

# Nutritious, safe and sustainable seafood for consumers of tomorrow

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(on behalf of Dr. António Marques, IPMA)

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### Context

- Globally, population and economic growth will result in a doubling of demand for food by 2050
- Seafood is a high quality animal protein, rich in nutrients (Vitamin D, Omega-3, Vitamin B12 and iodine).
- It is one of the most important food commodities consumed in Europe (€56.6 billion spent in 2017)
- Marked transition from wild fish capture to aquaculture (currently at an all-time high of €4.25 billion, EU Fish Market 2018).

## SEAFO D TOMORROW



#### EATING SEAFOOD 2× PER WEEK:











Leads to improved **BRAIN & EYE** DEVELOPMENT

Contributes to an **INCREASE** in your OMEGA-3 LEVEL

Helps to REDUCE risks of HEART DISEASE

NURSING WOMEN and their BABIES

See more at: www.choosemyplate.gov/ten-tips-eat-seafood

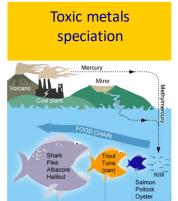


### Challenge

- Most consumers do not meet dietarv recommendations of eating two portions of fish per week
- Europeans eat more (and more!) of their favourite (imported) fish (tuna, cod, salmon, pollock, shrimp = 43% of the market, EU Fish Market 2018).
- And, some are concerned about seafood safety, quality, authenticity and sustainability.
- There is need for seafood products that are socially, economically and environmentally sustainable.













### The Project



#### **PROGRAMME**

H2020 (EC) – BG-08-2017 Innovation Action (IA)

#### **TOTAL BUDGET**

€7.5 million

#### DURATION

Nov 2017 - Oct 2020 (36 months)

#### **CONSORTIUM**

35 partners + 13 third-party affliate organisation from 19 countries

#### **COORDINATOR**

Instituto Português do Mar e da Atmosfera IP (IPMA), Portugal

#### CONSORTIUM (I) Mareforsking Alexand AS 35 PARTNERS (19 RESEARCH INSTITUTES, 12 SMEs, 4 INTEREST Instituto Portuguile do Mar e de Atmosfere IP (IPMA) ASSOCIATION GROUPS (IAGS)) AND 13 THIRD-PARTY AFFILIATE SPAROS Lda (SPAROS) Pundedon AZTI - AZTI undexion (AZTI-Tecnalia) **ORGANISATIONS BASED IN 19 EUROPEAN COUNTRIES** Spread European Safety GEIE Universiteit Gent (UGent) (SPES), in collaboration with third parties: 🕙 latituto Superiore di Sanità (635) Rijkainatibuut voor Federazione Italiana dell Industria Alimentare 2000 Volksgezondheid en Milleu Associazione (FEDERALIMENTARE) Agenda Estatal Consejo Federation of the Food and Superior de Investigaciones Drink Industries (FFDI) Clentificas (CSIC) Lebensmittelverauchsen-🕜 Instituto de Clâncias, stalt (LVA) Tecnologias e Agroembiente de Universidade do Parto Union of Dairy, Meet, Food industrialists and Benmarks Tekniske Manufacturers (SETBIR) Universitet (DTU) Aeiforia ari (AEIFORIA in collaboration with Universitia Instituut voor Landbouw en Cattolica del Sacro Cuore BALTIC SEA (ii) Centre for Environment, Zachodniopomorski Isheries and Aqueculture Uniwersylet Technologiczny Science (Cefes): w Szczecinie (ZUT) Institut de Recerce i Tecnologia Campden BRIMagyerország Agroalmentides (IRTA) Nonprofit Kft (CBHU) Institut technique de Gueen's University Belfast (GUS) developpement des produits de la mer (IDmer) in collaboration with third party: Buropean Consumers Union (ECU), in collaboration with Ethic Ocean third parties: Universitet Rovini i Virgili (URV). (A) Centro Interdisciplinar de Liebasca nacionalinà Investigação Marinha e vartotolu řederacija Ambiental (CIMAR) azodadia (LNCF) Aquett UETP CLG (AqueTT) Aquimer (AQUIMER), in Tarelaks AS (Tarelaks), in collaboration with third collaboration with third Nouvelle des Sulefisk AS (Sulefisk) Etablissements Jacques Ennas and Daksonochatt MAES (Jacques NAES) A/S (Engeaund) SAS Delabil (DELPIERRE) Osland Haybruk AS Mer Hemult Poly (Osland Havbruk) Production (MHP Production) 🕜 MRAG LЫ. (MRAG) European Food Information Biorex Food Diagnostics Resource AISBL (BuroFIR Makie Centrum Rybectwe Sp. z. a.o. (ICR) RISE Research Institutes of Westcounty Mussels of Sweden AR (RISE) Fowev Ltd (WCM) Asociación Nacional de PtC Phage Technology Rebricantes de Conservas Center GmbH (PTC) de Pescados y Mariscos. SKALOMA SA (SKALOMA) Centro Técnico Nacional de Research Institutes Conservación de Productos de la Pesca (ANFACO-CE-

