innovation processes with a market purpose and increasing the creation of knowledge to respond to business and societal challenges;

- **Research and Development:**

To promote investment in R&D, in the categories of industrial research and experimental development, stimulating its economic valorization and the promotion of innovation in priority areas of intelligent specialization, by strengthening the link between companies and scientific and



technological institutions, as well as promoting the internationalization of national capacities in the field of research and innovation (R&I), through integration into international R&I networks.

3.5 Steps Required for the Approval of Marine Food Business

Portugal has not defined lists of authorized plants and substances. Therefore, it is up to the economic operator to verify that the food they intend to place on the market meets the requirements of the Regulation. To clarify the Novel Food status, there are several resources:

- **EU Novel Food status Catalogue (NFC):** Non-binding tool that lists products of animal and plant origin, algal species, food cultures and other substances subject to the Novel Food Regulation. The information is provided by the EU Member States on the NF status of specific products, including whether they were used for human consumption in a significant way in the Union before 15 May 1997 or not.
- **Consultation process to determine novel food status (art. 4, R2015/2283):** If the operator has doubts about the classification of a food as a novel food, he can consult the Member State in which he intends to place the food on the market for the first time. Following Implementing **Regulation (EU) 2018/456** which sets out the procedural steps and the information to be provided.
- **Union list of novel foods:** Commission Implementing **Regulation (EU) 2017/2470** that establishes the list of novel foods compiling all the authorized novel foods in the European Union to date. It includes their conditions of use, labelling requirements, and their specifications. All authorizations are generic and the Union list serves as a reference for economic operators who wish to place in the market an authorized novel food unless data protection is requested by the applicant.

The process required for the approval of a new food, follow these steps:

1. Risk Assessment:

- a. If the product qualifies as novel food, an application must be submitted to the European Commission (COM) for authorization, complying with **Regulation (EU) 2015/2283** and **Regulation (EU) 2017/2469** of Novel Food Application.
- b. COM verifies and validates the dossier and will request EFSA to carry out the risk assessment.
- c. EFSA will adopt its opinion in 9 months.



2. Risk Management:

- a. COM prepares a draft implementing act based on EFSA's opinion.
- b. COM submits the draft to PAFF SC for voting (qualified majority). If not, NF will not be authorized and cannot be placed on the market.
- c. COM adopts Implementing Act and Union List is updated.

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4. Developing Innovative Marine Food Products in Spain

Policy and regulatory context in Spain consist of a complex system where the main Organism implied is the Spanish Agency for Consume, Food Safety and Nutrition (AECOSAN), associated with different Ministries. They are responsible for the management of sanitary, quality and safety control of food (including those from marine sources), guaranteeing the health of the consumers. For that, they have established different Methods, Decrees and Laws to assure the correct use of food products, together with European regulations. Moreover, the entity has well defined protocols for introducing new food products to the market, guaranteeing the sanitary conditions of products, processes and consumers.

4.1 Marine Food Regulatory Bodies and Responsibilities

The organisation in Spain responsible for food safety regulation and administration is the Spanish Agency for Consume, Food Safety and Nutrition (AECOSAN), which is composed by the Spanish Agency for Food Safety and Nutrition (AESAN) and the National Consumer Institute (INC) since 2014. AECOSAN, composed by more than 170 professionals, is an autonomous entity related with the food security and healthy nutrition, with the main objective to guarantee the higher degree of food security and to promote the health of consumers.

The objective is planned to be achieved through different key points:

- To promote and push forward cooperation and coordination among public governments involved in food security and nutrition.
- To plan, coordinate and develop strategies and activities to foster the information, education and promotion of health on the nutrition field, specifically preventing obesity.
- To support collaboration among public governments and the different sectors involved, including consumers and user associations.
- To be the national reference centre on food risk evaluation and on management and communication of them, especially in emergency situations.

By all these key points, AECOSAN pretends the following milestones:

- To reduce risks from illness transferred or related with food.
- To guarantee the efficacy of control systems



on food.

- To promote a varied and equilibrate diet to foster a better population health degree by improving the accessibility of the food information.

AECOSAN, despite being an autonomous organisation, is assigned to the Ministry of Social Rights, Consumer Affairs and 2030 Agenda. In fact, the entity is related with the following national departments:

- Ministry of Social Rights, Consumer Affairs and 2030 Agenda.
- Ministry of Agriculture, Fisheries and Food.
- Ministry of Health.
- Ministry of Economy, Trade and Enterprise.

Moreover, AECOSAN itself has a structured and complex organisation, composed of different departments and working groups. The organigram of AECOSAN is shown in the Figure 1 below.

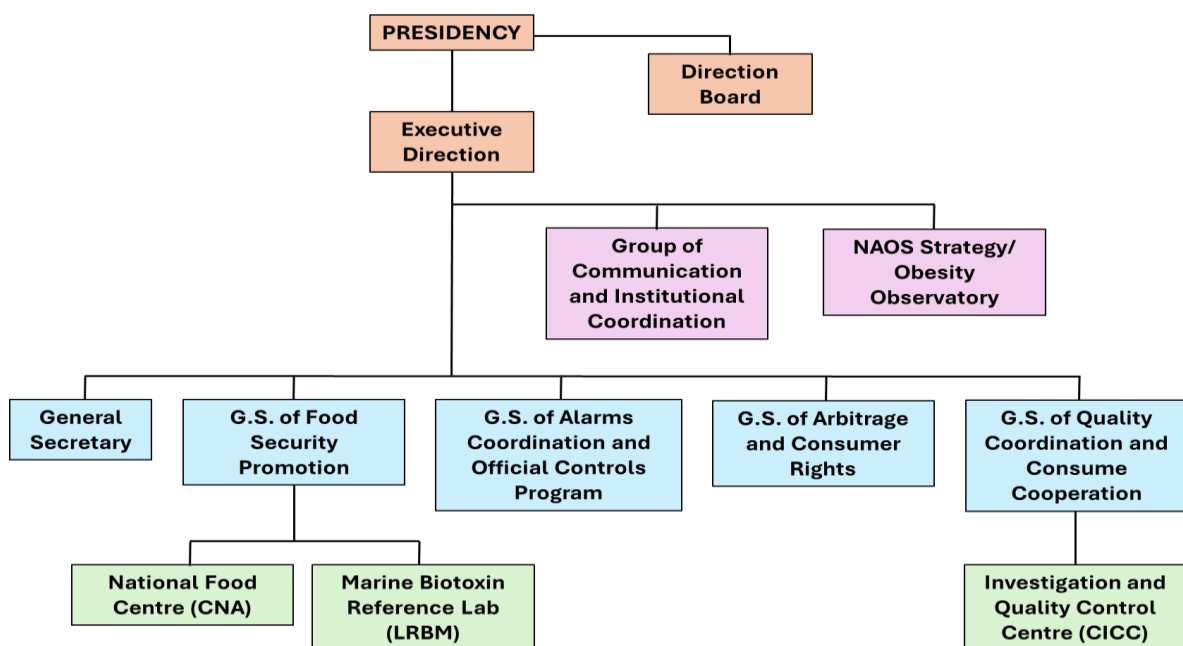


Figure 1. AECOSAN Organigram.

