THE CHALLENGE
Seafood is recognised as a high-quality, healthy and safe food and is one of the most important commodities consumed worldwide. However, seafood, like other types of food, can also be a source of harmful environmental contaminants with potential to impact on human health. Availability of safe and high-quality food is a growing public concern and research plays a very important role in ensuring consumer confidence in this sector. The challenge for the ECsafeSEAFOOD project is to assess food safety issues mainly relating to non-regulated priority contaminants and evaluate their impact on public health in order to increase seafood safety and reduce human health risks.

PROJECT OBJECTIVES
The overall objective of ECsafeSEAFOOD is to assess safety issues related mostly to priority contaminants present in seafood as a result of environmental contamination (including those originating from harmful algal blooms and those associated with marine litter) and evaluate their impact on public health. ECsafeSEAFOOD will directly address several aspects of the Marine Strategy Framework Directive (MSFD) and will support the provision of safe seafood to consumers and reduce human health risks. In the long term, the project will deliver several societal benefits, such as improving consumer education, increasing employment, improving nutrition and increasing the sustainability of an important food sector.
The first step of the ECsafeSEAFOOD project is the creation of a database of environmental contaminants in seafood. This database will facilitate the monitoring of some contaminants and assess the effect of preparation for consumption on contaminant content. At the same time, the development of fast screening detection methods for relevant priority contaminants, and the use of innovative toxicological tools to test environmental contaminants in realistic conditions, together with the monitoring of contaminants, will facilitate the development of seafood risk assessment and mitigation strategies. Some of these mitigation strategies will be complemented by establishing the links between the level of relevant priority contaminants in the environment and those in seafood. Finally, ECsafeSEAFOOD will increase the consumer confidence through clear and practical communication and information spread in close collaboration with food safety authorities.

RESULTS

- New and effective tools to perform more effective seafood risk analysis and a more accurate risk assessment.
- Fast screening detection methods of contaminants in seafood.
- Development of common food safety, public health and environmental policies and measures.
- Increase in the knowledge of priority contaminants in marine organisms, and assessment on the potential impacts of these pollutants in the environment.

PROJECT PARTNERS