



Montenegro Ministry of Transport and Maritime Affairs

STRATEGY FOR DEVELOPMENT OF MARITIME ECONOMY 2020 - 2030

Contents

Contents

Scope of the strategy and introductory notes	
METHODOLOGY	
PART A: VISION AND PRINCIPLES OF THE STRATEGY FOR DEVELOPMENT OF MARITIME EC	
A.1: Vision of the Strategy for Development of Maritime Economy	14
A.2: Principles of the Strategy for Development of Maritime Economy	15
Part B: ANALYSIS OF THE STATE OF AFFAIRS	17
B.1: Overview of the European Union Maritime Policy	17
B.1.1 Key Features and Trends in the European Maritime Sector	
B.1.2 European Union White Paper 2011	
B.1.3. European Union Maritime Policy – priorities and initiatives	
B.1.3.1 EU Integrated Maritime Policy	
B.1.3.2 Motorways of the Sea	
B.1.4 Development of the basic regional transport network in South-East Europe (SEETO)	
B.2: Overview of Montenegrin Strategies, Planning and Spatial Planning Documents	
B.2.1 Programe of Economic Reforms for Montenegro 2019-2021	
B.2.2 Tranport Development Strategy 2019–2035	
B.2.3 National Strategy for Sustainable Development by 2030	
B.2.4 Strategy for Development of Tourism by 2020	
B.2.5 Montenegrin Fisheries Strategy 2015-2020	
B.2.6 Regional Development Strategy 2014-2020	
B.2.7 National Air Quality Management Strategy 2013-2020	
B.2.8 National Strategy for Integrated Coastal Zone Management 2015 – 2030	
B.2.9 Second National Biodiversity Strategy with Action Plan 2016-2020	
B.2.11 National Climate Change Strategy 2015-2030	
B.2.12 Special Purpose Coastal Zone Plan	
B.2.13 Energy Development Strategy by 2030	
B.2.14 Smart Specialization Strategy	
B.2.15 Strategic plans for the development of local self-governments	
B.3: Analysis of legal and institutional framework	
B.3.1 Institutional development of the maritime market – harmonization as a cost factor	
B.3.2 Decisions related to GHG policy: reduction of GHG emission from ships	
B.3.3 Decisions on Energy Efficiency Requirements	
B.3.4 Mandatory system for collecting data on fuel consumption on ships	
B.3.5 Implementation of sulphur limit by 2020 – Approved prohibition for non-compliant fuels	
B.3.6 Implementation of the BWM Convention	
B.3.7 Operational/financial impact of the regulatory framework	
B.3.8 Legal aspects of maritime economy development.	
B.3.8.1 Law on Ports	
B.3.8.2 Law on Safety of Maritime Navigation	44
B.3.8.3 Law on the Sea	44
B.3.8.4 Law on Yachts	
B.3.8.5 Law on Prevention of Marine Pollution from Vessels	45
B.3.8.6 Law on Maritime and Inland Navigation from 1998	
B.3.8.7 Law on Security Protection of Ships and Ports	
B.3.8.8 Law on the Manner of Registration of Ships, Floating Objects and Installations for Hydro	
Production and In Rem Rights over Ships and Installations for Production of Hydrocarbons	
B.3.8.9 Law on Coastal Zone	
B.3.8.10 Law on Air Protection	
B.3.9 IMO Conventions and Protocols	48

