



**Interreg**  
Italy - Croatia  
HATCH



EUROPEAN UNION

**Hadriaticum  
DATA HUB. Data  
management, protocols  
harmonization, preparations  
of guidelines: cross-border  
tools for maritime spatial  
planning decision-makers**



# HATCH

# WHY HATCH PROJECT?

The Adriatic Sea is a recognized biodiversity hotspot. At the same time, it is exposed to numerous man-made pressures. These include fisheries, maritime transport, oil and gas extraction, urbanization and tourism, to name but a few. These put the fragile eco-systems at risk and, consequently, may negatively affect many ecosystem services that local communities and visitors to the area rely upon for their well-being.



Therefore, to ensure long-term sustainable use of ecosystem services, such as the seafood we eat, clean water we bathe in or maritime routes we use for trade and travel, a plan of the activities existing in marine areas needs to be established based on the best available knowledge. One of the ways of achieving this is Maritime Spatial Planning (MSP), which is a process introduced by the European Directive 2014/89/EU with the intention of promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources.

Project HATCH is a collaboration of six partner organizations and five external expert organizations from Italy and Croatia, aiming to contribute to the cross-border implementation of the Maritime Spatial Plans in the Adriatic Sea, ultimately leading to the more effective conservation of biodiversity. This partnership capitalizes on the results of research and monitoring of chemical, physical and microbiological pollution, underwater noise, maritime traffic and ecology of threatened species and habitats that were collected within seven previously conducted projects of the Interreg Italy-Croatia 2014-2020 Programme to develop tools and guidelines supporting drivers and decision-makers in MSP.

## PROJECT PARTNERS

University of Udine

CORILA

Marche Region

Istrian University of Applied Sciences

Blue World Institute

University Department of Marine Studies, University of Split

## EXTERNAL EXPERTS

Università Politecnica delle Marche

CNR-ISMAR

CNR-IRBIM

Università Iuav di Venezia

OGS

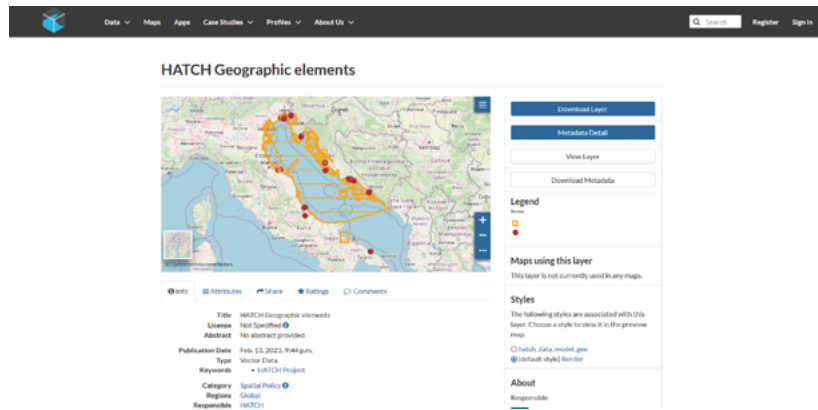


# GOALS and ACTIVITIES

The overall goal of the HATCH project is enhanced protection of the Adriatic Sea by providing integrated and standardized multi-disciplinary dataset, ready to be utilized within the MSP framework.

*In order to achieve the overall objective, the project was organized around three specific objectives:*

**Hadriaticum Hub data set** – collection of data obtained through previously conducted Interreg Italy-Croatia projects, comprising geo-referenced data on nutrient loads, chemical and physical pollution, microbiological and pathogenic distribution, underwater noise, maritime traffic and biodiversity.

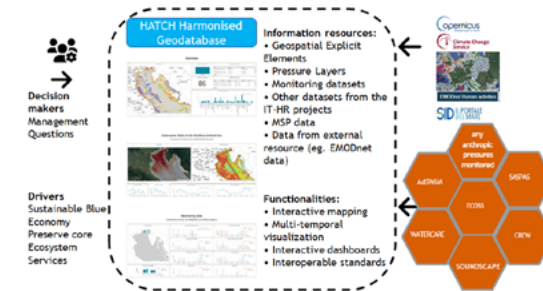


**Hadriaticum for policy** – to maximize the use of the Hadriaticum Hub, protocols on its optimal use are made, intended at local administrations and policy makers as well as other stakeholders involved in the planning process.