AECOSAN is the unique contact point with European Union, concretely has the responsibility of interlocution with the European Food Safety Authority (EFSA) and other international institutions related with food security and health nutrition¹.

4.2 Marine Food Policies and Regulations

There are diverse policies and regulations, both at European and Spanish level, about food security and health nutrition, with respect to the insertion of a new food product in the market, specifically from animal raw materials and from by-products.

The most representative regulations are the following:

General Hygiene of Food Products

- At European level:
 - Regulation (EC) N° 852/2004 of the European Parliament and of the Council, of 29 May 2003, on the hygiene of foodstuffs⁵.
 - Regulation (EC) N° 2073/2005 of the Commission, of 15 November 2005, on microbiological criteria for foodstuffs⁶.
- At Spanish level:
 - Royal Decree 1086/2020, of 9 December, on the regulation and flexibility of determined application conditions of the European Union dispositions about production hygiene and commercialization of food products and on the regulation of excluded activities of their application field⁷.
 - Law 17/2011, of 5 July, on food security and nutrition⁸.

Foods of Animal Origin

- At European level:
 - Regulation (EC) N° 853/2004, of 29 April 2004, of the European Parliament and of the Council, laying down specific hygiene rules for on the hygiene foodstuffs⁹.
- At Spanish level:
 - Royal Decree 1086/2020, of 9 December, on the regulation and flexibility of determined application conditions of the European Union dispositions about production hygiene and commercialization of food products and on the regulation of excluded activities of their application field⁷.
 - Royal Decree 1021/2022, of 13 December, on the regulation of determined requirements related to production and commercialization hygiene of food products in retail markets¹⁰.

Regulatory and administrative aspects developing innovative marine food products

Animal By-Products Intended for Human Consumption

- At European level:
 - Regulation (EU) 2017/625 of the European Parliament and of the Council, of 15 March 2017, on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending and repealing different previous regulations, like Regulation (EC) N° 854/2004 about rules for the organisation of official controls on products of animal origin intended for human consumption¹¹.
- At national level:
 - Law 7/2022, of 8 April, on waste and contaminated soils for a circular economy¹².
 - Law Project on prevention of food loss and food waste¹³.

Animal By-Products Non-Destined for Human Consumption (ABP)

- At European level:
 - Regulation (EC) N° 178/2002 of the European Parliament and of the Council, of 28 January 2002, laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety¹⁴.
 - Regulation (EC) N° 1069/2009 of the European Parliament and of the Council, of 21 October 2009, laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) N° 1774/2002 (Animal by-products Regulation)¹⁵.
- At Spanish level:
 - Royal Decree 1528/2012, of 8 November, on the applicable rules for animal by-products and derived products non-destined for human consumption¹⁶.

Control of Animal Products

- At European level:
 - Delegated Regulation (EU) N° 2019/624 of the Commission, of 8 February 2019, concerning specific rules for the performance of official controls on the production of meat and for production and relaying areas of live bivalve molluscs in accordance with the Regulation (EU) 2017/625 of the European Parliament and of the



Council¹⁷.

- Implement Regulation (EU) N° 2019/62 of the Commission, of 15 March 2019, laying down uniform practical arrangements for the performance of official controls on products of animal origin intended for human consumption in accordance with Regulation (EU) 2017/625 of the European Parliament and of the Council¹⁸.
- At Spanish level: The control normative is included in each Spanish specific regulation, decree, directive or law.

Labelling and Food Information

- At European level:
 - Regulation (EU) N° 1169/2011 of the European Parliament and of the Council, of 25 October 2011, on the provision of food information to consumers¹⁹.
- At Spanish level:
 - Royal Decree 1334/1999, of 31 July, concerning the approval of the general Rule of labelling, presentation, and publicity of food products²⁰.
 - Royal Decree 126/2015, of 27 February, on the general rule relative to the food information of food without packaging to the final consumers and to the communities, of food packaged in the market by consumer request, and of food packaged by the owners of retail market²¹.

Introducing New Food Products to the Market

- At European level:
 - To introduce a new food product to the market, you must obey all the previous European regulations and also the specific legislation of the country.
- At Spanish level:
 - Royal Decree 191/2011, of 18 February, on general sanitary register of food and beverage companies. Last modification on 21/12/2022²².
 - Decree 61/2012, of 13 March, on the regulation of the procedure about sanitary authorization of operation and prior communication of activity start of companies and food establishments and creates the General Sanitary Registry of Food Companies and Food Establishments of Andalusia. Last modification on 04/10/2016²³.

Novel Food and Novel Ingredients

- At European level:
 - Regulation (EU) N° 2015/2283 of the European Parliament and of the Council, of 25 November 2015, on novel foods²⁴.
- At Spanish level: There are no specific rules about novel food and novel ingredients at national level. The legislation is subject to the European Regulation.

4.3 Marine Food Checks and Controls

According to regulations described previously, various obligations exist about checks and controls of raw materials as ingredients and food products destined for human consumption, both at European and at Spanish scale. Most of them are already included on the own regulations, although there are at least two specific legislations about controls of animal products at European level, concretely laying down on official controls of bivalve mollusc production and of management of animal origin products intended for human consumption.

With respect to the Spanish level, each Royal Decree, Directive or Law has its own control section within the document, guaranteeing the quality of the raw materials, processes and products obtained for human consumption.

Moreover, all European Union members must have a National Plan for Official Control of the Food Chain, according to the 109 article of the Regulation (EU) N° 2017/625 of the European Parliament and of the Council, of 15 March 2017, on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products¹¹.

For Spain, AECOSAN is the organization responsible for the development of this document, in collaboration with the public governments assigned. The current Plan is the National Plan for Official Control of the Food Chain 2021-2025, which is annually reviewed and updated. The Plan has the objective to describe the official control systems for the food value chain in Spain, since primary production to final consumer market.

4.4 Business Advisory Supports for Marine Food Products

There is no public entity with the responsibility of business advisory support for marine food products. Instead, this task is taken by various technological centres related with marine food products, which offer consulting and pilot tests for the companies interested. For example, Andalusian Aquaculture Technology Centre (CTAQUA) is one of these technological centres involved.

4.5 Funding Supports for Marine Food Products

The funding supports for marine food products coming from the different Ministries involved, specially from the Ministry of Agriculture, Fisheries and Food, which belongs to the Spanish Government. The way to support is commonly through diverse grants or subventions.

4.6 Steps Required for the Approval of Marine Food Business

Nowadays, consumers are more and more concerned about the security and quality of food products. For this reason, there is a whole regulation for food products regulating all the steps they must mandatorily pass before reaching the market and the final consumers. Apart from the faithful compliance of the European and Spanish regulations mentioned before, the food products must follow some specific procedures.

In Spain, the regulation and control of new food products (not novel food) is carried out through the procedure of the Sanitary Register. Every food product that is destined for the human consumer (market, restaurant...) must be approved by the General Sanitary Registry for Food and Food Companies (RGSEAA), according to the Royal Decree 191/2011, of 18 February, on general sanitary register of food and beverage companies²². This national registry is the fundamental backbone to guarantee the public health and the consumer confidence because it assures that all food products commercialized are in optimum conditions of hygiene, quality and traceability. Moreover, the regulations of the autonomous communities establish determined specific conditions for Andalusian foods and companies²³.

