## MATCHING PRIORITIES BETWEEN EUSAIR ACTION PLAN AND BLUEMED SRIA.

**WG 1, Sustainable Aquaculture and Fishery; Marine Biotech: Nuno Lourenco**, Sofia Loukmidou, **Milena Krasic**, J M Gonzalez, I Gauci-Borda, E Klein, P Moretti

EUSAIR Pillar 1 – Blue GROWTH		Matching	BLUEMED	
Торіс	Action		Priority	Action
Blue tec	R&D&I platforms on deep sea		Promoting sustainable	1
hnologies	resources:		exploitation of biotic and	Develop and implement
			abiotic resources	management plans for
	1			sustainable exploitation of
	Deep sea observation network: to map	1E - 1B, 2B, 3B,4B		coastal to deep-sea biotic and
	and monitor the seabed and analyse			abiotic resources, including gas
	potential deep sea resources which can			hydrates, minerals, molecules of
	contribute to strengthening economic			industrial interest
	activities in the blue sector.			
	2			2
	Research platform marine robotics:	2E - 4B,5B		Depict the deep sea, mapping
	e.g. to strengthen unmanned marine			the topography of seabed,
	vehicles for underwater and seabed			characterizing the
	operations			geomorphology and substrate
			Towards an observing system	types, identifying geo-habitats
			of systems	
				3
				Developing an integrated
				Mediterranean observing
				system based on existing
				European networks and
				consortia, including European
				Strategy Forum on Research
				Infrastructures, and national
				infrastructure, in line with the
			Taylor-made sensors and	overall European contribution

EUSAIR	Pillar 1 – Blue GROWTH	Matching	BLUEMED	
Торіс	Action		Priority	Action
			platforms	to global observing systems 4 Develop new ideas for robotic systems and devices to explore and work on the seabed in deep-sea areas 5 Develop Unmanned Autonomous Vehicles and related infrastructure that can extend the area - on the sea surface and underwater - for different types of operation, e.g. monitoring illegal activities, supporting search and rescue activities, helping the Civil Protection service respond to disasters, supporting offshore economic activities
	3 Research platform on biosecurity, bio- technologies and the exploitation of micro-organisms growing in the Adriatic and Ionian seas for the production of pharmaceuticals and cosmetic products.	3E - 6B#, 7B	Developing new technologies and tools	<ul> <li>6</li> <li>New or more robust micro-algae species, eukaryotic and prokaryotic microbial communities and strains for biorefinery schemes and for greening the chemical industry</li> <li>7</li> <li>Optimize cultivation and metabolic/production potential (omics techniques) of known and new marine microbial species as well as their industrial up-scaling</li> </ul>

EUSAIR Pillar 1 – Blue GROWTH		Matching BLU		EMED
Торіс	Action		Priority	Action
				8 Evaluate the potential of marine litter from macro and micro pollutants, including nanomaterials and plastics; assess its impact on marine organisms and develop in situ bioremediation actions
				9 Integrated valorisation of by- products and waste of fishery and aquaculture
	4 Macro-regional cluster development: to support the establishment of transboundary clusters on promising sectors such as green shipbuilding and new materials in order to enhance exploitation of emerging technologies and internationalisation of Small and Medium Enterprises.	<mark>4E - 10B</mark>	From traditional maritime economic to blue growth activities	10 Foster and facilitate cluster development in the Mediterranean area through collaboration of local SMEs, large companies, scientific institutes and innovative actors
	5 Researcher mobility: "Blue technology 'brain circulation' in the Adriatic and Ionian Region" to support researcher mobility in the areas of blue technology and build on the experience of UNIADRION. This may also involve the development of a "cloud environment", for facilitating the matching between researchers and institutes and companies, and for setting up a scheme for supporting	5E - 10B Other actions not in the BLUEMED table		
Fisheries and	Scientific cooperation on fisheries and		Develop optimal fishing	11