**Hadriaticum best practices** – building on the knowledge and experiences from the Interreg Italy-Croatia Standard projects, case studies and best practices are compiled and analyzed to provide guidelines for the best application of MSP in preserving the Adriatic biodiversity.

# HATCH Data HUB

The main output gained by the project is a geoplatform **HATCH data HUB** in which data generated by previous projects, analysed and harmonised, are shown as overlapped layers bringing different information. The HATCH data HUB is conceived as an open, fair and freely available platform, on which data from sources other than Interreg projects or Interreg projects of the new 2021-2027 Programme, can also be added as further layers, improving knowledge and information.



In the end, this repository is going to be rich in information about all uses and analyses performed in Adriatic sea. One of the main advantages of this data hub is its flexibility: in fact very heterogenous information about chemical, physical (such as underwater noise), microbiological threats from the coastline and land, as well as uses such as the navigation ways or underwater cables, are represented together with protected areas, highly important for environmental preservation. It is a way of representing as completely as possible all anthropogenic pressures, eventually conflicting uses among which the valuable protected areas are considered too, to try to support with a visual tool the decision-makers in planning to reduce or resolve them.

# GOALS and ACTIVITIES

Furthermore, to achieve an overspill effect, foster cooperation and increase the public awareness, project HATCH has conducted:

**Study visits** – study visits of project partners and external expert organizations in Venice lagoon, Marano-Grado lagoon and Veli Lošinj enabled exchange of experiences and knowledge from the previously conducted Interreg Italy-Croatia projects and engagement with local stakeholders.



**Public presentations** – Effective marine conservation relies on public support and future generations. Project HATCH has thus conducted numerous presentations involving students and general public, both in Italy and Croatia, to increase awareness about the Maritime Spatial Planning and promote marine conservation.



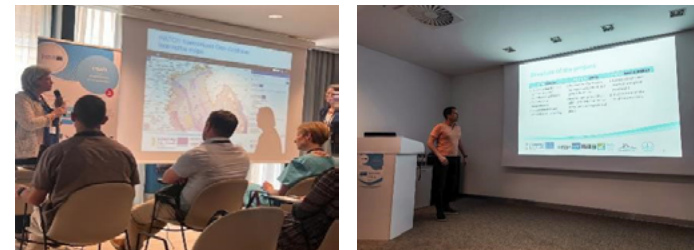
**Joint actions with EUSAIR** – Results and experiences were exchanged with the EU Strategy for the Adriatic-Ionian Region Programme (EUSAIR) through joint events, enabling dissemination of the results and networking of stakeholders involved in conservation of the Adriatic Sea.



**Interreg networking** – HATCH project was present at the annual event of the Interreg Italy-Croatia Programme “Our Shared Blue Basin” held in Venice, with an interactive workshop about stakeholders’ engagement in MSP, through a role-playing game where participants acted as representatives of various sectors negotiating establishment of a marine protected area.



Further synergies were achieved by presenting our results in the events of **RESISTANCE** and **CREATE** projects of the Interreg Italy-Croatia Programme.



## ECOSS

This project has established ECOAdS – an Ecological observing system in the Adriatic Sea shared between Italy and Croatia and integrating ecological and oceanographic research and monitoring with Natura 2000 conservation strategies. This system builds upon existing facilities, infrastructures and long-term ecological data, thus enhancing marine observational capacities for improving the conservation status of Adriatic biodiversity.

## SOUNDSCAPE

This project set up a cross-border network of nine underwater noise monitoring stations that collected broadband acoustic data for 15 months continuously. For the first time in the Adriatic Sea, the Soundscape project provided a shared assessment of annual and seasonal noise level distribution, which helps identify and reduce negative impacts of underwater noise on sound-sensitive species.



## SASPAS

This project aimed at improving the conservation of seagrass meadows in the Adriatic Sea through implementation of innovative safe anchorage systems, conducting pilot seagrass transplantation actions, monitoring activities and defining an integrated management system.