Prior to the RGSEAA, it is necessary to obtain the certificate of the National Classification of Economic Activities (CNAE), which is mandatory for all national companies independently of the developed activity, according to the Royal Decree 475/2007²⁵. Then, if the objective of the company is to commercialize food products it will be necessary to obtain the RGSEAA register.

The control of the food products to obtain the RGSEAA is carried out along all the value chain of the product:

Origin Control

The control of the food products starts at the beginning of the process, with farmers and producers where the products are cultivated and produced, which are submitted to exhaustive inspections and analyses to guarantee the quality and security of the food products and of the final consumers. Farmers and producers must demonstrate the following of Good Practices, using only authorized ingredients and additives. Furthermore, they must have a whole register of the raw materials and the process, to facilitate traceability and the controls of them.



Regulatory and administrative aspects developing innovative marine food products

Laboratory Control

After the recollection or processing of the raw materials by farmers or primary producers, the food products are destined to industries, where they will be submitted to secondary processing, treatments, packaging, distribution, etc., transforming the raw materials into final products ready for consumption. At this point, food products must also pass different inspection and analysis tests, to guarantee the quality and security of the products.

Apart from the inspections “in situ” in the industries checking Good Practices and the requirements mentioned before in origin control, various analyses are carried out in authorized laboratories. These controls will check the organoleptic and microbiological characteristics and properties of the food products, assuring the absence of pathogens, contaminants and other substances that could risk the health of the consumers.

Labelling Control

Once passed the quality and security checks, food products must adjust to the legal rules of labelling. According to the regulations, labels of food products must provide clear, real and accurate information about basic characteristics of the products, such as composition, storage conditions, shelf life or preferent consumption, use instructions and warnings of interest for the consumers. Based on this information, consumers will be able to decide about the products they want to buy and to consume.

Sanitary Authorities Control

Following the previous steps, food products must be evaluated by the Agency for Consume, Food Safety and Nutrition (AECOSAN) and other national or autonomic sanitary authorities. These entities will check exhaustively all information and documentation about the product and they will carry out the inspections needed to assure that the product stick to the sanitary requirements.

If the product meets the legal valuation with respect to their hygienic, quality and traceability requirements, the food product or the company to whom the food product belongs is granted the corresponding Sanitary Registry. This is an endorsement that demonstrates and confirms that the product has been submitted to the pertinent controls and complies with quality and safety criteria according to the law in force. With this certification, the product is deemed suitable for the sale and distribution to consumers¹.

- Before launching a food product to the market, the producer must ensure it does not infringe on intellectual property rights, such as patents, registered trademarks or author rights.

Market Control

Although the food product is already authorized, markets and restaurant business are responsible for the quality and security control of the food products they offer to consumers, being the last step on the value chain.



They are also subjected to strict inspections to guarantee the sanity of the products and facilities and the health of the future consumers. The complete information about the procedure of the Sanitary Registry, with requirements, forms, mandatory documents, deadlines, FAQs... is available on the website of the responsible Organism (AECOSAN)¹ and of the autonomous government (Regional Government of Andalusia)^{2,3}, with very detailed guidelines to carry out the process of registration⁴.

Among all the documents required for the Sanitary Registry, the Hazard Analysis and Critical Control Points (APPCC) stands out, which is a complex document about all the information related to raw materials, products and processes implied with the food product management, defining the critical points, warnings and dangers associated, and corrective actions. The APPCC pretends to establish a preventive and systematic procedure to control the possible risks generated, guarantying the quality and safety of products, staff and infrastructures¹. This APPCC is a live document, it means that it changes with the changes in the company: a new product, a new equipment, a new process, a new infrastructure, a new processing flow... In fact, the RGSEAA register is linked to the type of activity (not to the raw materials origin or product gamma). These activities could be production, transformation, commercialization, distribution, etc. The RGSEAA register must englobe all the activities in which the company is involved in. If the company modifies or adds a new activity, the RGSEAA register must be updated.

If the activity of the company is only the production and/or commercialization/distribution of food products the RGSEAA register will be sufficient. In contrast, if the objective of the company includes the transformation process of the food product it will be also required the Agri-Food Industry Register (RIA), which is mandatory for all companies that transform raw materials into final food products destined for commercialization and human consumption, according to the Royal Decree 173/2001²³. The RIA register acts at national level but the responsibility is associated with each Provincial Delegation. To achieve the RIA registration, it is required to define and present information about raw materials, food products, equipment, processes, etc., information similar to that required for the RGSEAA registration but more extensive. Further information about the RIA register is available on the website of each Provincial Delegation²⁶. With respect to the use of by-catch and by-products as raw materials to develop new food products (not novel foods, they have its own European regulation: artificial nano-ingredients, third-world country products and food not used previously to 1997) intended for human consumption, the regulation of the application is the one mentioned on “Animal by-products intended for human consumption” and “Animal by-products non-destined for human consumption”, but there is no any additional regulation because of the type of raw materials.

Following these European and Spanish regulations laid down on animal by-products intended and non-destined for

human consumption, all by-products generated through primary processing with the proper quality and security properties (sanitary conditions) could be used for human consumption. The inconvenience of by-products is that most of them are not suitable for direct human consumption. Thus, they are submitted to a transformation processing to obtain a new food product with high added value, suitable for human consumption. On the other hand, when by-products are catalogued and managed as ABP (animal by-products non-destined for human consumption) they must not be destined for human consumption, only elimination or other exploitation ways, like feed, biogas, compost, etc., following Regulation (EC) Nº 1069/2009¹⁵ and Royal Decree 1528/2012¹⁶.

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¹⁹European Parliament and Council of the European Union. (2011). Regulation (EU) Nº 1169/2011, of 25 October 2011, on the provision of food information to consumers.

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²⁰Ministry of Presidency. (1999). Royal Decree 1334/1999, of 31 July, concerning the approval of the general Rule of labelling, presentation and publicity of food products. *Official State Gazette*, 202, 31410-31418.

²¹Ministry of Presidency. (2015). Royal Decree 126/2015, of 27 February, on the general rule relative to the food information of food without packaging to the final consumers and to the communities, of food packaged in the market by consumer request, and of food packaged by the owners of retail market. *Official State Gazette*, 54, 1-9.

²²Ministry of health, social policy and equality. (2011). Royal Decree 191/2011, of 18 February, on health general register of food and beverage companies. *Official State Gazette*, 57 (I), 26012-26019.

²³Health Council. (2012). Decree 61/2012, of 13 March, on the regulation of the procedure about sanitary authorization of functioning and the previous communication of activity start for companies and food establishment and it is created the General Sanitary Registry for Food and Food Companies for Andalusia. *Official Gazette of the Regional Government of Andalusia*, 60, 1-10.

²⁴European Parliament and Council of the European Union. (2015). Regulation (EU) Nº 2015/2283, of 25 November 2015, on novel foods. *Official Journal of the European Union*, L 327, 1-22.

²⁵Ministry of Economy and Finance. (2007). Royal Decree 475/2007, of 13 April, based on the 2009 National Classification of Economic Activities (CNAE-2009). *Official State Gazette*, 102, 1-20.

²⁶<https://www.juntadeandalucia.es/servicios/sede/tramites/procedimientos/detalle/138.html>

5. Developing Innovative Marine Food Products in France

The marine food sector in France is subject to a comprehensive regulatory framework that ensures food safety, sustainability, and economic viability. This framework is shaped by both European Union regulations and national policies aimed at managing fisheries, aquaculture, seafood processing, and market distribution.

