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Maritime Affairs



REPUBLIC OF BULGARIA
Ministry of Transport, Information Technology
and Communications

Burgas Vision Paper

A Blue Growth Initiative for Research and Innovation in the Black Sea

We, experts from the Black Sea coastal countries, namely the Republic of Bulgaria, Georgia, Romania, the Russian Federation, the Republic of Turkey and Ukraine, as well as the Republic of Moldova, in cooperation with marine experts from leading European marine institutes and organisations, and with the support of the European Commission, aim to advance a shared vision for a productive, healthy, resilient, sustainable and better valued Black Sea by 2030. We believe that through our work we will help to deeper connect Black Sea societies through a bridge of new knowledge, technologies and services. We aim to foster human and infrastructures capacity building in coastal, marine and maritime sectors in view of unlocking unique opportunities for a sustainable and environmental friendly blue growth in the Black Sea.

We take into account - in our common work - the best practices of multilateral cooperation in European and world sea basins and the experience from international organisations such as the Organisation of the Black Sea Economic Cooperation and the Black Sea Commission.

As a first step, We work towards developing a Strategic Research and Innovation Agenda (SRIA) that will guide researchers, academia, funding agencies, industry and policy makers to promote the social well-being, prosperity of Black Sea citizens and support economic growth and jobs of countries bordering it.

The following characteristics and principles will guide Our vision and underpin the Strategic Research and Innovation Agenda:

- We identify the Black Sea as a common resource, paleoclimate archive and natural laboratory, hosting unique forms of life in its diverse ecosystems, which need to be sustained with joint activities based on this vision and with the support of the Strategic Research and Innovation Agenda.
- The Black Sea is the largest oxygen-free hydrogen sulphide-rich marine basin on Earth. Any new local, national or transboundary policy measures should consider its special ecosystem characteristics, its biodiversity and its submerged cultural heritage sites.
- Attention needs to be drawn to emerging challenges which are driven by a range of human-induced and natural drivers, such as pollution, maritime transport, eutrophication, climate change, and coastal hazards.
- The abundance of gas hydrates is a particular asset of the Black Sea that represents both opportunities and risks.
- Fish stocks and species diversity are under severe stress, common surveys and monitoring can provide a base for better assessment, management and prevention.
- Provide accurate predictive tools and capabilities to tackle the increasingly complex array of multi-stressors and their poorly understood interactions, including their connection with rivers flowing into the Black Sea.
- We see education, science and innovation as the most important tool that can fully unlock the potential for blue growth in living resources, offshore renewable energy, tourism, culture, transport, seafloor hydrocarbons that underpin the blue economy of the region.
- Science and innovation support the development and implementation of coastal and maritime policies and strategies in the Black Sea, including better ecosystem assessments, forecasts and management; understanding of vulnerability, risks and possible mitigation measures.
- Knowledge supports evidence-based and informed decision-making towards the sustainable growth of the Black Sea economies in response to the societal and environmental or climate-related challenges.

Based on these considerations, We, the experts, agree to continue to work towards developing the Strategic Research and Innovation Agenda and, in doing so, reach out to as many relevant public and private stakeholders as possible, and to be inclusive.

The Strategic Research and Innovation Agenda will aim at becoming a reference framework for marine and maritime strategies to be used as a programmatic tool for defining, national, European, and sea-basin priorities.

Addressing fundamental Black Sea research challenges:

- Developing innovative multi-disciplinary research, building on existing initiatives, including research infrastructures, data sharing mechanisms that will generate the knowledge needed to increase ecosystems resilience;
- Providing new knowledge to assess and mitigate the impacts of global climate change and the multiple natural and human-induced stressors in the Black Sea from land-sea interface to the deep basin.

Developing products, solutions and clusters underpinning Black Sea blue growth:

- Supporting marine and maritime research and innovation to create synergy, increase economic benefits, reduce hazards for prospering, resilient and empowered communities deriving interest from the Black Sea basin;
- Creating incentives for marine and maritime innovation in traditional and emerging blue economy sectors such as:
 - Energy – establishing of renewable energy sectors such as offshore wind and waves;
 - Aquatic living resources and food – developing sustainable fisheries, and high-tech and eco-friendly aquaculture, including multi-platform use;
 - Biotechnology – deriving high-value novel products from organisms of the unique habitats of the Black Sea;
 - Transport – developing sustainable safe shipping and a cleaner marine environment;
 - Blue tourism.

Building of critical support systems and innovative research infrastructures:

- Developing sustainable smart observation and monitoring systems, and assessment frameworks towards governance for a sustainable ecosystem, mitigation of climate change impact, and accurate forecasting for adaptive management;
- Building on existing best practice and latest achievements in science and technology to develop a harmonised set of working methodologies, standards and procedures on all aspects of coastal and marine research. This would provide compatible data, information and knowledge at the sea-basin level;
- Establishing facilities for promoting start-ups oriented towards the circular and blue economy in the region;
- Developing new marine-based technologies by harnessing the Industry 4.0 for the Black Sea to promote safe and sustainable economic growth of the marine and maritime sectors, the conservation and valorisation of marine cultural heritage.

Education and capacity building:

- Supporting formal and informal learning, education, training and utilisation and transfer of technologies and knowledge for established and new marine and maritime-related jobs;
- Promoting educational and vocational youth mobility related to the blue economy among the countries in the region;
- Contributing to enhanced science-policy dialogue in formulating coastal and marine policies and programmes;
- Empowering ocean-engaged citizens and policy-makers by providing high-level scientific output, contributing to a clean, plastic-free, healthy and productive Black Sea.

In the forthcoming months, for the benefit of local communities, We are committed to further refine these pillars, formulate concrete actions, and reach out to scientists, academia, business operators, decision-makers, and to society at large in the region. We hope that this work will be taken into consideration in the formulation of a broader Common Maritime Agenda for the Black Sea, but also serve as a valuable tool for the Black Sea countries' authorities, the European Commission and other international donors to support its implementation.