

The 6th FINAL E-newsletter of the TIMMOD Project

Common borders. Common solutions.

TIMMOD PROJECT COMES TO A SUCCESSFUL END

IN THE FINAL EDITION OF TIMMOD ELECTRONIC NEWSLETTER YOU CAN READ ABOUT THE FINAL CLOSING SERIES OF EVENTS ORGANIZED IN TULCEA, ROMANIA AND FIND A SUMMARY OF THE PROJECT MAIN RESULTS AND ACHIEVEMENTS.



TIMMOD TEAM EXPRESSES THEIR GRATEFULNESS AND THANKS TO ALL INVOLVED STAKEHOLDERS AND EXTERNAL EXPERTS WHO CONTRIBUTED IN THE PROCESS OF IMPLEMENTING THE PROJECT ACTIVITIES.

MAY 2022



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TIMMOD Final Events, May 2022

The project Final Closing Events, including Final TIMMOD Conference, Thematic Transboundary Meeting (TTM #5), Regional Strategy Validation Workshop and a lot of communication and dissemination activities have been organized in Tulcea, Romania in the period 4-7 May 2022. The events were hosted by the Danube Delta National Institute - DDNI.



The **Final TIMMOD Conference** gathered more than 90 participants on site and in parallel almost 20 more joined the event online. The Conference was officially welcomed by Dr. biol. **Marian Tudor** - General Director of Danube Delta National Institute for Research and Development Tulcea, followed by welcome speeches from Mr. **Gabriel Teodosie Marinov** - Governor of the Danube Delta Biosphere Reserve Authority Tulcea, Dr. **Elitsa Petrova** - Lead Beneficiary: Director of Institute of Fish Resources Varna, Mr. **Lucian Eduard Simion** - representative from Tulcea City Council, Mr. **Gabriel Francisk Stika** - General Director of Apele Române National Administration (ANAR) - Bucharest and Mr. **Marian**

Chiriac - Director of National Agency for Fisheries and Aquaculture Tulcea (ANPA).



The fifth TIMMOD Thematic Transboundary Meeting (TTM #5) took place to present the results and achievements of the two demo surveys, conducted in Varna, Bulgaria and Batumi, Georgia (*you can find more info about the demo tests and training on the project web page:*

<https://timmod.org/index.php/en/events/field-surveys-trainings>).

The **Regional Strategy Validation Workshop** has been organized in order to have final feedback and input to the TIMMOD Innovation Strategy. The TIMMOD Innovation Strategy, is designed to bring together national, regional and European Union policies and regulations, combined with new information policies and technologies for greater transparency of the application of marine innovative equipment. The goal of the Strategy is to make the Black Sea cleaner, through monitoring and modeling of the marine environment using advanced tools and to facilitate the sustainable use of Black Sea fish resources, as well as living aquatic resources.



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A [TV promotional campaign](#) in Romanian served as an additional tool for promoting the results of the project targeting the local public.



Final **dissemination event** has been also organized along the Strategy Validation Event in Romania gathering executives and policy makers from the regions and from other relevant institutions. The aim is to promote the project achievements and to disseminate the results of pilot demonstration activities and strategy to a larger audience.

Regular meeting of the project management and coordination team **PMCT meeting** also took place gathering all project partners in Tulcea, Romania.



Digital promotional campaigns were held in all Partners' countries with modern interactive tools for questioning/interviewing and providing relevant feedback from Stakeholders and general public.

The Final TIMMOD activities have been associated with the "[European Maritime Day 2022, #EMD in my country](#)" initiative, promoted through the information channels of the Directorate-General for Maritime Affairs and Fisheries.



The series of events ended with a fabulous visit to the Danube Delta, acquainting the participants with the unique for the region habitats and environmental conditions, as well as cultural and social heritage.



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TIMMOD main achievements and results.

Detailed studies have been carried, and a number of inventories and analyses have been produced within TIMMOD Group Activities in the period May 2020 - May 2022. Human resources, research fleets, technical capabilities hardware and software resources of Black Sea countries were assessed. Advanced innovative environmental monitoring technologies and best practices have been identified, including an overview of future and emerging technologies for environmental monitoring, and assessment of fish stock and non-fish living resources. A number of new ICT Tools have been developed. Basic recommendations for technological upgrade and improving joint monitoring, and data sharing have been suggested. Existing mechanism of regional cooperation have been analysed, and relevant recommendation for improvement were suggested.

INVENTORY & PROMOTION OF INNOVATIVE ENVIRONMENTAL MONITORING TECHNOLOGIES FOR ASSESSMENT OF FISH STOCK AND NON-FISH LIVING RESOURCES

Findings, conclusions and recommendations of TIMMOD studies were made in **INVENTORY & PROMOTION OF INNOVATIVE ENVIRONMENTAL MONITORING TECHNOLOGIES FOR ASSESSMENT OF FISH STOCK AND NON-FISH LIVING RESOURCES**, including: Analysis of the current situation of the monitoring and assessment of Black Sea fish and non-fish living resources; Inventory on Technology Innovations in marine environmental monitoring; Recommendations for innovative solutions and best practices. **Three Technical reports** were delivered and published in the e-Library of BSB JOP, Section

“Documents related to the environmental monitoring”.