5.1 Marine Food Regulatory Bodies and Responsibilities

In France, several organizations are responsible for regulating and overseeing food safety. The main ones are:

- General Directorate for Food (DGAL)
- Directorate General for Competition, Consumer Affairs and Fraud Control (DGCCRF)
- National Agency for Food, Environmental and Occupational Health Safety (ANSES)
- National Agency for the Safety of Medicines and Health Products (ANSM)
- Departmental Veterinary Services and Regional Directorates for Food, Agriculture, and Forestry (DRAAF)

General Directorate for Food (DGAL)

Within the French Ministry of Agriculture and Food Sovereignty, the **Directorate General for Food (DGAL)** has the primary mission of protecting the health of consumers, animals, plants, and the environment. It develops and implements the French government's policies in three key areas, including food quality and safety. As part of its role in food safety enforcement, the DGAL establishes and organizes the inspection of sanitary conditions under which animal and plant-based food products are produced and marketed. It is responsible for health alerts and product withdrawals/recalls when necessary¹. The DGAL supervises food safety at all stages—production, processing, and distribution—while coordinating official controls and enforcing both European and national regulations.

The DGAL includes a **Sub-Directorate for Food Safety (SDSSA)**, which comprises several entities, including the **Bureau of Marine and Freshwater Products (BPMED)**².

Role and Main Missions of BPMED: BPMED is responsible for drafting, monitoring, inspecting, and evaluating regulations related to the food safety of marine and continental aquaculture products in their production, processing, and distribution.

Regulatory and administrative aspects developing innovative marine food products

- **Health Monitoring of Aquatic Products:** BPMED oversees the sanitary monitoring of shellfish production areas, particularly regarding microbiological and toxin-related risks. It sets guidelines for organizing this monitoring, managing agreements with analytical laboratories, and implementing controls through departmental authorities.
- **Authorization and Inspection of Live Tank Facilities:** BPMED is responsible for the authorization and sanitary inspection of live tank facilities for crustaceans and marine and freshwater fish. It defines procedures to ensure food safety in these establishments.
- **Management of Foodborne Outbreaks (TIAC):** In the event of a suspected **foodborne outbreak (TIAC)** linked to shellfish contaminated by noroviruses, BPMED outlines the necessary actions, including sample collection, authorization of farming activities during area closures, and product withdrawal/recall operations.

Thus, **BPMED**, structured into two divisions—**live shellfish and fishery products**, plays a crucial role in managing the food safety of seafood and freshwater products. It ensures the monitoring of production areas, regulates live tank facilities, and coordinates actions in response to food safety crises involving these products. Until December 2023, DGAL had been co-managing food safety alongside the **Directorate General for Competition, Consumer Affairs and Fraud Control (DGCCRF)**.

[Directorate General for Competition, Consumer Affairs and Fraud Control \(DGCCRF\)](#)

The DGCCRF is a department within the Ministry of Economy, Finance, and Industrial and Digital Sovereignty. It ensures economic public order by overseeing the proper functioning of markets. One of its key missions is to ensure the fairness of food products, conducting inspections of establishments to verify compliance with regulations on business practice fairness (such as labelling, product naming, etc.) and traceability. It combats fraud and deceptive commercial practices but is no longer responsible for food safety.

The DGCCRF contributes to competition and consumer policy as well as the development of regulations. It conducts investigations and inspections of businesses to ensure compliance with laws and regulations. Additionally, it helps professionals understand and apply consumer and competition rules, corrects violations, and imposes sanctions on fraud. Its work strengthens trust among all economic stakeholders, which is essential for stable and secure trade³.



Regulatory and administrative aspects developing innovative marine food products

National Agency for Food, Environmental and Occupational Health Safety (ANSES)

ANSES plays a key role in the regulation and monitoring of the seafood sector in France. Its work focuses on evaluating, monitoring, and preventing risks associated with seafood consumption, guiding public authorities and industry professionals in better managing health and environmental challenges. ANSES' Three Key Areas of Action are the following (ANSES website):

- **Health Risk Assessment:** ANSES analyses risks associated with seafood consumption, evaluating chemical contaminants (heavy metals like mercury, PCBs, dioxins, pesticides), microbiological risks (pathogenic bacteria such as *Listeria*, *Vibrio*, parasites), marine biotoxins (present in shellfish, e.g., paralytic shellfish toxins *PSP*, diarrhetic shellfish toxins *DSP*), allergens (allergenic proteins in crustaceans and fish). The agency issues scientific opinions for public authorities and industry professionals to help minimize these risks.
- **Contaminant Monitoring and Control:** ANSES collaborates with various organisations (DGAL, Ifremer, national laboratories) to analyse marine water quality and shellfish farming areas for pollutants, monitor contaminant levels in seafood and issue alerts when contamination exceeds regulatory thresholds. This work contributes to managing health crises, such as pollution episodes or shellfish contamination by toxins.
- **Scientific Recommendations for Seafood Safety:** ANSES provides recommendations to consumers, encouraging seafood consumption for its omega-3 and protein benefits while ensuring food safety and traceability standards.

The DGAL relies on scientific advice from ANSES to adapt its actions and control priorities. ANSES evaluates and advises, while the DGAL acts and controls. Working together, they can guarantee the safety of seafood products in France, by combining scientific expertise with active surveillance in the field.

ANSES contributes to public policy and regulations by providing its scientific expertise to develop European and national food safety regulations, set maximum contaminant levels in seafood and improve monitoring and control practices. It plays a special role in the French seafood sector. ANSES ensures the sanitary quality of seafood from fishing and aquaculture, evaluating both risks and benefits of consumption⁴.

In terms of fish health, the ANSES Laboratory in Ploufragan-Plouzané-Niort studies the viruses that affect farmed fish and assesses the impact of environmental pollutants or resistance to infectious diseases in the production chain. The Food Safety Laboratory



Regulatory and administrative aspects developing innovative marine food products

(Maisons-Alfort and Boulogne-sur-Mer) works on the biological and chemical hazards that can affect the quality and safety of food and fish products. Working on the issue of antibiotic resistance, the ANSES also monitors levels of antibiotic resistance in freshwater fish and fishery products and assesses water contamination by antibiotics and resistant bacteria.

National Agency for the Safety of Medicines and Health Products (ANSM)

The ANSM primarily intervenes in cases where a product holds the status of medicinal product. If a marine-derived product (e.g. seaweed, marine extracts) is claimed to have therapeutic properties or exerts a pharmacological action, it may be classified as a medicine. In such cases, the ANSM evaluates the Marketing Authorisation (AMM) application, which includes data on the product's efficacy, safety, and quality. The agency also conducts inspections and monitors adverse effects post-marketing (pharmacovigilance). In the event of a health issue, the ANSM can restrict or ban a product, request further analyses, and impose usage restrictions.

For dietary supplements and marine-derived ingredients, other agencies such as ANSES and the DGCCRF hold regulatory authority.