B.3.10 Summary: Specific features of Montenegrin maritime legislative framework in comparison to EU acc IMO and other Conventions	
B.4. Economic Bacground – Overview of Montenegrin economy	
B.5. "BLUE ECONOMY" - Overview of the Existing Maritime Sector and Economic Setting	55
B.5.1 Montenegrin Maritime Cluster	55
B.5.1.1 State authorities (structure of Montenegrin maritime adminsitration)	
B.5.1.2 Montenegrin register of vessels (ships, boats, yachts and other vessels)	
B.5.1.3 Shipowners and operators	
B.5.1.4 Maritime Insurance Companies and Maritime Insurance	
B.5.1.5 Financial Institutions in Maritime Sector	
B.5.1.6 Designing Ships and Shipyards	
B.5.1.8 Maritime Education and Training of Seafarers	
B.5.1.9 Institutions for Research, Innovation and Development in the Maritime Sector	
B.5.1.10 Ship Classification Societies	
B.5.1.11 Maritime Agents and Brokers	
B.5.1.12 Ship Chandlers	
B.5.1.13 UPSTREAM Industry - Exploration and Production of Hydrocarbons	
B.5.1.14 Dredging B.5.1.15 Ports and Terminals (Cargo, Passengers, "Green" Ports) – Historical Data	
B.5.1.16 Nautical Tourism Ports – Yachts – Servicing Yachts	
B.5.1.17 Maritime and Nautical Tourism – Services of Recreation	
B.5.1.18 Blue Biotech Companies	
B.5.1.19 Fisheries and Mariculture	
B.5.1.20 Services of Environment Protection in Maritime Sector (Waste Disposal, Marine Waste Landfill Sector)	
Oil Pollution)	
B.5.1.21 Seafarer Employment Agencies	
B.5.2 INFLUENCE OF BLUE ECONOMY/ MARITIME SECTOR ON MONTENEGIRN ECONOMY	
B.5.2.2 Estimates of contribution of blue economy/maritime sector	
PART C: EXTERNAL ENVIRONMENT – TRENDS AND COMPETITION	
C.1. Analysis of External Environment	
C.1.1 Overview of utilization of selected ports in the Adriatic-Ionian region and their connections with trans	
corridors	•
C.1.2 Competition in the Mediterranean Sea	
C.1.3 Effects of Competition on the Global Level – Opportunities and Risks of the OBOR Initiative (Initiative	
belt – one road ")	
C.1.4 Role of NAPA (North Adriatic Ports Association)	
C.1.5 Brief Overview of Competitors' Ship Registers	
C.2. Development of the "Blue Growth" Initiative	112
C.2.1 Blue Growth Strategy	.112
C.2.2 Blue Growth Model for Jobs	.115
C.3. Maritime Clusters	118
C.3.1 Concept of Clusters	.118
C.4 S.W.O.T. Analysis of Montenegrin Maritime Economy	122
Part D. Strategic goals of integrated maritime policy	.123
D.1 Strategic Goals and Operational Objectives	123
D.1.1 Setting Strategic Goals	.123
D.1.2 Performance Indicators for the Level of Achievement of Defined Operational Objectives	
D.1.3 Overview of Strategic Goals and Operational Objectives	
D.1.4 Time Schedule of Activities Presented in the Gantt Diagram	.140

Contents

D.1.5 Action Plan for the Period 2020-2021	147
D.1.6 Mid-term Action Plan 2020-2025	161
D.1.7 Plan for Long-term Activities that will Start or Will be Completed in the Period Longer than Five	Years 171
D.2 Plan for Implementation of Monitoring, Reporting and Evaluation of the Strategy for Development Economy	•
D.2.1 Monitoring	179
D.2.2 Funds Required for Implemenation of the Activities Envisaged in the Strategic Document	
D.3 Sources of Funds	181
D.3.1 Financial Support within Instrument for Pre-Accession Assistance - IPA	181
D.3.2 Western Balkans Enterprise Development and Innovation Facility (WB EDIF)	
D.3.3 Western Balkans Investment Framework (WBIF)	
D.3.4 Public-Private Partnerships	
D.4 Public Consultations – Opinions of Interested Parties	183

Tables

Table 1: Overview of macro-economic indicators for Montenegro (2009-2018)	53
Table 2: Turnover of passengers and goods in maritime transport	
Table br. 3: Condition of infrastructure and suprastructure in Montenegrin marinas	89
Table 4: Arrivals of foreign vessels to nautical tourism ports by type of vessel	89
Table 5: Arrivals and Overnights – Coastal Towns and Settlements	
Tabl 6: Cruises of foreign ships	
Table 7: Arrivals of foreign vessels to nautical tourism ports	
Table 8: Number of fishing vessels by type and power, 2017	
Table 9: Gross added value and employment in the sector of transport and storage	
Table 10: Economic contribution of blue economy	
Table 11: Foreign trade in goods and services of maritime transport	
Table 12: Turnover of cargo in selected ports in Adriatic-Ionian region	
Table 13: List of projects contributing to better connectivity of Montenegrin ports with the hinterland	103
Table 14: Basic data from the selected registers for 2018	
Table 15: Flag states chosen by the most competitive shipowners in selected countries	
Table 16: Segmentation of criteria for rendering decision on chosing certain register	111
Table 17: Competitive advantages of the Maltese Ship register	111
Table 18: Economic contribution of blue economy to EU countries by sectors	
Table 19: Characteristics of maritime clusters organizations	

