ABSTRACT

Reference Framework
The European Commission with the communication ‘An Integrated Maritime Policy for the European Union’ (the Blue Book) while recognising that the seas and coasts are essential for the welfare and prosperity of the Union, underlines the need to rapidly implement an integrated maritime policy to enhance Europe's capability to face the challenges of globalisation and competitiveness, climate change, degradation of the marine environment, maritime safety and security, and energy security and sustainability, which "must be based on excellence in marine research, technology and innovation".

Italy, with its 8,000 km of coastline, the excellence of its maritime traditions, its unique position in the Mediterranean, and the dimension of its industrial and research activities is inextricably linked to the sea from which a significant source of national GDP is generated.

For this reason, Italy is entitled and ready to play a leading role in defining and implementing the Blue Book policies on research, technology and innovation, with particular attention to the progressive development of a maritime policy involving all Mediterranean countries.

Motivations and objectives
The Italian industry and research system are strongly in favour of the implementation of a national programme of scientific and technological research for the sea, pluri-annual and open to the participation of all public and private stakeholders. Such a programme, which brings together the interests of ministries responsible for research, innovation, environment, transport, fisheries, industry and relations with neighbouring Mediterranean Countries, would reaffirm forcefully and effectively the maritime vocation of Italy in harmony with the indications of the Blue Book.

The objectives of the RITMARE Programme aim at achieving important developments in the technological areas described below as well as at promoting a significant evolution of the national economy of the sea, supporting networking, co-operation and internationalization actions through the following approach:
networking of research actors
activation of public-private partnerships
activation of synergies between national and regional public actions
implementation of a value chain approach on research
identification of useful RTD alliances with foreign partners
maximisation of the involvement under EU and international supporting instruments
upgrading of the national structures to the selective construction of the European Research Area.

Technological areas
The RITMARE Programme aims to decline the priorities of the Italian maritime cluster, coherently identified in relation with the strategic vision and European programmes, in the following areas:

Maritime Technologies - Research on the issues of safety and security, environmental sustainability, comfort, efficiency and development of new materials, processes and components, designed to support over the medium term the competitive potential of the domestic industry, saying more excellence of products and naval watercraft as a symbol of Made in Italy.

Technologies for a sustainable fisheries - Research and development of advanced technologies for the management of fishery resources in the perspective of sustainable fishing and safety at sea.

Technologies for the sustainable management of coastal zone - Research and development of technologies that aim to improve the understanding of the processes of change and the real-time control of environmental risks relating to the coastline for the activation of possible emergency or structural interventions.

International network of laboratories for the Mediterranean Sea - Development of an international multi-node laboratory dedicated to the study of the Mediterranean Sea, the exploitation of observational network of environmental data, for carrying out training and for the implementation of policies in scientific partnership ‘Mediterranean area also open to active participation of non-European countries.

Upgrading of national infrastructure of research - Development of interventions to update and streamline the national fleet of research vessels, through re-fitting and new construction of means.