Despite their importance — both from an environmental and an economic perspective — marine ecosystems are being seriously degraded by pollution and overfishing. To help overcome these problems, a new European consortium is building data services for fisheries, aquaculture, ecosystem management, food-system analysis, and more.

Oceans are the world’s seventh largest economy and are fundamental to strengthening Europe’s competitiveness and labor market. However, poorly managed fisheries and pollution, among others issues, are causing serious damage to carrying capacity. International intervention is needed.

Europe is taking bold steps to address this with Blue Growth, the long-term strategy for sustainable growth in the marine sector. This requires comprehensive and accessible information about Europe’s seas and oceans, such as fisheries databases, sea maps, etc., for policymakers to make informed decisions that ensure a healthy marine environment can sustain growth in Europe. This is where the BlueBRIDGE project comes in.

BlueBRIDGE (Building Research environments fostering Innovation, Decision making, Governance and Education) is funded under the European Commission’s Horizon 2020 program and provides data services to scientists, researchers, and data managers. A complete set of web-based data and computational resources will enable them to address key challenges related to the Blue Growth long-term strategy with a strong focus on sustainable growth.

BlueBRIDGE will specifically target:

- Stock assessment and a global register for stocks and fisheries, disseminating comprehensive information on the location, status, and trends of fish stocks and fisheries.
- Analysis of socio-economic performance in aquaculture, also identifying suitable locations for aquaculture. The companies running these farms will be able to see how well they are performing, if the business is sustainable, and if they are operating in an environmentally sustainable mode.

“These are just a few of the challenges BlueBRIDGE will address,” says Marc Taconet, from the Fisheries and Aquaculture Statistics and Information Service at the Food and Agriculture Organization of the United Nations. “The
development of smart solutions will importantly support decision-makers involved in the ecosystem approach to fisheries and aquaculture management, by facilitating the knowledge production chain from the initial phases of data collection, through to aggregation, analysis and the production of indicators for competent authorities and investors,” continues Taconet, who is also chair of BlueBRIDGE’s external advisory board. “These solutions will help bridge the work of international organizations and communities of scientists from different disciplines (e.g., fisheries, biology, economics, statistics, environment, etc.).”

“This knowledge production chain is usually the result of the work of multidisciplinary scientific communities working in silos,” says Donatella Castelli from the National Research Council in Italy and BlueBRIDGE project director. “BlueBRIDGE will radically transform the way they work together by enabling collaboration and alignment. Members from different sectors with specific competences will benefit from data sharing and re-use, as well as processing capabilities they cannot typically afford. As a result, users will gain mutual economies of scale.”

BlueBRIDGE services aim to have a measurable impact in Europe and worldwide. Empowering the next generation of scientists through training is fundamental to achieving this, as is engaging small- and medium-sized enterprises (SMEs) operating in the sector. One of the strongest assets of BlueBRIDGE is indeed its public-private collaboration. Seven of the fourteen partners in BlueBRIDGE are private companies specializing in aquaculture and fisheries management; the French business and sea innovation cluster, with their network of 400 SMEs, is also part of the consortium. Having their experience and their knowledge of the real needs will be a key driver for wide uptake of the services and their sustainability.

BlueBRIDGE services will be built on top of the iMarine infrastructure in order to capitalize on the previous investments made by the European Commission. This will also act as a first step towards sustainability after the end of the iMarine project. With such data and computational resources, as well as the expertise of the consortium, BlueBRIDGE can really help make a difference.
Innovative BlueBRIDGE data services for oceans and fisheries

Disclaimer: While Science Node™ does its best to provide complete and up-to-date information, it does not warrant that the information is error-free and disclaims all liability with respect to results from the use of the information.