EUSAIR Pillar 1 – Blue GROWTH		Matching	BLU	EMED
Торіс	Action		Priority	Action
aquaculture	Actionfish stocks:6Increasing data collection and scientific capacity", in the fields of scientific thematic areas of investigation to be jointly explored by (national) research institutions, e.g.: (i) the ecology of larval and juvenile stages and stock recruitment relationship of small pelagic and demersal fish relevant for fisheries; (ii) stock connectivity at sea basin level of the most important fishery resources; (iii) the biology and ecology of important coastal resources (e.g. Sparidae) targeted by the small scale fishery.7New knowledge for minimising maritime damage caused by fishing, e.g. focusing on developing improved multi-species modelling, fishing gear and related techniques and technologies so as to minimise carbon footprint, seabed damage, discards and by-catch.	6E - 11B,13B# 7E - 12B	strategies, technologies and practices	Action         Develop optimal strategies,         technologies and practices for         sustainable exploitation of         biological resources; take into         account socio-economic and         ecosystem considerations, in         line with the Common Fishery         Policy (CFP) and the General         Fishery Commission for the         Mediterranean (GFCM)         12         Adapt fishing gear, reduction of         discards, by-catch and reduction         of other impacts of fishing         13         Develop appropriate         monitoring, assessment,         management and governance         regimes for sustainable small-         scale and recreational fisheries
	8 Data sharing on fishery impacts to support evidenced based decision making, sharing socio-economic and environmental data to enhance managers' understanding of the socio- economic and ecosystem impacts of fisheries management measures and establish synergies between the fishing sector and other maritime activities (e.g. aquaculture, shipping, tourism, amateur fishing, small-scale fisheries,	8E - matches MSP actions not in the BLUEMED table		

EUSAIR Pillar 1 – Blue GROWTH		Matching	BLUEMED	
Торіс	Action		Priority	Action
	etc.). 9 Fish stock monitoring platforms, monitoring the state of fish stocks in the Adriatic and Ionian Seas and evaluating the main elements for sustainable fisheries management, such as fishing pressure levels, catch/discards composition, habitat mapping, genetics, tagging, etc. Using to the greatest extent existing cooperation frameworks, e.g. the GFCM. 10 R&D platform for seafood: Seafood- related R&D and internationalisation of existing seafood clusters are critical to increasing the added value of fisheries and aquaculture products. Actions include research aiming at improving productivity, quality and environmental sustainability of aquaculture (including offshore aquaculture), as well as at increase the industry's ability to respond to market needs and to diversify its offer (new species).	9E - 11B 6E and 9E are strictly connected with the big degree of overlap 10 E - 15B#, 16B BLUEMED does not have anything on internationalisation of existing seafood clusters	Develop optimal aquaculture strategies, technologies and practices	14         Adapt aquaculture activities         (species and systems) and         capacities in a changing         environment         15         Develop new strategies,         technologies and practices to         ensure sustainability of         aquaculture         16         Promote the diversification of         aquaculture and the use of         multi-trophic marine farming         systems
	11 Developing skills: Professional skills and competencies are needed as well as higher capacity to develop them. This action focuses on promoting and strengthening networks of academies and training institutes aiming to	No matches in the BLUEMED table, but mentions to blue carriers do exist in the SRIA (not sure if they comprise fisherman and aquaculture training)		

EUSAIR Pillar 1 – Blue GROWTH		Matching	BLUE	MED
Торіс	Action		Priority	Action
	develop specific educational and (joint) training programs for fishermen and aquaculture			
	Diversification and profitability of fisheries and aquaculture 12 Improvement and diversification of fishing activities 13 Sustainable aquaculture, site location and management	12E - no match with B 13E - 14B, 15B#		

**TABLE LEGEND** 

#### E - EuSAIR

B - blumed

### **#**-Partial match

#### **GENERAL COMMENTS:**

- We approached the table considering firstly the fact that EUSAIR has prioritized actions and has implementation plan. So each EUSAIR action was confronted with BLUEMED and not the inverse.
- There is a overall good match between EuSAIR and BLUEMED actions. EUSAIR actions are more detailed in some cases, and all priorities set in EUSAIR have correspondence with exception on Aquaculture, where some misalignment occurs. Some topics depicted in the table for EuSAIR and BlueMED do exist but in other pillars and are not present in the table, so links cannot be performed.

