Lab 1 – Maritime clusters development and innovation

- **Regional Cluster development and networking – Capacity building** - Develop Business Models for Clusters Creation, Development and Management.
- **Blue Biotechnologies cluster for the westMed** - Set up of a Blue Biotechnologies cluster to federate public and private actors (networking) and to share best practices and develop projects.
- **Promotion of green shipping through the use of clean fuels** - Establishment of a distribution network of LNG for maritime transport, to be installed inside western Mediterranean ports.
- **Demonstration activities to boost the uptake of innovative technologies** - Indication of possible methods to transform results of R&D activities into largely adopted innovative technology is an important contribution to SMEs, as protagonists of sustainable development over next decades.
- **Set-up of a westMed Blue Economy Observatory** - Improvement of knowledge on BE in the Western Med (data collection structuring and storage) and data sharing (via VKC as a portal of portals) to support private and public decision makers (investment) and support key sectors with highest level of potential of GVA and job creation (SME market targeting support)
- **Blue growth innovation accelerator for the westMed** - Follow-up project of NEPTUNE (Blue Growth Innovation Accelerator) with a focus on Smart ships, Smart shipyards and maritime surveillance
- **Promotion of cooperation amongst maritime logistic clusters**
- **Knowledge of marine grounds through hydrographic research and studies** - Sharing and Coordination of hydrographic research of western Mediterranean marine ground, where necessary
- **Prevention of accidental oil spillage from collecting centres and hydrocarbons treatment on coastal areas** - Application of cement-bentonite plastic barriers; Develop a new generation of Decision Support Systems tools for emergency response in relation to marine pollution from accidents
Lab 2 – Blue tourism, biodiversity and habitat conservation

- **Med Coast for Blue Growth (UfM - MC4BG)** - Strategic territorial planning is introduced as a tool to manage blue tourism destinations (human activities and natural systems in coastal touristic areas), through concrete pilot projects based on participatory planning (ICZM-MSP)

- **Blue-tourism/ecosystem indicators (based on local databases) for Decision Support Systems**
  Collection and systematization of indicators (socio-economic, environmental, alert systems) building on existing projects (MITOMED +, HERIT DATA, CO-EVOLVE, MED IAMER, etc.) and expand results to the southern Mediterranean

- **MedResilience: Resilient Environment, Resilient People** - Countries with common management and development issues in wetland, coastal, and marine habitats host pilot actions so to enhance their resilience, foster active multi-sectoral engagement and better manage ecosystem services

- **Tourism-driven multi-uses of the seas** - Engage with coastal communities in developing concrete and durable synergies between different maritime activities (tourism-driven Multi-Uses), creating a strong inter-sectoral network able to improve touristic offer and tourism sustainability

- **Bridge tourism innovation and climate adaptation to boost tourism competitiveness** - Provide additional skills and competencies to stakeholders in the Blue tourism to address growing impact of climate change for the sector (climate adaptation), boost sector competitiveness and ensure coastal/ecosystem resilience

- **Tech innovation (accelerator/incubator): boost sustainable tourism and resilient ecosystems**
  Multi-stakeholders platform to identify/piloting technological developments for eco-tourism product/service innovation (e.g. submarine archeo/heritage, micro-cruising and small yachting routes, ICT monitoring, eco-marinas/eco-ports)

- **New eco-tourism routes/development: platform of Blue Med Eco-tourism operators**
  Networks/platform of local eco-tourism sustainable operators to foster eco-tourism thematic routes (cultural heritage, historical routes, etc.) across the westMed (and beyond)
Lab 3 - Sustainable Fisheries and Coastal Community Development

• **Artificial Reefs and Sustainable Fisheries and Aquaculture** - *Pilot project in the Mediterranean (Morocco)* where some Artificial Reefs are intended to be located along the coastline so as to serve as potential MPAs. These may serve as potential sustainable fisheries areas (fishing MPAs) as well as for alternative activities to those from artisanal fisheries.