Images and Figures

Image 1: Quintuple Helix Model	13
Image. 2: TEN-T corridors	
Image 3: Road infrastructure within SEETO initiative	27
Image 4: Railway network within SEETO initiative	
Image 5: Integration of SEETO and TEN-T projects	27
Image 6: SEETO comprehensive area	27
Image 7: Graphic presentation of the new container terminal in the Port of Bar	33
Image 8: Graphic presentation of the new continer terminal in the Port of Bar	
Image 9: Graphic presentation of the new shipyard in Bijela - Quay, ship lift and new floating dock	
Image 10: Graphic presentation of the new shipyard in Bijela – bird's eye view	
image. 11: Graphic presentation of the new shipyard in Bijela – bird's eye view	
Image 12: Shipyard port Bonići	
Image 13: Port of Bar	
Image 14: Graphic presentation of the project of extension of the operational shore in the passenger terminal	
Port of Bar (Quay V)	
Image 15: Graphic presentation of the project of extension of the operational shore in the passenger terminal	
Port of Bar (Quay V)	
Image 16: Graphic presentation of the project of extension of the operational shore in the passenger terminal	
Port of Bar (Quay V)	79
Image 17: Graphic presentation of the project of extension of the operational shore in the terminal for dry bulk	
Image 18: Graphic presentation of the project of permanent rehabilitation of the Northern slope of the hill Volujica	
of Bar	
Image 19: Presentation of the solution for the berth of cruiser on the mooring buoys – Port of Kotor	
Image 20: Presentation of the project of modernization of the berths in the marina part of the port	
Image 21: Port of Risan	
Image 22: Port of Zelenika	
Image 23: Port of Virpazar	
Image 24: Marina Bar	
Image 25: Port of Tivat – Porto Montenegro	
Image 26: Port of Budva	
Image 27: Luštica Bay	
Image 28: Port of Kumbor – Portonovi	
Image 29: Marina Lazure	
Image 30: Port of Kotor	
Image 31: TEN-T corridors of the Core network and their connections with European ports (ISL, Eurostat 2018).	
Image 32: Presentation of cargo flows by type through the Core Trans-European Transport Netork and European	
(ISL, 2016)	
Image 33: Mediterranean Corridor (East) and cargo flows by type	
Image 34: Corridor Orient (Middle East) – East Mediterranean and cargo flows by type	
Image 35: Rhine – Danube Corridor and cargo flows by type	101
Image 36: Indicative extension towards neighbouring countries – comprehensive network	102
Image 37: Potential for establishment of free zones in the Mediterranean	
Image 38: Infrastructural projects within the initiative "OBOR" – Source Merics, 2017	105
Image 39: Silk Road Economic Belt	
Image 40: Silk Water Ways	
Image 41: Express Land-Sea Express Route, Railway connecting the Port of Piraeus with Western Balkans and C	
Europe	
Image 42: Highway connecting ports of Northern Adriatic	
Image 43: Potentials of the ports that are NAPA members	
Image 44: Graphic presentation of maritime economy in the context of Blue Economy	
Image 45: Contribution of blue economy to GDP and employment in the EU blue economy sector (Source: Eu	
2016)	
Image 46: Share of blue economy in employment of local population and in the national gross added value - EU	
Image 47: A Typical Maritime Cluster	
Image 49: Various integrated cluster approaches: The Dutch Maritime Cluster	119 120
ILIQUE 33. VALIQUA INICULAICU GUAICI ADDIDAGIICA. THE DUICH MAININE GUAIEI	171

Abbreviations

AFS Anti Fouling System - The International Convention on the Control of Harmful Anti-fouling

Systems in Ships

AIIB Asian Infrastructure Investment Bank
AIS Automatic Identification System
AMMN Association of Marinas in Montenegro
ISA Insurance Supervision Agency
ABMN Accreditation Body of Montenegro
ENPA Environment and Nature Protection

GDP Gross Domestic Product
GNP Gross national Product
BOT Build – Operate – Transfer