#### **SPECFIFIC COMMENTS:**

- 1. Diversification and profitability of fisheries and aquaculture not included in the table (EUSAIR)
- 2. Some BlueMED actions such as training and carreers are not in table
- 3. Internationalization on seafood clusters and MSP are missing in BlueMED
- 4. Marine Litter exists in BlueMED and in EUSAIR pillar 3 (not in table)

# WG 2, Sustainable Trasportation and ports; off-shore platforms: Pierpaolo Campostrini, Cosmo Forte, Pierfrancesco Moretti, Branko Cermelj A. Norcini Pala, E. Reja

EUSAIR I	Pillar 2 – Connecting the region	Matching	BLUEMED	
Торіс	Indicative Action (EUSAIR AP) <sup>i</sup>		Priority	Action
Maritime Transport	Clustering port activities/services (e.g. Sharing strategic functions and harmonizing ports processes) Developing ports, optimizing port interfaces, infrastructures and procedures /operations (e.g. Creation of an accessible maritime transport database allowing the design of new itineraries Support port multimodal connectivity through the development of Short- Sea Shipping.) Improving the accessibility of the coastal areas and islands. Cross-border facilitation (e.g. Adoption of common standardized administrative	Note: matching pillar 1 new materials for green vessels and facilities e.g. hull-cleaning with ROVs in controlled environmental conditions	From traditional maritime economic to blue growth activities	Foster and facilitate cluster development in the Mediterranean area through collaboration of local SMEs, large companies, scientific institutes and innovative actors Consolidate existing infrastructures that support the development of innovative green technologies performed by the Mediterranean clusters Implement training/mobility programs to share knowledge and best business practices in maritime clusters with other regions

EUSAIR	Pillar 2 – Connecting the region	Matching	BLUEMED	
Торіс	Indicative Action (EUSAIR AP) <sup>i</sup>		Priority	Action
	procedures at border crossings and implementation of small and target scale investments and joint training programmes.) Developing motorways of the sea (e.g. Identifying transpational IT tools for		Effective maritime	Use integrated decision tools for selecting appropriate sites for off- shore installations, fulfilling energy and environmental requirements
	tracking and tracing of ITUs using MoS in the Adriatic Ionian Region, supporting intermodality through its integrated with inland terminals and port / inland operators and improving last mile connections.)		spatial planning in the Mediterranean	
	Developing the Western Balkans comprehensive network by developing integrated planning for infrastructure developments.			
Maritime transport Intermodal connections to the	Clustering port activities/services – Common certification of the ports on safety, sustainability and computerization Improving the accessibility of the coastal areas and islands.		Greening vessels and facilities	Design and develop innovative infrastructure solutions to improve the sustainability of ports, with special reference to energy efficiency and externalities relating to the surrounding built environment
ninterland Energy	Gas pipelines [e.g. LNG bunkering and car/truck fuelling, cold ironing; Design and develop innovative /efficient solutions to interconnect LNG terminals (offshore and			Develop new vessel concepts, i.e. hybrid systems, with lower manufacturing, construction, installation and decommissioning costs
	onshore) to gas network to provide secure and competitive gas supply ; Converting ship engines to dual fuel use (by the year 2020)]		Safer Maritime transport in the Mediterranean	Identify and implement safer, secures and clean off-shore installations/devices