• **Blue Belts, Sustainable Fisheries and CO2 Capture** - *Transversal project* which will touch on various environmental topics (some related to fisheries whilst other to conservation, marine litter, clusters, etc.).

• **Good practice cases concerning governance and management measures for fishing harbors** - Regional project ideas aimed at setting the objectives, principles and concrete actions to be implemented in order to ensure the long-term environmental, economic and social sustainability of small-scale fisheries and sustainable development to eradicate poverty in all its forms and dimensions, while respecting human rights and gender equality.

• **Cluster on Fisheries and Aquaculture - CC (knowledge transfer)** - *Idea on creating a Mediterranean CLUSTER to discuss potential knowledge and good practices / ideas around fisheries management within the context of Climate Change impacts and coastal adaptations*

• **Blue Observatory (Knowledge and awareness raising)** - “Observing the Marine Environment to better manage sustainable fisheries”

• **Durability of artisanal fisheries activity** - *Promoting new opportunities, funding sources and diversification inside the artisanal sustainable fisheries so as to overcome their current situation in the Mediterranean*

• **Awareness on local catching species through partnerships with primary schools** - *Educational classes in partnership with primary schools where pupils are instructed on local fish species and “traditional catches” by local fishermen, including possible local fairs with local food (also within primary schools where possible) where families are also invited to raise awareness on quality of local catches and foster local (sustainable) consumption*
Lab 4 – Blue Skills Development

- **Network of existing institutes/schools for the reinforcement of blue skills and capacities**
  Summer schools and other tools to foster upscaling of skills and competencies across the sub-sea basin, possibly by allowing mobility amongst various schools and practical training experiences across the region

- **Boost capacity for young entrepreneurs** - Providing advice on business planning, start-up funding, with seed funding for the implementation of business proposal, training sessions and mentorship by technical experts (including as a further development/follow-up of the previous project idea)

- **Experts in management and promotion of activities for sustainable/eco blue tourism** - Develop knowledge and capacities to foster the development of activities related to Lab 2

- **Experts in advanced methodologies for eco-sustainable aquaculture** - Develop knowledge and capacities to foster the development of activities related to Lab 6

- **Enhancement of capacities for maritime surveillance** - Develop knowledge and capacities to foster the development of activities related to Lab 5

- **Professional skills for Marine Mammal Observer and offshore scientific research** - Development of an international multidisciplinary Centre for the formation of new Marine Mammal Observer (MMOs) and experimentation of innovative methods for offshore scientific research

- **Knowledge on seabed by deepening the topographical and geophysical knowledge** - Better understand the "landscape" of the deep sea, map the topography of seabed, its geomorphology and type of substrate and describe the geological and geophysical dynamics of the western Mediterranean
Lab 5 – Maritime surveillance

• **Maritime transport impact assessment in westMed** - Mapping of major maritime transport flux in West Med (first in EAST-West axis) and assessment of impacts on sea (including pollution and noise) and air – in order to promote low energetic consumption and low carbon footprint

• **Maritime balloons to support maritime surveillance (initial component of the action above)**
  Development/enhancement of permanent maritime surveillance capacity for safety and security. The project is based on the definition of a multi-sensor platform (balloon). Based on previous studies, the objective is to provide and test an affordable solution with a pilot project to be deployed in the Southern countries

• **Marine and maritime surveillance development** - Development of solutions to support maritime and marine surveillance based on innovative for observation (sensors, platforms), monitoring and support to policy activities: environmental status (EcAp – MSFD), gas emissions (GES), etc.