GT Gross Tonnage
BV Bureau Veritas

CCTV Closed – Circuit Television

CETR Centre for Eco-Toxicological Research (MN abbreviation CETI)

CISE Common Information Sharing Environment

CLC International Convention on Civil Liability for Oil Pollution Damage

CME Clúster Marítimo Español

COLREG Convention on the International Regulations for Preventing Collisions at Sea

CPI Consumer Price Index

CRPIP Central Register of Payers and Insured Persons

CSC Convention for Safe Containers

CSN System for satellite detection of potential oil spills (CleanSeaNet)

DEG Deutsche Investitions und Entwicklungsgesellschaft – German fund for investment and

development

DWT Deadweight Tonnage

EBP Evidence – Based Practice – a stage in acquiring experience
EBRD European Bank for Reconstruction and Development

ECA Emission Control Area

ECDIS Electronic chart display and information system

EEDIThe Energy Efficiency Design IndexEFCAEuropean Fisheries Control AgencyEFSEEEuropean Fund for South East Europe

EGCS Exhaust gas cleaning system
EIB European Investment Bank

EMODnet The European Marine Observation and data network

EMSA European Maritime Safety Agency

EPZ Export processing zones

ESPO European Sea Ports Organisation

EU European Union

EUSAIR The EU strategy for the Adriatic and Ionian Region

FLAG Fisheries Local Action Group **FTA** Free trade agreement

FUND International Convention on the Establishment of an International Fund for Compensation for Oil

Pollution Damage

GGF Green for growth fund
GHG Greenhouse gas
GIA Global Industrial Alliance
GMN Global Marine Networks
GPS Global Positioning System

GVA Gross value added GVC Global value chain

HNS The International Convention on Liability and Compensation for Damage in Connection with the

Carriage of Hazardous and Noxious Substances by Sea

CSR Croatian Ship Register

IACS International Association of Classification Societies

IAP Ionian Adriatic pipeline

IALA The International Association of Marine Aids to Navigation and Lighthouse Authorities

ILO International Labour Organization
IMO International Maritime Organization

IMSO The International Mobile Satellite Organization

IMSAS IMO Member State Audit Scheme
IPA Instrument for Pre-Accession Assistance

IPARD Instrument for Pre-Accession in Rural Development IPCC Intergovernmental Panel on Climate Change

IDF Investment-Development Fund

ISPMN Indicative strategy paper for Montenegro

ISPS International Ship and Port Facility Security Code

ITS Information Technology System LSGU Local self-government unit

PCCZM Public Company for Coastal Zone Management

PPP Public-Private Partnership
STR Single Tax Return
CA Classification activity

LC, LDC Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter

LL International Convention on Load Lines

LOA Liquid natural gas
LOA Length over all
LPG Liquid petrol gas

LRIT The Long Range Identification and Tracking

MArED Modernizing and harmonizing maritime education in Montenegro and Albania

MARES European system for exchange of AIS data

MARPOL International conventions for prevention of pollution from ships

MATF Hong Kong Maritime and Aviation Training Fund

MCB Maritime cluster of Bulgaria

MCF - MD Singapore Maritime Cluster Fund - Manpower Development

MEEP Montenegrin Energy Efficiency Project

ME Ministry of Economy

MEPC Marine Environment Protection Committee

MF Ministry of Finance

IFI International financial institutions
MLC Maritime Labour Convention

MONSTAT Montenegrin Office for National Statistics
ILO International Labour Organization

MSDT Ministry of Sustainable Development and Tourism

MoU Memorandum of Understanding

MoE Ministry of Education

MARD Ministry of Agriculture and Rural Development
MTMA Ministry of Transport and Maritime Affairs

MSV Multipurpose Support Vessel

MI Ministry of Interior
MFA Ministry of Foreign Affairs
NAPA North Adriatic Ports Association

NBIMN National Bureau of Insurers of Montenegro
NSDS National Sustainable Development Strategy

NMSW National Maritime Single Window

NT Net ton

NGO Non-government organization
OBOR One Belt – One Road initiative

OECD Organization for Economic Co-operation and Development

RES Renewable Energy Sources
OOCL Orient overseas container line

OPRC International Convention on Oil Pollution Preparedness, Response and Cooperation

PARIS MoU The Paris Memorandum of Understanding on Port State Control from 1982 (Paris MoU)