- **Case of Dietary Supplements:** Marine-based dietary supplements (e.g. fish oil, spirulina, marine collagen) are regulated under European food law (Regulation (EC) No 178/2002) and French regulations. The ANSM does not intervene directly unless health risks arise. The DGCCRF and ANSES oversee risk assessment and market control. A notification to the DGCCRF is required before market placement.
- **Case of Marine-Derived Ingredients:** If an ingredient is part of a medicinal product, the ANSM ensures its quality and safety within the AMM application process. If it is intended for dietary supplements, it must comply with regulations set by ANSES and the DGCCRF.

Departmental Veterinary Services and Regional Directorates for Food, Agriculture, and Forestry (DRAAF)

The Departmental Veterinary Services and the DRAAF play a crucial role in the marketing of seafood products, particularly by ensuring their sanitary safety and regulatory compliance.

- **The Departmental Directorates for Population Protection (DDPP)** serve as the departmental veterinary services responsible for⁵:
 - Controlling the hygiene and sanitary safety of seafood products (fishing, aquaculture, processing, distribution).

Regulatory and administrative aspects developing innovative marine food products

- Inspecting establishments handling these products (markets, fishmongers, restaurants, processing companies).
 - Granting sanitary approval to establishments based on their compliance with European and French standards.
 - Monitoring the presence of contaminants (heavy metals, marine toxins, parasites) and acting in cases of non-compliance.
 - Intervening in the event of a health alert (product withdrawals, recalls, closure of establishments posing a public health risk).
- **Regional Directorates for Food, Agriculture, and Forestry (DRAAF).** At the regional level, the DRAAF have a coordination and supervisory role⁶, including:
 - Overseeing health inspections carried out by the DDPP on seafood products.
 - Managing surveillance and control plans to detect health risks (presence of contaminants, food fraud).
 - Implementing food safety and traceability policies imposed by the European Union and the French government.
 - Supervising aquaculture production in compliance with sanitary and environmental standards.

In the aquaculture and agri-food sector, the DRAAF serves as the regional level of France AgriMer, a national institution under the supervision of the Ministry of Agriculture, responsible for regulating agricultural and agri-food markets, providing economic support to industries, and implementing European and national policies.

Ultimately, the Departmental Veterinary Services and the DRAAF have a direct impact on the marketing of seafood products. Before a seafood product can be marketed, it must comply with European sanitary standards and be inspected by the DDPP/DRAAF. Thus, production, processing, and distribution establishments must be approved, and regular inspections ensure the absence of microbiological, chemical, and physical risks.

5.2 Marine Food Policy and Regulatory Environment

There are diverse policies and regulations, both at European and French level, about food security and health nutrition, with respect to the insertion of a new food product in the market, specifically from animal raw materials and from by-products. As an EU member state, France follows key regulations governing the marine food sector, including the Common Fisheries Policy (CFP) that sets quotas, fishing limits, and sustainability measures.



Regulatory and administrative aspects developing innovative marine food products

In France, European regulations are directly applicable, but their implementation is often supplemented or clarified by national texts. Thus, French regulations transpose and implement European regulations through laws, decrees, and orders incorporated into the Rural and Maritime Fisheries Code (which defines the legal framework for fisheries and aquaculture operations), the Consumer Code, the EGalim (which promotes sustainable food sourcing, fair pricing, and quality standards for marine food products) and other specific texts to regulate the marine food sector. Authorities such as the **DGAL**, **DGCCRF**, and **ANSES** ensure their implementation and control.

The French equivalents of the main European regulations are noted below.

General Hygiene of Food Products

The "**Hygiene Package**" is a set of European regulations directly applicable in all Member States. It applies to the entire agri-food sector, from primary production (both animal and plant-based) to the final consumer, including the food industry, food service professionals, and transportation. The regulations establish objectives that professionals must meet while allowing some flexibility in how they achieve them. Control authorities ensure that these objectives are met, particularly that only safe food products are placed on the market⁷.

At European level:

- Regulation (EC) N° 853/2004⁸ of the European Parliament and of the Council, of 29 April 2004, on the hygiene of foodstuffs. This regulation applies to all food business operators, covering primary production, processing, and distribution across all production sectors. Among other requirements, it mandates the implementation of procedures based on HACCP principles within a food safety management plan (except for primary production).
- Regulation (EC) N° 2073/2005⁹ of the European Commission, of 15 November 2005, on microbiological criteria for foodstuffs.

At French level:

- Rural and Maritime Fishing Code (CRPM, 2025)¹⁰ – this Code brings together and organises, in an official effective code, the legislative and regulatory texts relating to the countryside, agriculture and fishing - Articles L231-1 to L231-7 and R231-14 to R231-58.
- Decree of 21 December 2009¹¹, relating to sanitary rules applicable to retail, catering, and food craftsmanship activities.



Foods of Animal Origin

At European level:

- Regulation (EC) N° 853/2004¹², of 29 April 2004, of the European Parliament and of the Council, laying down specific hygiene rules for food of animal origin, including seafood processing and distribution.

At French level:

- Decree of June 8, 2006¹³, establishing the sanitary conditions applicable to approved establishments for the marketing of products of animal origin and foodstuffs containing them.
- Rural and Maritime Fishing Code (CRPM)¹⁴ – Articles R231-4 and following

Animal By-Products Intended for Human Consumption

At European level:

- Regulation (EU) 2017/625¹⁵ of the European Parliament and of the Council, of 15 March 2017, on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending and repealing different previous regulations, like Regulation (EC) N° 854/2004 about rules for the organisation of official controls on products of animal origin intended for human consumption.

At French level:

- Rural and Maritime Fishing Code (CRPM)¹⁶ - Articles L231-1 to L231-7 and R231-14 to R231-58
- Decree of June 28, 1994¹⁷, concerning the identification and sanitary approval of establishments marketing animal or animal-origin foodstuffs and health marking (Legifrance, 2020).

Animal By-Products Non-Intended for Human Consumption (ABP)

At European level:

- Regulation (EC) N° 178/2002¹⁸ of the European Parliament and of the Council, of 28 January 2002, laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food

safety (Official Journal of the European Union, 2002).

- Regulation (EC) N° 1069/2009¹⁹ of the European Parliament and of the Council, of 21 October 2009, laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) N° 1774/2002 (Animal by-products Regulation) (Official Journal of the European Union, 2009).

At French level:

- Consumer Code²⁰ – Articles L412-1 and following.
- Decree No. 2010-719 of June 28, 2010, concerning the National Agency for Food, Environmental, and Occupational Health Safety (ANSES)²¹.
- Decree of December 8, 2011²², establishing sanitary rules applicable to animal by-products and derived products in accordance with Regulation (EC) No. 1069/2009 and Regulation (EU) No. 142/2011.

Control of Animal Products

At European level:

- Delegated Regulation (EU) N° 2019/624²³ of the Commission, of 8 February 2019, concerning specific rules for the performance of official controls on the production of meat and for production and relaying areas of live bivalve molluscs in accordance with the Regulation (EU) 2017/625 of the European Parliament and of the Council.
- Commission Implementing Regulation (EU) N° 2019/627²⁴ of 15 March 2019, laying down uniform practical arrangements for the performance of official controls on products of animal origin intended for human consumption in accordance with Regulation (EU) 2017/625 of the European Parliament and of the Council.