TopicIndicative Action (EUSAIR AP)'PriorityActionMaritime TransportImproving and harmonizing traffic Monitoring and management (e.g. Enhancement and simplification of the existing ADRIREP Mandatory Ship Reporting system and proposal for the armedment of the IMO Res. NSC n.139(76). Implementation of an integrated Adriatic and Ionian common VTMIS, the related alerting system and the common training and certification schemes of the operators)EGNOS today and GALLEO soon improve the system and is key in the integration in AIS will improve the system and is key to the approach in Adriatic oorts, especially in difficult weather conditions, The guidance inside ports can be improved with the help opt structural monitoring, ability to existing reporting system and the speed up administrative procedures to increase the efficiency of maritime transport (e.g. Adoption of a common framework for the development of Single durinational between the ship and the onshore competent administrative procedures J.EGNOS today and GALLEO soon improve the port efficiency in any conditions. It essential to have some pluri-national "gractical experiences" which can be funded by regional cooperation programs. A regional data acquisition and sharing appears fundementati, tooSafer Maritime transport inter heyelocolicity. Advisor of a common framework for the development of Single operators J.Improve the soft action schemes of the section procedures J.Develop innovative technologies indeprocedures J.Developing ports, optimising port interfaces, infrastructures and procedures J.Respiration afficiency of maritime section acquisition of AIS-like system should be promoted by adding high value services system should be p	EUSAIR	Pillar 2 – Connecting the region	Matching	BLUEMED	
Maritime TransportImproving and harmonizing traffic Monitoring and management (e.g. Enhancement and simplification of the existing ADRIREP Mandatory Ship Reporting system and proposal for the amendment of the IMO Res. MSC n.139(76). Implementation of an integrated Adriatic and loain a common VTMIS, the related alerting system and the common training and certification schemes of the operators)Safer Maritime transportImprove the transport systems fi smart and safe mobility in coasta zones, lagoons and restricted are to the approach in Adriatic ports, especially in difficult weather conditions. The guidance inside ports can be improved with the help of perators)Safer Maritime transport in the MediterraneanImprove the transport systems fi smart and safe mobility in coasta zones, lagoons and restricted are to restreamed in advisition perators)Develop tools/software to enhance and simplify the existing reporting system and to speed up administrative procedures to the ship and the onshore competent authorities and operators for streamilining dministrative procedures ).Safer Maritime transport is the mediation of an integrate to the approach in Adriatic ports, optimising port interfaces, infrastructures and procedures / peratorsSafer Maritime transport is the mediation of an integrate some many probability and safety/security of the portConsidering leisure traffic, with no obligation of AIS-like system should be promoted by adding hip value services related to leisure navigationSafer Maritime transportImprove the transport system of Single move the port capacity to sail and operator for the development of Single with no obligation of AIS-like system should be promoted by adding hip value services related to	Торіс	Indicative Action (EUSAIR AP) <sup>i</sup>		Priority	Action
operations and of the delivery system (e.g.use of an acoustic sensorAdoption of a common framework for the development of green shipping solutions as the necessary facilities for bunkering withuse of an acoustic sensor network for the identification and tracking of any vessel could be studied in the	Topic Maritime Transport	Indicative Action (EUSAIR AP)' Improving and harmonizing traffic Monitoring and management (e.g. Enhancement and simplification of the existing ADRIREP Mandatory Ship Reporting system and proposal for the amendment of the IMO Res. MSC n.139(76). Implementation of an integrated Adriatic and Ionian common VTMIS, the related alerting system and the common training and certification schemes of the operators) Develop tools/software to enhance and simplify the existing reporting system and to speed up administrative procedures to increase the efficiency of maritime transport (e.g. Adoption of a common framework for the development of Single Window systems (Directive 2010/65/EU) allowing exchange of information between the ship and the onshore competent authorities and operators for streamlining administrative procedures ). Developing ports, optimising port interfaces, infrastructures and procedures /operations Implementation of ICT and tracking and monitoring to improve the efficiency, reliability and safety/security of the port operations and of the delivery system (e.g. Adoption of a common framework for the development of green shipping solutions as the necessary facilities for bunkering with	EGNOS today and GALILEO soon improve the reliability of satellite navigation system. Their integration in AIS will improve the system and is key for the approach in Adriatic ports, especially in difficult weather conditions. The guidance inside ports can be improved with the help of new technologies, with the effect to improve the port efficiency in any condition. It is essential to have some pluri-national "practical experiences" which can be funded by regional cooperation programs. A regional data acquisition and sharing appears fundamental, too Considering leisure traffic, with no obligation of AIS, the voluntary adoption of AIS-like systems should be promoted by adding high value services related to leisure navigation In a longer time frame, the use of an acoustic sensor network for the identification and tracking of any vessel could be studied in the	Priority Safer Maritime transport in the Mediterranean	Action Improve the transport systems for smart and safe mobility in coastal zones, lagoons and restricted areas Develop innovative technologies for safer vessels, with real time structural monitoring, ability to navigate in degraded conditions (safe return to port) and ship capacity to sail and operate in extreme environmental situations (resilient ship) and sensitive areas, also with the use of European GNSS