• **Prevention of accidental oil spills from collecting centres and hydro-carbons treatment**
  Applications of plastic diaphragms (cement-bentonite) evolved for the prevention of accidental spills from coastal plants for treatment and / or storage of liquid hydrocarbons
Lab 6 – Eco-friendly aquaculture

• **Promote the use of integrated multitrophic marine farming systems (IMTA)** - Within the concepts of the circular economy and blue growth, within the allocation zone for aquaculture (AZA), foster the reduction of environmental impact (bio-remediation, carbon sequestration), to increase the economy benefits (diversification, enhancement of productions and increased profitability) and the social acceptability of aquaculture (more jobs and better interaction with local activities)

• **Promote sustainable and certified aquaculture firms across the (sub)seabasin** - Promote standard certification process as a tool to increase qualities and safety of fish products, train aquaculture operators about best practices, develop common technical standards across countries and facilitate export.

• **Digitalisation and transformation of the sustainable aquaculture industry and services**
  Promote a modern, resilient and sustainable production of fish, molluscs and algae. Foster advanced technologies, new tools and precision fish farming concepts, so to innovate, support and improve the whole value chain of aquaculture. Develop new standard and organic feed formulations according to the circular economy principles, whereas new feeding strategies, farming systems and genetic selection will improve health and welfare of farmed aquatic animals.
Lab 7 – Marine litter and circular economy

- **Collecting/Recycling Technologies for Land /Sea-based Litter** - Artisanal fisheries to collect deep marine litter collection, sorting and valorisation of plastic residues at coastal and river level towards reduction of plastic at sea level and conversion into new products, according to the principle of bio and circular economy. Focus on knowledge transfer and policy makers and on training activities (policy frameworks of local level in connection with citizens) taking into consideration jobs creation.

- **Data collection analysis and representation for decision-making processes** - Combine climatic data (currents etc), additional satellite data information, artificial intelligence and remote sensing, to allow for the monitoring of state of the art in plastic litter management. Bring together industry, research, NGOs, finance and policymakers to develop a toolkit on how to get data and display them to decision makers to reduce/reuse/recycle plastics.

- **Trans-boundary Assessment, Monitoring, Management of Sea-based Litter (TAMMAL)** - In the Alboran/Levantine Seas compare the different types, sizes, categories, distributions and destination of floating litter across these two ecoregions in order to understand the scale and intensity of the common challenges and design adequate management interventions that straddle borders. This will include engaging with a multitude of stakeholders and sectors to extend the scale and resolution of the field observations and interventions across each of these two ecoregions.

- **Plastic Busters to the South Med** - Assess amount, sources, pathways, distribution convergence areas and effects of marine litter on biota as well as mitigate and reduce the impact of marine litter in the Mediterranean Sea. Nature and effects of plastic litter on the marine food chain, fisheries and fishing activities, as well as human health are still largely unknown and are important issues to be investigated.

- **Innovative Ideas for Cleaning Litter (CLAIM to expand to the South)** - Develop innovative technologies able to reduce the amount and impact of plastic pollution on the ecosystem-based services of the Mediterranean Sea; Set the basis for operational forecasting of the impacts of marine plastic litter pollution on ecosystem services. Change policy and public perceptions and provide advice for management decision-making.

- **Capacity building on recycling technology for SMEs** - Recycling but for private sector. SMEs of recycling market.

- **Tackle waste from ships** - Available Technology for ships to recycle on board and recycle afterwards. Recycling on board.
Lab 8 – Building capacities to fight IUU

Promote cooperation in capacity building towards the possible set-up of a Regional Academy - Fighting against IUU and implementing MEDFISH4EVER Declaration and GCFM measures, looking for synergies as regards the different coastguard functions, with the ambition to reduce illegal fishing activities in the Mediterranean, through the efficient and responsible action of flag States in coordination with coastal, port and market States to ensure an effective level playing field across the Mediterranean.

Supporting capacity building activities by implementing a set of actions to provide all participants with knowledge to fight IUU fishing and also to look for a permanent state through the capacitation provided to trainers. The capacity building needs to come supported by the control activities also at sea chartering a patrol vessel (operated by the Agency in cooperation with the MS interested) at regional level for permitting a more permanent surveillance in the West Mediterranean and serving for the control and enforcement of the management measures adopted by the GFCM.