At French level:

- Decree of November 6, 2013²⁵, regarding the classification, monitoring, and sanitary management of production areas and relaying areas for live shellfish (Official Journal of the French Republic, 2013).
- Rural and Maritime Fishing Code (CRPM)²⁶ - Articles L231-1 and the following.

Labelling and Food Information

At European level:

Regulatory and administrative aspects developing innovative marine food products

- Regulation (EU) Nº 1169/2011²⁷ of the European Parliament and of the Council, of 25 October 2011, on the provision of food information to consumers. This regulation covers food labelling and information requirements, including allergens, origins, and nutritional values.

At French level:

- In France, Regulation (EU) No 1169/2011, also known as the INCO regulation²⁸, has been in force since December 13, 2014. It harmonises food labelling rules, ensuring clear and transparent information for consumers. One of the key measures of the regulation is the improvement of consumer information regarding the nutritional composition of most pre-packaged food products, including energy content and certain nutrients (fats, saturated fatty acids, carbohydrates, sugars, proteins, and salt). This nutritional composition information, referred to as the "nutrition declaration", became mandatory on these food products starting December 13, 2016, to allow consumers to compare products and make healthier choices.
- Consumer Code - Articles L412-1 to L412-7²⁹: when a food product has a minimum durability date, it may be accompanied by a statement, specified by decree, informing consumers that the product remains consumable after this date.
- Decree No. 2015-447 of April 17, 2015, on consumer information regarding allergens and non-prepackaged food products³⁰. Allergens present in ingredients must be clearly indicated and highlighted in the ingredient list. This requirement also applies to non-prepackaged foods, such as bulk products or those sold in restaurants.
- France promotes eco-certification and sustainable fishing practices through initiatives such as:
 - Label Rouge & AOP (Appellation d'Origine Protégée): Labels that guarantee the quality and origin for certain seafood products.
 - Marine Stewardship Council (MSC) & Aquaculture Stewardship Council (ASC): Recognised certifications for sustainable fishing and aquaculture at an international level
 - National Fisheries and Aquaculture Strategy: Focuses on environmental sustainability, resource management, and consumer protection.

Introducing New Food Products and New Ingredients to the Market

To introduce a new food product to the market, you must comply with all the previous European regulations and also the specific legislation of the country.



At European level:

- Regulation (EU) N° 2015/2283³¹ of the European Parliament and of the Council, of 25 November 2015, on novel foods.

At French level:

- There are no specific rules about novel food and novel ingredients at national level. The legislation is subject to the European Regulation.

Conclusion

The regulatory framework for the marine food sector in France ensures a balance between economic development, environmental conservation, and consumer protection. Compliance with EU and national laws, combined with sustainability initiatives, strengthens France's position as a leader in the global seafood market.

5.3 Marine Food Checks and Controls

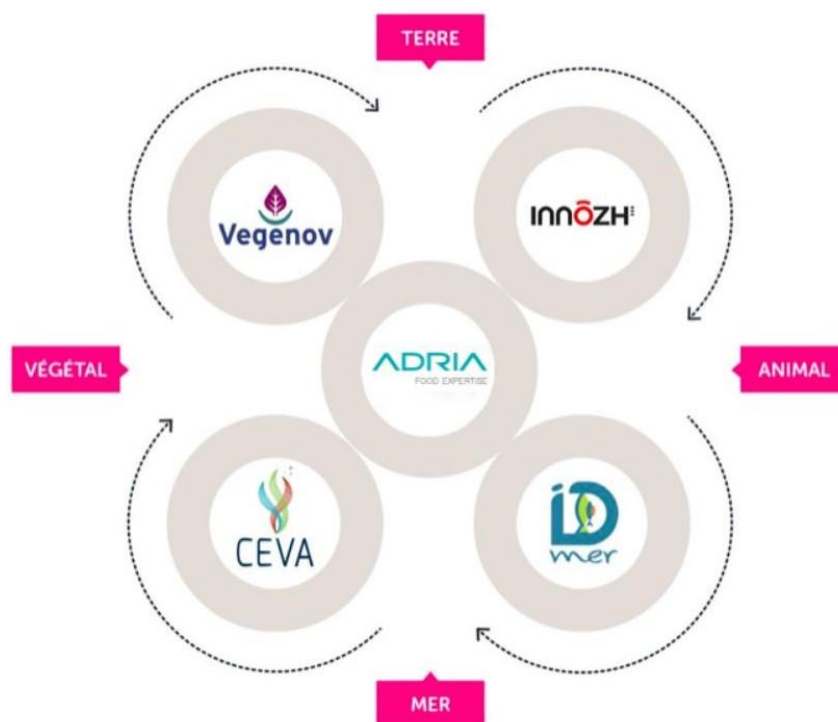
All the organisations mentioned above work together to ensure the safety and quality of food products consumed in France. Food products can be a source of contamination, which is why regular inspections are conducted in restaurants, shops, and food production or processing establishments. As of January 1, 2024, the responsibility for food safety has been fully entrusted to the **General Directorate for Food (DGAL)** under the **Ministry of Agriculture and Food Sovereignty**. The **DGCCRF** remains responsible for food products in the fight against unfair and fraudulent practices, particularly those related to product labelling, promotional claims, and quality or origin claims.

5.4 Business Advisory Supports for Marine Food Products

There is no public entity with the responsibility of business advisory support for marine food products. Instead, this task is carried out by various technological centres related with marine food products, which offer consulting and pilot tests for interested companies.

Brittany has **five Technical Centres** dedicated to the agricultural, aquaculture, and agri-food industries. These centres provide expertise to support businesses in the development, optimisation, and marketing of new food products, covering aspects such as research and development, resource optimisation, process control, food quality and safety, and regulatory compliance.

A unique alliance of these five Breton agri-food technical centres has been established to support business development and innovation projects: **ACT Food** (ACT Food website: <https://www.actfood.fr/>).



ACT Food Bretagne

ACT Food Bretagne assists in the development of products and processes for the health and nutrition of plants, animals, and humans, including seafood products. This synergy provides access to multidisciplinary expertise for the development of new marine-based food products. Among these five centres, three have a direct connection to seafood products: **ADRIA, IDmer and CEVA** are three key Technical and Innovation Centres for Seafood Products.

ADRIA - Quimper, France

ADRIA is a technical agri-food centre specialising in food quality and safety. Its areas of expertise include:

- Product design (R&D)
- Process optimisation
- Microbiological risk management
- Food regulations and training

ADRIA supports companies in the development of new food products, including marine-based ones, offering services such as:

- Product formulation
- Nutritional quality optimisation
- Shelf-life determination
- Food safety audits and consulting

ADRIA Website: <https://www.adria.tm.fr/>

Regulatory and administrative aspects developing innovative marine food products

IDMER – Lorient, France

IDMER is a technological innovation centre specialising in the valorisation of food products and by-products, particularly seafood, using agri-food and biotechnological processes. For over 30 years, IDMER has supported companies in developing food products, active ingredients, and nutritional ingredients for human and animal markets. IDMER is equipped with facilities from laboratory scale to semi-industrial-scale, allowing for:

- R&D projects
- Product development from concept to industrial feasibility
- Confidential testing and initial production

IDMER also facilitates small-scale production before scaling up to industrial-level capacity.