EUSAIR	Pillar 2 – Connecting the region	Matching	BLUEMED	
Торіс	Indicative Action (EUSAIR AP) <sup>i</sup>		Priority	Action
		term, a feasibility cost-benefit study can be conducted.		
Maritime transport	Develop tools/software to enhance and simplify the existing reporting system and to speed up administrative procedures to increase the efficiency of maritime transport	Considering security and emergency planning and management as a side aspect of transport, strictly connected to its possible development becomes important to explore the R&D aspects in this field.	Tailor-made sensors and platforms	Develop new technologies and systems to enable spatial and temporal resolution and observation parameters to be improved in the coastal region (using both in situ and remote tools) Develop Unmanned Autonomous Vehicles and related infrastructure that can extend the area - on the sea surface and underwater - for different types of operation, e.g. monitoring illegal activities, supporting search and rescue activities, helping the Civil Protection service respond to disasters, supporting offshore economic activities
Intermodal connections to the hinterland	Developing the Western Balkans comprehensive network (e.g. Development of a joint lifelong learning plan, training tools and methodologies in transport and energy sectors to address requirement of private sector (shipping, trade, port operations) and public administrations ( port management, coast guard/ surveillance, safety and security)		Changing the rational, one offshore platform - multiple uses and activities	Spatialize and cross-check: offshore fixed and mobile infrastructures distribution and environmental monitoring and surveillance needs from coasts to open sea Develop new concepts and protocols with private companies and the maritime operators to maximise the use of infrastructures, ships and platforms for scientific and environmental monitoring, safety and security purposes

EUSAIR	Pillar 2 – Connecting the region	Matching	BLUEMED	
Торіс	Indicative Action (EUSAIR AP) <sup>i</sup>		Priority	Action
				Develop tailor made solutions and new technologies to improve efficiency on installations, maintenance and exploitation of marine renewable energies (wind, current and waves) and the power grid charge

## WG 3, Marine ecosystems and dynamics; MSP; Observing systems: Vassilis Likou, Laurant Mortier, Marilaure Gregoire, Senad Oprasic, Gaspar Zupancic, Andrea Barbanti

EUSAIR Pillar 3 – Environmental quality		Matching	BLUEMED	
Торіс	Action		Priority	Action
EUSAIR F Topic Maritime governance	Pillar 3 – Environmental quality         Action         Governance of maritime space:         Maritime governance and services task         force ensuring the legal framework for         exploiting deep-sea water and marine         mineral resources in a sustainable manner,         through governance mechanisms such as         establishment of maritime zones.         Implementing coordinated Maritime         Spatial Planning (MSP) and Integrated         Coastal Management (ICM), based         on the experience of e.g. ADRIPLAN with	Matching Maritime Spatial Planning based on an ecosystem approach supported by advanced knowledge and tools. International coordination on MFSD descriptors (e.g. ICES for the Mediterranean). Integration between GES assessment and MSP Management of the	Priority Cleaning the Mediterranean Sea	Action         Implement         coordination/cooperation         schemes and comparable risk         assessment of the effects of         multiple anthropic pressures         at different depths, including         deep sea areas; comply with         regional conventions and the         Marine Strategy Framework         Directive (MSFD)
	the aim of improving the on-going process to develop Maritime Spatial Planning (MSP) in the sea basin, of overcoming barriers to full participation of all neighbouring countries in the process and of promoting sound technically/scientifically based political decisions. This will promote a coherent transnational approach to the spatial planning of the two seas and support implementation of the MSP Directive. The ultimate aim would be good governance of economic activities in this sea region and implementation of common plans.	exploitation of marine resources based on a sound ecosystem approach and assuring sustainability at long- term scales. Sound risk assessment of compromising the GES (at short and long time scales) due to multiple pressures and blue growth exploitation. Integrated Marine Observing Systems: (Adriatic, Ionian and especially in regions which are actually not enough covered to manage the GES). Coordination between countries is requested and need of standardized approach	exploitation of biotic and abiotic resources	ecological dynamics and socio- economic needs in order to improve adaptive management scenarios of resource uses Implement multidisciplinary integrated methodologies to evaluate the impact of ship and harbors on the environment at trans-national level on the light of the specific characteristics of the Mediterranean basin