## WATERCARE

With the overall goal of improving the bathing and coastal waters, the Watercare project developed an innovative Water Quality Integrated System (WQIS) that comprises a real-time hydro-meteorological monitoring network, implemented an ad-hoc infrastructure for bathing waters management, conducted feasibility studies in four sites to support management, and developed a real-time alert system to identify and prevent ecological risks from fecal contamination.



## ADSWIM

The Adswim project investigated new treatments, new analytical devices and new chemical and microbiological parameters of the waste waters to examine the levels of nutrients, pollutants and fecal bacteria near the marine discharges and depuration plants. Based on this, shared cross-border guidelines and common measurement models were developed.



## ECOMAP

The main focus of Ecomap project was improvement of environmental quality conditions of the sea and coastal areas connected to nautical ports and routes. It involved use of new technologies to investigate pollution from anthropogenic activities, activities enhancing capacities of marinas for improved environmental managements, and developed management system for sediment dredging in port areas.



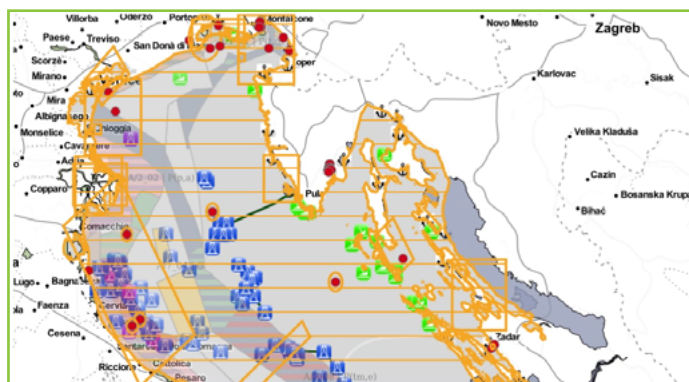
## CREW

This project improves conservation of coastal wetlands in the Adriatic Sea through developed cross-border Crew Observatory and joint data exchange, and establishment of Wetland Contract as an integrated tool for better stakeholder coordination in Natura 2000 areas.



# What is MARITIME SPATIAL PLANNING?

Maritime spatial planning (MSP) is a process that aims to organize and regulate human activities in marine and coastal areas in a sustainable and efficient way. MSP provides for mapping and analyzing the distribution of various uses and activities in the marine environment, such as fishing, shipping, renewable energy, tourism, and conservation, and developing plans to manage and coordinate these activities.



The main goal of MSP is to ensure that the use of marine space is optimized in a way that minimizes conflicts between different uses and promotes the sustainable use of marine resources. It also aims to provide a framework for decision-making that takes into account the needs of different stakeholders, including coastal communities, industry, and conservation groups.

MSP is becoming increasingly important as human activities in the marine environment continue to grow and put pressure on marine ecosystems. Many countries and regions have developed MSP frameworks and are implementing MSP processes to manage their coastal and marine areas. The European Union, for example, has developed a Directive on MSP, which requires its Member States to establish MSP frameworks and develop national plans by 2021.

Overall, MSP is a tool for promoting sustainable development in marine and coastal areas, and for ensuring that the multiple uses of the sea are managed in a coordinated and effective way.



## PROJECT INFO

Lead partner



**UNIVERSITÀ  
DEGLI STUDI  
DI UDINE**  
hic sunt futura

Partners



Istarsko  
veleučilište  
Università  
Istrianana  
di scienze  
applicate



External experts



UNIVERSITÀ  
POLITECNICA  
DELLE MARCHE



CNR  
ISMAR  
ISTITUTO  
DI SCIENZE  
MARINE



CNR  
IRBIM  
ISTITUTO PER LE  
RISORSE BIOLOGICHE  
E LE BIOTECNOLOGIE  
MARINE

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Università Iuav  
di Venezia



**OGS**

Istituto Nazionale  
di Oceanografia  
e di Geofisica  
Sperimentale



**PROJECT DURATION**  
1.6.2022 – 30.6.2023



**ERDF**  
481627,85 €



**TOTAL BUDGET**  
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