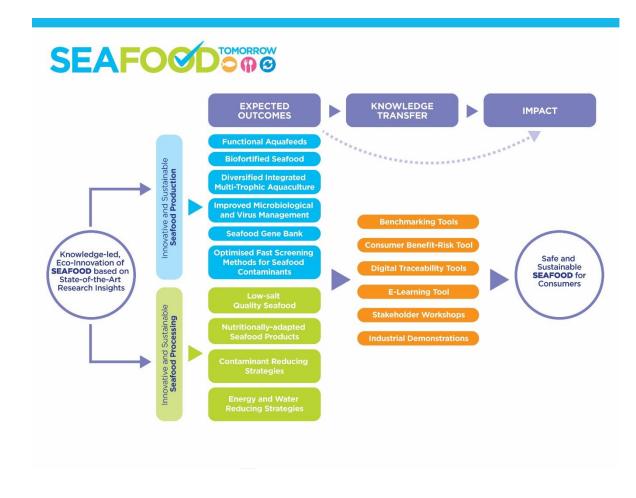
### **Objectives**



SEAFOOD<sup>TOMORROW</sup> aims to strengthen the seafood industry in Europe by providing validated, market-driven and consumer-responsive eco-innovative sustainable solutions for seafood production and processing, that contribute to food security, mitigate production hazards, contribute to employment and increase consumer awareness of seafood quality and safety.



**Sustainability & Competitiveness** 



### **Project Video**











### **Achievements**

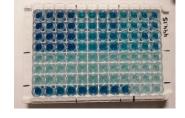
**Eco-innovative solutions for production (Aquaculture)** 



Integrated Multi Trophic Aquaculture

Buffer zones in shellfish

production areas



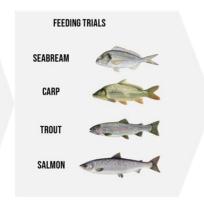


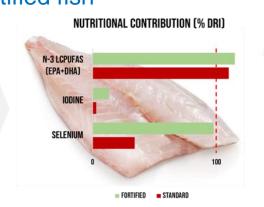
Multi-contaminant detection sensors

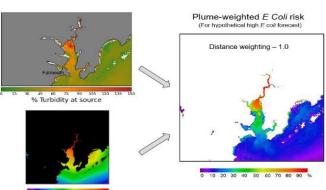














### **Achievements**

# SEAFO D TOMORROW

**Eco-innovative solutions for processing (seafood)** 



Sodium reduced products



Sustainable fish recipes & tailor-made products







Norovirus depuration











### **Achievements**



**Innovative solutions (for seafood value chain + consumers)** 

Fast screening DNA authentication tool

Reference database



Benefit-risk communication tool (web-based portal + Android app)

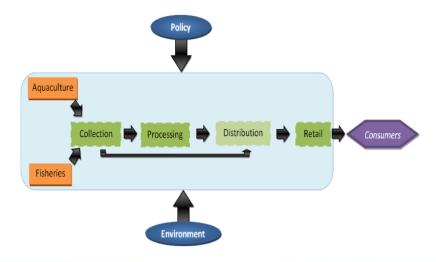




### **Impact**

- New / improved technology, tools and know-how, demonstration and validation of prototypes (TRL 5-7)
- Greater transparency and traceability and improved accessibility to information for consumers (TRL 9)
- Strategies to improve seafood safety and public health
- Improved understanding of markets and consumer choices
- Supporting sustainable eco- food production











# Thank You

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