PCS Port Community System
VAT Value Added Tax

MNCC Montenegrin Chamber of Commerce

MOC Maritime Operational Centre
SPSP Special Purpose Spatial Plan
PSV Platform supply vessel
SZP Spatial Zoning Plan
RMN Republic of Montenegro

REBIS The regional Balkans infrastructure study

REEEP Renewable Energy and Energy Efficiency Partnership

RINA Italian classification society
FIS Fishing Information System
Ro – Ro Roll on – Roll off ship

RS Russian maritime register of ships – classification society

USA United States of America

SAR Convention International Convention on Maritime Search and Rescue, 1979

SAT-AIS Satellite – Automatic Identification System

FDI Foreign Direct Investment

SEEMP Ship Energy Efficiency Management Plan SEETO South East Europe Transport Observatory

SEG SafeSeaNet Ecosystem GUI

SOLAS International Convention for the Safety of Life at Sea

SOx Sulphur Oxide

SPP Single Project Pipeline (priority infrastructural projects)

SSN Safe Sea Net

STCW International Convention on Standards of Training, Certification and Watchkeeping for Seafarers

STM Sea Traffic Management

SUA The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation

SWOT Strengths – Weaknesses – Opportunities – Threats Analysis

FZ Free zones

CC Council for Competitiveness

TANAP Trans - Anatolian Natural Gas Pipeline

TAP Trans - Adriatic Gas Pipeline

TENT Trans – European Transport Network

TEU Twenty foot equivalent unit
THETIS Inspection Data Base
TNG Liquidified Petroleum Gas
UfM Union for Mediterranean

UN United Nations

UNCITRAL United Nations Commission on International Trade Law
UNESCO United Nations Educational, Scientific and Cultural Organization

MSPMA Maritime Safety and Port Management Administration

USCG United States Coast Guard

VHF Very High Frequency – Range of frequencies used in the movable maritime service

VTMIS Vessel Traffic Monitoring Information System

VTS Vessel Traffic Services

WB EDIF Western Balkans Enterprise Development and Innovation Facility

WBC Western Balkan Countries

WBIF Western Balkans Investment Framework
WIF Western Investment Framework
UOM Union of Municipalities of Montenegro

IHSM Institute for Hydrometeorology and Seismology of Montenegro

SCOPE OF THE STRATEGY AND INTRODUCTORY NOTES

The Government Programme of Work for 2020 envisages that the Ministry of Transport and Maritime Affairs is to invest efforts into creating preconditions for strategic development of the maritime economy in Montenegro through development and implementation of the Strategy for Development of Maritime Economy for the period 2020-2030 with the relevant Action Plan. The aim of the Strategy is to recognize and precisely define directions of development in the sector of maritime economy in Montenegro. This is particularly important given the fact that no strategic document that would recognize and properly valorize development potentials of this sector of the economy has been developed so far.

By developing this Strategy, Montenegro aims to strengthen the role of the maritime economy in the country's development and to increase its competitiveness through clearly defined maritime policy and sustainable development initiatives. To make this more precise, the Strategy sets strategic goals and operational objectives alongside relevant performance indicators. It also includes the Action Plan that clearly defines: the activities whose implementation is to contribute to the achievement of strategic goals and operational objectives, the manner of reporting and evaluation as well as other issues important for further development of the maritime economy sector and valorization of the potentials in this field for the period 2020-2030.

In the process of developing this strategic document the Project Team followed the functional system of strategic planning. In Montenegro this system is based on the *Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents* that contains minimum quality criteria for each strategic document adotped by the Government of Montenegro. The goal of establishing the functional strategic planning system is to regulate horizontal and vertical relations between the existing strategic documents ensuring not only their higher quality, but also their efficient implementation, improvement of the inter-ministerial cooperation and establishment of a sustainable mechanism for monitoring their implementation. Strategy for Development of Maritime Economy sublimes the above goals in the following: in the process of its development the team took into account the strategic goals and commitments of Montenegro, but also the direct inputs and guidelines that the Project Team got from other ministries and the real sector.

Strategy for Development of Maritime Economy sumarizes the potentials of Blue Economy to contribute to the Montenegrin public and private sector. It contains four key parts that cover all aspects that stand in correlation with economic, social, infrastructural and regulatory framework in Montenegro.