IDMER Website: <https://www.idmer.com/>

CEVA (Centre for the Study and Valorisation of Algae) – Pleubian, France

CEVA is a technology and innovation centre specialising in algae and marine biotechnology. It provides expertise in:

- Consulting, research, and training
- Audits and experimental studies
- Environmental safety and food security
- Securing the supply chain of algae-based raw materials

CEVA Website: <https://www.ceva-algues.com/>

Beyond Brittany, several other technical centres play a crucial role in the development and commercialisation of marine-based food products in France. Below are a few examples:

CFPMT (Training Centre for Seafood and Agricultural Products) – Boulogne-sur-Mer, France

CFPMT specialises in training professionals, focusing among other areas on seafood processing, fish mongering, hygiene and safety compliance, management. With dedicated technical facilities, it trains professionals in:

- Processing and preservation techniques
- Valorisation of seafood products
- Enhancing skills in the seafood sector



Regulatory and administrative aspects developing innovative marine food products

CFPMT Website <https://www.cfpmt.fr/>

CTCPA (Technical Centre for the Conservation of Agricultural Products) – Paris, France

The CTCPA supports companies in:

- Food product and process development
- Food preservation, quality, and safety
- Industrial and environmental performance
- Packaging solutions

While CTCPA has a broad scope, it provides valuable expertise for seafood companies, particularly in food preservation and safety.

CTCPA Website: <https://www.ctcpa.org/>

IVAMER – Thury-Harcourt, France

IVAMER specialises in innovation, valorisation, and application of marine and agri-food resources. Its expertise includes:

- Valorisation and management of marine resources and by-products
- Supporting the structuring of professional sectors
- Technical expertise, audits, and foresight in aquaculture, agri-food, and environmental fields
- R&D in enzymology and hydrolysis

IVAMER assists companies in developing new seafood-based food products, offering R&D, technical expertise, and industry structuring services.

IVAMER Website: <https://www.ivamer.fr/>

These Technical Centres provide essential support to the marine agri-food sector in France by offering research and development, training, consulting, and innovation services. Their expertise helps businesses develop and market new products derived from marine resources, contributing to the advancement of the seafood industry.

5.5 Funding Supports for Marine Food Products

European Maritime, Fisheries and Aquaculture Fund

As a global ocean actor and a major producer of seafood, the EU has a responsibility to protect and sustainably use the oceans and their resources. It is also in the EU's socio-

Regulatory and administrative aspects developing innovative marine food products

economic interest to guarantee the availability of food supplies, the competitiveness of the maritime economy and the livelihood of coastal communities. To achieve this, a fund has been set up to promote sustainable fisheries and the conservation of marine biological resources: **the European Maritime, Fisheries and Aquaculture Fund (EMFAF)**. The EMFAF supports the EU common fisheries policy (CFP), the EU maritime policy and the EU agenda for international ocean governance. It provides support for developing innovative projects ensuring that aquatic and maritime resources are used sustainably. It entered into force on 14 July 2021 and runs from 2021 to 2027 with a total budget of €6.108 billion (European Commission, EMFAF website³²).

The fund supports

- food security through the supply of seafood products
- the growth of a sustainable blue economy
- a healthy, safe and sustainably management of seas and oceans.

The EMFAF supports innovative projects that contribute to the sustainable exploitation and management of aquatic and maritime resources. It facilitates:

- the transition to sustainable and low-carbon fishing
- the protection of marine biodiversity and ecosystems
- the supply of quality and healthy seafood to European consumers
- the socio-economic attractiveness and the generational renewal of the fishing sector, particularly for small-scale coastal fisheries
- the development of a sustainable and competitive aquaculture contributing to food security
- the improvement of skills and working conditions in the fishing and aquaculture sectors
- the economic and social vitality of coastal communities
- innovation in the sustainable blue economy
- maritime security towards a safe maritime space
- international cooperation towards healthy, safe and sustainably managed oceans.



In France, the **European Maritime, Fisheries, and Aquaculture Fund (EMFAF)** is aligned with the "Farm to Fork" strategy and the new EU guidelines for sustainable aquaculture development, which are implemented at the national level through the Plan Aquaculture d'Avenir (PAA)³³. The allocated budget for France amounts to €600 million for the 2021-2027 programming period. The fund is jointly managed by the State and coastal regions, with the State delegating certain measures to the regions in line with their competencies (economic development, environment, training, local development, etc.).

The EMFAF regularly launches national calls for projects to foster innovation in the fisheries and aquaculture sectors. In 2025, four new calls for projects have opened in the first half of the year, focusing on the following priorities:

- **Call for projects:** "Strengthening economically, socially, and environmentally sustainable fishing activities."
- **Call for projects:** "Reducing the impact of fishing on marine ecosystems."
- **Call for projects:** "Promoting sustainable aquaculture activities."
- **Call for projects:** "Developing competitive, transparent, and stable markets for fisheries and aquaculture products, and transforming these products."

At **regional level**, the launch of the EMFAF calls for projects is managed by each **region** according to its priorities. In **Brittany**, in **2024**, the key priorities were:

- Call for projects: "**Innovations to support sustainable fisheries in Brittany**," covering topics such as:
 - Energy saving for fishing vessels.
 - New production methods with lower environmental impact.
 - Adaptation to climate change.
 - Safety and working conditions.
- Call for projects: "**Reducing the impact of fishing on the marine environment**," including:

○ Development and deployment of



low-tech fishing equipment and practices to improve selectivity, reduce unwanted catches, or minimise the impact of fishing activities on marine ecosystems (seafloor impact, accidental capture of protected species).

- Projects must include awareness-raising and training phases for professionals to facilitate the deployment of the proposed innovation once it reaches the market.
- Call for projects: **"Innovations in the downstream sector of fisheries and aquaculture products"**, focusing on:
 - Processing and valorisation of commercial species and those favoured by global changes for human consumption.
 - Packaging of fisheries and aquaculture products.
 - High value-added approaches to valorising co-products and by-products.

This final call for projects particularly supports high-value-added innovations that enhance marine co-products. Valorising co-products and by-products is a key issue for the fisheries and aquaculture sectors, covering all marine and freshwater products. Innovations must benefit businesses in the sector (production, processing, and marketing of fisheries and aquaculture products) and have collective interest.

Lastly, the **EMFAF's Community-Led Local Development (CLLD) programme** supports **local innovative projects for the blue economy** during the **2023-2027** period. Selected coastal territories are designated as Fisheries and Aquaculture Local Action Groups (FLAGs) to implement the territorial component of the 2021-2027 EMFAF.

In Cornouaille, the CLLD EMFAF is structured around three strategic objectives (Quimper Cornouaille Développement, website³⁴):

- Supporting the development of blue economy sectors and ensuring generational renewal.
- Preserving the maritime and coastal ecosystem for the sustainable development of activities.
- Strengthening maritime identity at

the heart of the territory to promote responsibility and acceptance by all.

National Food Programme

Since 2014, as part of the **National Food Program (PNA)**, the Ministry of Agriculture, Food Sovereignty, and Forestry has launched an annual national call for projects in partnership with the Ministry of Health and Access to Care, the Ministry of Solidarity, Autonomy, and Gender Equality, and the Agency for Ecological Transition (ADEME) ³⁵.