EUSAIR	Pillar 3 – Environmental quality	Matching	BLU	EMED
Торіс	Action		Priority	Action
		(capacity building, data		
		delivery, same protocols,		
		coherence of the approaches,		
		definitions of essential		
		variables)		
		New needs for data to support		
		the blue growth		
		Sustainability of the system		
		over the long term (e.g. to		
		assess climate change)		
		Mapping of the system		
		Climate change (impact)		
		assessment and reporting to		
		policy (e.g IPCC for the		
		Mediterranean, MEDEC		
		initiative)		
		<b>Development of Adaptation</b>		
		and mitigation actions based on		
		robust scientific tools		

EUSAIR Pillar 3 – Environmental quality		Matching	BLUEMED	
Торіс	Action		Priority	Action
Threat to coastal and marine biodiversity	Implementing Maritime Spatial Planning and Integrated Coastal Management: by ensuring coordination of different projects/initiatives with the frameworks provided by the Maritime Spatial Planning Directive and the Priority Action Plan of UNEP/MAP.		Promoting sustainable exploitation of biotic and abiotic resources	Promote innovative devices and approaches for limiting coastal erosion and pollution by strengthening the synergy between science, industry and policy makers and foster joint initiatives with European marine regions

EUSAIR Pillar 3 – Environmental quality		Matching	BLUEMED	
Торіс	Action		Priority	Action
				Depict the deep sea, mapping
				the topography of seabed,
				characterizing the
				geomorphology and substrate
				types, identifying geo-habitats
	Increasing marine knowledge: To ensure a		Understanding the functioning	Develop tools/software to
	sound basis for actions related		of the Mediterranean Sea	describe impacts on coastal
	to Maritime Spatial Planning (MSP),		ecosystem	environments taking into
	Integrated Coastal Management (ICM) and			consideration the social and
	implementation of the Marine Framework			economic aspects
	Strategy Directive, it is important for the			
	Region to:			Improve the knowledge on land-
				sea nexus and develop coastal
	- Make an inventory of marine biodiversity			ecological engineering solutions
	and detailed habitat mapping in coastal and			and measures to reach a 'good
	offshore areas.			environmental status'
	- Agree on a common approach to be			Develop tools able to assess
	applied across the Adriatic and Ionian sea			cumulative impacts of human
	basin for monitoring diversity descriptors on			activities for an eco-sustainable
	the status of the marine environment the			exploitation of marine resources
	two seas, and for determining Good			
	Environmental Status indicators and targets.			Assess inputs from atmosphere-
	C C			land-sea and anthropogenic
	- Establish a common infrastructure			pressures leading to alteration
	platform in terms of data collection, marine			of the marine and coastal
	research, lab analysis through common			ecosystems: limit the specific
	survey programs, research vessels and			emerging risks and impacts on
	laboratories.			both ecosystems and human
				health and wellbeing
	- Develop a Web-GIS Observatory Network			
	to gather and process geographical and		Towards an observing system	Maintain undated
	statistical data related to sustainable		of systems	data/information on erosion
	development and the marine environment			phenomena and coastal risks
				harmonizing and expanding the
				coastline monitoring systems at
				hasin scale
				basin scale

EUSAIR	Pillar 3 – Environmental quality	Matching	BLUEMED	
Торіс	Action		Priority	Action
				Develop common methodologies to implement the Marine Strategy Framework Directive (MSFD) in shared waters, enhancing coordination and cooperation among Member States to achieve the Good Environmental Status (GES) Tailor made solutions for sensors and platforms Develop new technologies and systems enabling the increase of the spatial and temporal
				resolution and observation parameters at the coastal region (both using in-situ and remote tools)
				Develop and commercialize environmental sensors for assessment of impacts of human activities and the implementation of Marine Strategy Framework Directive (MSFD)

EUSAIR Pillar 3 – Environmental quality		Matching	BLUEMED	
Торіс	Action		Priority	Action
Threat to coastal and	Enhancing the network of Marine		Promoting sustainable	Implement managing solutions
marine biodiversity	Protected Areas: By possible		exploitation of biotic and	and conservation plans,
	designation of new areas in		abiotic resources	including MPAs networks, of
	coordination with the process of			coastal to deep sea ecosystems
	designation of Specially Protected			and their relationship to the