<https://blacksea-cbc.net/capitalisation/>

18 good practices from the Black Sea region and the Mediterranean basin were presented there. These practices have already been proven as effective for various tasks relevant to the environmental monitoring, modelling and assessment of water quality and fish stocks & non-fish resources. 7 best practices have been further recommended for replication and upscaling at BS basin scale.

ASSESSMENT AND RECOMMENDATION ON ADVANCED HYDRO-ENVIRONMENTAL NUMERICAL TOOLS FOR DATA HANDLING, REAL-TIME CONTROL AND FORECASTING OF MARINE CONDITIONS IN THE BLACK SEA

ASSESSMENT AND RECOMMENDATION ON ADVANCED HYDRO-ENVIRONMENTAL NUMERICAL TOOLS FOR DATA HANDLING, REAL-TIME CONTROL AND FORECASTING OF MARINE CONDITIONS IN THE BLACK SEA were conducted including studies on data handling and numerical modelling, and development of a set of various ICT tools applicable to fish research. **Eight Technical reports** were delivered and a pilot Monitoring & Modelling Data Sharing Platform (MMDSP) has been developed, which is composed of **four main ICT data handling and numerical modelling tools**, as follows:



<https://timmod.org/index.php/en/ict-tools>

1) Web-based open GIS tool for the presentation and management of monitoring and modeled data by stakeholders and end-users.



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- 2) Operational forecast platform (OFP) for water quality/circulation in the Black Sea.
- 3) Web-based Mobile Data Tool in the form of recommendation of codes, smartphone apps and SMS mobile services for forecast data acquisition and management, and water quality updates or alerts.
- 4) Database of hydro-environmental monitoring and modelling output and short-term forecasts.

PILOT DEMONSTRATION PROJECT ON INNOVATIVE MONITORING USING ADVANCE METHODS AND INSTRUMENTS

PILOT DEMONSTRATION PROJECT ON INNOVATIVE MONITORING USING ADVANCE METHODS AND INSTRUMENTS were organized in two demo test sites in Varna, Bulgaria and Batumi, Georgia. Experience and Results of pilot surveys at sea, by testing and demonstrations of innovative monitoring equipment and software were presented in Four Technical reports.



[https://timmod.org/index.php/en/events/fiel
d-surveys-trainings](https://timmod.org/index.php/en/events/field-surveys-trainings)

INNOVATION STRATEGY TO IMPROVE JOINT MONITORING, DATA SHARING AND CROSS-BORDER INFORMATION EXCHANGE SYSTEMS

INNOVATION STRATEGY TO IMPROVE JOINT MONITORING, DATA SHARING AND CROSS-BORDER INFORMATION EXCHANGE SYSTEMS IN COMPLIANCE WITH MSFD AND DCF including studies, analyses and preparatory works for its development preceded by Four Technical reports. The Innovation Strategy is one of the most important outputs of the TIMMOD project. It brings together all the findings, conclusions and recommendations derived from the group-activities of the project, regarding advanced technologies in marine research,

best practices on environmental monitoring and fish stock assessment, and the potential for modernization. Special attention is put on data-sharing: data format synchronization, common databases, ways of data exchange, providing of public web-access.

STRATEGY VALIDATION WORKSHOPS

The draft Innovation Strategy was discussed at **FOUR NATIONAL VALIDATION WORKSHOPS** in Bulgaria, Romania, Georgia and Greece. The stakeholders' recommendations from the national workshops were discussed and finalized during the **FINAL REGIONAL VALIDATION WORKSHOP** in Romania.

THEMATIC TRANSBOUNDARY MEETINGS (TTM#1-5) AND SEMINARS

FIVE THEMATIC TRANSBOUNDARY MEETINGS (TTM# 1-5) AND SEMINARS were organized, where main findings and recommendations given in TIMMOD technical reports have been presented to key stakeholders.

COMMUNICATION AND DISSEMINATION

A number of *PROMOTIONAL MATERIALS* have been produced, and a series of targeted *DIGITAL EVENTS* were organised within the work plan of the TIMMOD project - aimed to promote innovative equipment and ICT tools for data sharing and open public web access of data and numerical tools. These were primarily targeted to TIMMOD staff, and key stakeholders identified by the project consortium. The experience of these events has shown the positive effects, in view of rising knowledge and capacity of participating researchers and experts.

Along with other project events *SEVEN DISSEMINATION EVENTS* were held, started from the project beginning and continued to the final stage, targeted to inform the large public about the



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progress of the project and achieved results, data-sharing processes between members of TIMMOD project and relevant stakeholders have been actively promoted.



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TIMMOD PROMOTES INNOVATIONS IN ENVIRONMENTAL MONITORING



[TIMMOD-Project](#)



www.timmod.org

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