Continuing the objectives of previous calls for projects, the **2024-2025 edition** has supported the emergence of new **Territorial Food Projects (PAT)** and the expansion of exemplary, innovative, or large-scale projects at the national or interregional level, aiming for a more sustainable, high-quality, and health-conscious food system accessible to all. It includes three main components:

- **Component 1:** Supporting the emergence of new Territorial Food Projects.
- **Component 2:** Developing innovative food-related actions.
- **Component 3:** Scaling up exemplary initiatives on a large scale.

Projects submitted under components 2 and 3 must have a national scope or cover at least two regions, involving a broad and diverse network of stakeholders. They must address one or more of the priority issues and target audiences defined in the project guidelines:

- **Supporting, equipping, training, educating, and assisting** social, medico-social, and early childhood institutions in improving food offerings.
- **Engaging economic actors** toward a more sustainable, high-quality, and health-conscious food system by encouraging their inclusion in local supply chain structuring and cooperation efforts.
- **Informing, raising awareness, and supporting the most vulnerable or disadvantaged populations**, particularly students and residents of overseas territories, to facilitate their access to sustainable, high-quality, and health-friendly food.

The **2024-2025 national call for projects** was allocated a total budget of up to **€2.8 million**.

Future Investment Programs

The **"Resilience and Agri-Food Capacities 2030" Call for Projects**, part of the **France 2030 Plan**, aims to strengthen food sovereignty by supporting investment and innovation in the agri-food sector³⁶. It can play a key role in the **development of new seafood products** by funding projects related to:

- **Processing and valorisation of marine resources**
 - Development of new food products from fish, shellfish, seaweed, and marine co-products.
 - Innovations in marine biotechnology for high-value ingredients (marine proteins, omega-3, natural extracts).
 - Valorisation of co-products and by-products from fishing and aquaculture to promote a zero-waste approach.
- **Support for innovative technologies and processes**
 - Investment in sustainable processing methods to reduce environmental impact.
 - Optimisation of preservation and packaging techniques to extend product shelf life while reducing plastic usage.
 - Development of extraction and stabilisation solutions for marine ingredients used in food and nutraceutical applications.
- **Supply chain structuring and competitiveness**
 - Strengthening local and sustainable supply chains for seafood products.
 - Supporting SMEs and innovative start-ups in bringing new products to market.
 - Encouraging collaborative projects between the agri-food industry, researchers, and marine producers.

Regulatory and administrative aspects developing innovative marine food products

By focusing on these priorities, the "Resilience and Agri-Food Capacities 2030" Call for Projects represents a major opportunity for maritime sector players looking to innovate and enhance their competitiveness in sustainable food production.

5.6 Steps Required for the Approval of Marine Food Business

Nowadays, consumers are increasingly concerned about the safety and quality of food products. For this reason, there is a comprehensive regulation in France governing all the steps that food products must go through before reaching the market and final consumers.

Apart from strict compliance with European and French regulations, food products must follow specific procedures. In France, the regulation and control of new food products (not classified as novel food) is managed through the procedure of the Sanitary Approval and Registration. Every food product intended for human consumption (market, restaurant, etc.) must be approved by the General Directorate for Food (DGAL) and, if applicable, be registered with the National Sanitary Establishment Registry (SIMPA), in accordance with the provisions of the French Rural and Maritime Fishing Code. This national registry is a key component in guaranteeing public health and consumer confidence, ensuring that all marketed food products respect optimal hygiene, quality, and traceability standards. Moreover, specific regional regulations may establish additional conditions for food businesses in certain territories.

Before registering with SIMPA, businesses must obtain a code from the French National Institute of Statistics and Economic Studies (INSEE) in the form of the APE (Main Activity Performed) code, which is mandatory for all companies operating in France. Once this classification is secured, companies aiming to market food products must proceed with their sanitary registration. The control of food products to obtain sanitary approval or registration covers all stages of the value chain:

- **Origin Control**

The supervision of food products begins at the source, with farmers and producers, who are subject to rigorous inspections and analyses to ensure food safety and quality. Farmers and producers must adhere to Good



Agricultural Practices (GAP), using only authorised ingredients and additives. Additionally, they must maintain detailed records of raw materials and processes to facilitate traceability and inspections.

- **Laboratory Control**

Once raw materials have been harvested or processed by primary producers, they are sent to processing industries for processing, packaging, and distribution. At this stage, food products undergo additional inspections and laboratory tests to verify their safety and quality. Apart from on-site inspections to ensure compliance with Good Manufacturing Practices (GMP), food products must be tested in accredited laboratories to check their microbiological and organoleptic properties, ensuring the absence of pathogens and contaminants.

- **Labelling Control**

After passing quality and safety controls, food products must comply with legal labelling requirements. Labels must provide clear, accurate, and truthful information about key product characteristics, including ingredients, storage conditions, expiry or best-before dates, usage instructions, and any relevant consumer warnings. This enables consumers to make informed purchasing decisions.

- **Sanitary Authorities Control**

Following these steps, food products must be evaluated by the National Agency for Food, Environmental and Occupational Health Safety (ANSES) and other relevant national or regional health authorities. These agencies conduct thorough checks on the product documentation and carry out the necessary inspections to verify compliance with sanitary regulations. If the product meets all legal requirements concerning hygiene, quality, and traceability, the company is granted the necessary sanitary approval or registration, certifying that it has undergone the required controls and

complies with French and European



standards.

- **Market Control** Even after receiving sanitary approval, food products remain subject to ongoing market surveillance. Retailers, distributors, and restaurants are responsible for maintaining quality and safety standards in their establishments and are subject to routine inspections from the Departmental Directorates for Population Protection (DDPP) to ensure compliance with sanitary regulations.

Comprehensive information on the sanitary registration process, including requirements, forms, mandatory documents, and deadlines, is available on the official websites of DGAL and ANSES. One of the critical documents required for sanitary registration is the Hazard Analysis and Critical Control Points (HACCP) plan, which outlines key risks, critical control points, preventive measures, and corrective actions. The HACCP plan is a dynamic document that must be updated whenever changes occur in the company, such as the introduction of a new product, equipment, process, or infrastructure.

If a company is solely involved in the production and/or distribution of food products, sanitary registration is generally sufficient. However, if the company engages in food transformation processes, it must also register with the Directory of Agri-Food Industries (RIA), which is mandatory for all companies that process raw materials into finished food products intended for human consumption. While the RIA operates at the national level, each regional authority is responsible for its administration. Registration with the RIA requires companies to provide detailed information about raw materials, processing methods, and safety measures.

Regarding the use of by-products from fishing and aquaculture to develop new food products (excluding novel foods, which are governed by separate European regulations), the applicable legislation is outlined in the French regulations on animal by-products intended and not intended for human consumption. According to these regulations, all by-products from primary processing that meet the required quality and safety

standards can be used for human



Regulatory and administrative aspects developing innovative marine food products

consumption. However, since many by-products are not directly edible, they often undergo further processing to create high-value food products suitable for human consumption.

By contrast, by-products classified as non-edible animal by-products (ABP) must not be used for human consumption and can only be repurposed for other uses such as animal feed, biogas production, or composting, in compliance with Regulation (EC) No 1069/2009 and French national laws governing animal by-products.

Following these European and French regulations, the transformation and valorisation of by-products from the fishing and aquaculture sectors present significant opportunities for developing new, high-value food products while promoting sustainability and reducing waste in the industry.



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