EUSAIR Pillar 3 – Environmental quality		Matching	BLUEMED	
Торіс	Action		Priority	Action
	Areas of Mediterranean Importance under United Nations Environment Programme – Mediterranean Action Plan (UNEP MAP); by establishment of Fisheries Restricted Areas under the General Fisheries Commission for the Mediterranean (GFCM), by completing marine NATURA 2000 network under Birds and Habitats Directives; by designating further protected areas to form a coherent and representative network of MPAs according to the Marine Strategy Framework Directive; and by ensuring their joint or coordinated management, also in relation to maritime spatial planning and integrated coastal management		Understanding the functioning of the Mediterranean Sea ecosystem	environmental changes of natural and anthropogenic origin Identify the origin of invasive/alien species and routes of invasions, environmental conditions conducive for invasions and major effects on local habitats
			Understanding and forecasting the Mediterranean Sea dynamics	Provide numerical modelling, forecasting, indicators and trends definition in the Mediterranean environmental conditions along with long-term monitoring Implement downscaling models of climate change for the Mediterranean Sea and sub- basins; assess the (global) impacts on marine ecosystems and their resources from regional to local scales
Pollution of the sea	Implementing a life cycle approach to marine litter: - Establishing a coordinated monitoring system and database on marine litter and marine pollution, including sources		Generating new products	Evaluate the potential of marine litter from macro and micro-pollutants, including nanomaterials and plastics; assess its impact on marine organisms and develop in situ

EUSAIR Pill	ar 3 – Environmental quality	Matching	BLUEMED	
Торіс	Action		Priority	Action
	and types of litter and pollution and a GIS database on the location and sources of marine litter27.			bioremediation actions
	- Strengthening collaboration between sectors for the development of new possibilities for marine litter recycling including production of packaging waste and fishing gears to enable recycling;			
	- Preparation of a joint strategy for the assessment, prevention and reduction of marine litter, building on the work of MED POL programme28 and in line with the Regional Plan of the Barcelona Convention on Marine Litter Management in the Mediterranean, including an economic assessment of the costs and benefits of different options for reducing marine litter, as well as actions intervening at different stages of production, sources, transmission and loss.			
	- Supporting the preventative measures to address Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG), implementing gear marking and gear registration, marine spatial management, codes of practice for fishermen.			
	<b>Supporting clean-up programmes</b> for both floating and sunken litter, integrating these activities with recycling programmes, and investing in necessary infrastructure.		Cleaning the Mediterranean Sea	Measure and identify chemicals compounds and other sources of pollution, including contaminants dispersal, in different marine matrices;

EUSAIR Pillar 3 – Environmental quality		Matching	BLUEMED	
Торіс	Action		Priority	Action
	Identifying hotspots and investing in		Cleaning the Mediterranean	characterize sources, pathways and impacts on marine ecosystems; develop early warning tools to detect pollutants Identify areas with potential hot
	reducing emissions of pollutants by realising a Hot Spot Inventory and aiming to depollute the sea.		Sea	spots of conflicts particularly exposed to the impact of multiple stressors and possible solutions
	Drafting and implementation of a joint contingency plan for oil spills and other large-scale pollution events, building on the work on the sub-regional contingency plan developed by the Joint Commission for the protection of the Adriatic Sea and coastal areas, and on the forthcoming Action Plan for the Offshore Protocol of the Barcelona Convention. Implementation of measures to enable joint contingency planning and coordinated emergency response.		Reducing risk disasters	Develop adapted sampling strategies; better assess marine geo-hazards, from paleo records and from analysis and characterization of active faults Implement high resolution swath bathymetry mapping; reveal detailed morphology of the seafloor and large scale and local seismic profiling surveys; locate and study active geological features. Develop operational platforms and decision matrix for tackling destructive tsunami events generated by different sources, e.g. seismicity, volcanoes, landslides, atmosphere. Implement coordinated methods and approach to achieve a dedicated science-to- policy network on hazards in the Mediterranean.
			Cleaning the Mediterranean	Develop a new generation of

EUSAIR Pilla	ır 3 – Environmental quality	Matching	BLUEMED	
Торіс	Action		Priority	Action
			Sea	Decision Support System tools for emergency response in relation to marine pollution from accidents, including the analysis of the state of damaged platform/carrier Develop new tools, materials and methods to ease and improve the decision making process in managing on board emergency situations

## WG 4, Sustainable Tourism, Marine/Costal Cultural heritage: Margherita Cappelletto, Vlado Malačič, Vangelis Papathanassiou, Sonia Popa (NB: Blanka Belosevic absent and justified) C. Aspris

EUSAIR Pillar 4 – Sustainable tourism		Matching	BLUEMED	
Торіс	Action		Priority	Action
	Fostering Adriatic-Ionian cultural		Toward a shared management	Creation of a common
	heritage. In order to diversify the		approach to the Mediterranean	disclosure and data sharing
	Region's profile in the eyes of its		cultural heritage	policy
	visitors and to extend the tourism			
	inflows beyond the summer season, the			Exploit large-scale seabed
	rich cultural background and assets			mapping databases to locate
	should be further exploited. This could			shipwrecks and target areas for
	be achieved by strengthening cultural			high resolution seabed mapping
	cooperation. In this way the			
	implementation of the Ljubljana			Explore and protect natural and
	process will be reinforced and there will			cultural heritage at coast and
	be increased demand for use of the			underwater through
	creative, cultural and natural industries			multidisciplinary approach,
	sector. With a critical mass of cultural			combining efforts from national
	hotspots at macro-regional level certain			level programmes for
	areas could be rejuvenated and enjoy			stocktaking
	increased tourism attention. Possible			
	interventions are:			Establish a network for
				collaboration, e.g. between
	Adriatic-Ionian Museum Network for	Assessment of available surveys		marine and archaeological
	the establishment of a regional	that map objects and spots		institutions
	network that will direct visitors to the	relevant for coastal and		
	various museums, cultural events and	underwater Museums, as	Increase the economic impact	Create sustainable integrated
	premises across the Region. In the case	preliminary step for knowledge	of the Mediterranean's cultural	touristic offers and services, e.g.
	of marine Museums (coastal and	exchange, data harmonization,	heritage	scuba diving circuits, to make
	underwater) a preliminary mapping is	and capacity building.		best use of the Mediterranean's
	needed.			cultural heritage while
		Taking advantage of retrieved		preserving it
	Wore emphasis on archaeological sites	data and information and		
	for the promotion of the Region as a	establishing a network for		Develop educate 1 - 1 - 1
	global destination for archaeological	collaboration between marine		Develop advanced concept of
	tourism, including coastal and	and archaeological institutions		smart robotic systems for

Matching		BLUEMED
	Priority	Action
can lead to development of		coastal and submarine
products for a Virtual Museum		archaeology
of Mediterranean Coastal and		
g Submarine Archaeology.		Take advantage of retrieved
		data and information to create a
rs This could be a sample of the		Virtual Museum of
<b>EUSAIR Adriatic-Ionian Museum</b>		Mediterranean Coastal and
Network for the establishment		Submarine Archaeology
of a regional maritime network		
that will direct visitors to the		Train a new generation of
various museums, cultural		marine technicians/scientists to
events and premises across the		conduct research on the
Region.		protection of the marine
,		cultural heritage
	Matching         can lead to development of products for a Virtual Museum of Mediterranean Coastal and Submarine Archaeology.         rs       This could be a sample of the EUSAIR Adriatic-Ionian Museum Network for the establishment of a regional maritime network that will direct visitors to the various museums, cultural events and premises across the Region.	Matching       Priority         can lead to development of products for a Virtual Museum of Mediterranean Coastal and Submarine Archaeology.       Priority         rs       This could be a sample of the EUSAIR Adriatic-Ionian Museum Network for the establishment of a regional maritime network that will direct visitors to the various museums, cultural events and premises across the Region.

<sup>&</sup>lt;sup>i</sup> NB : in *Italic* are highlighted possible projects related to EUSAIR's Topics as listed in the Action Plan; in *Bold italic* are highlighted priority sub Actions identified by the EUSAIR's Thematic Steering Group for Pillar 2.