METHODOLOGY

Strategy for Development of Maritime Economy is the strategic document that guides development, sets development priorities and specific strategic and operational goals, defining at the same time the activities whose implementation can be followed through clearly defined indicators. The strategy develops long-term public policies in the field of maritime economy and it is based on the clear understanding of the current state of affairs and principles of consistency, feasibility and harmonization with other existing documents. A particular focus is on it being attractive and understandable for the general public.

As it was already noted, the system of strategic planning in Montenegro is based on the *Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents* that sets the minimum quality criteria for each strategic document adopted by the Government of Montenegro, which is the case here. In that respect, the Project Team complied with the requirements of the law and the mandatory contents required for each strategic document elaborated in the Methodology for development of policies, development and monitoring of the implementation of strategic documents whose application is binding for all institutions participating in developing public policies and strategic documents. Starting from the above, the Project Team paid particular attention to respecting the principles set in advance, always ensuring that input data used to analyse the current state of affairs in the field of maritime economy is accurate.

While drafting this strategic document, the Project Team followed a holistic approach, which resulted in an integrated set of strategic goals and operational objectives. This approach is elaborated below:

Methodology related to quality of the process of development of the strategic document:

The quality of the process of development of the strategic document is ensured through the use of the broadly accepted methodological approach "Project Management and Quality Assurance PRINCE II" and it also includes a number of other specialized science-based methods and instruments that are widely applied in similar projects, including the best practices that ensure successful implementation of the defined goals.

Methodology for ensuring the quality of input data:

To ensure quality of the strategic document in terms of accuracy of input data, the Project Team paid particular attention to the question of how usable the available data is. The reason for this was the fact that the quality of this strategic document significantly depends on the preciseness of the input data, which was ensured by obtaining the data for the Strategy from official sources. In addition to this, in the process of consultations regarding each chapter of this document, the Ministry of Transport and Maritime Affairs conducted appropriate quality control which resulted in specific remarks and suggestions that in the end served as a verification of the validity and usability of the input data.

In addition to the above, the methodological approach used for collecting and proceesing relevant data included the following:

- Overview of available reference sources assumes an analysis of existing research papers, policies and other strategic documents that treat the field of maritime economy on international level;
- Quantitative analysis assumes quantification of the entire Montenegrin maritime sector including the sector of blue economy, which was decisive for setting measurable performance indicators without which it would be impossible to follow the level of achievement of the operational goals set in this strategic document;
- Implementing qualitative analysis assumes qualitative factors that impact competitiveness of
 the entire maritime economy and that are directly and indirectly related to all other economic
 activities related to ships, sea and coast (i.e. shipping, shipbuilding, port activities, activities of
 the ports for nautical tourism, maritime-agency activities, other port services, activities of
 maritime insurance, mariculture, exploration and exploitation of hydrocarbons, etc).

Methodology

- Methodological approach in setting strategic goals is based on the definition of a strategy stipulated in the law which reads as follows: "Strategy is a public policy document that sets strategic goals in an integrative manner, as well as operational objectives for achieving the strategic goals in one or several inter-related socio-economic fields." As a support in setting strategic goals we followed one of the latest models of strategic management "Pearce and Robinson (2000)". It is based on the top-down approach which assumes a clear definition of the vision of the situation in the field the development of which wants to be achieved through the implementation of public policies and activities defined in the strategic document.
- Methodological approach in the analysis of the state of affairs in maritime economy: We start from the principle that analysis of the state of affairs is the initial stage of the policy planning proces, whose key goal is to identify problems within a certain public policy that is to be in the scope of the strategic document. In conducting the analysis of the state of affairs, one should precisely identify the existing problems and their causes, envisage the challenges that might occur in implementing the strategic document and potential solutions applicable to the identified problems. In the analysis of the current state of affairs in the field of maritime economy we used the most frequently used tool SWOT analysis that includes analysis of strengths, weaknesses, opportunities and threats in this field.
- Methodology for including other sectors, economic operators, professional and economic associations and the non-government sector into the process of developing this strategic document: In the process of analysing the current state of affairs in the field, we identified all stakeholders directly or indirectly involved in the Montengrin maritime economy. In relation to this, the focus was on the sector of "blue economy" because there is a need to create synergies and development potentials. Efforts are being invested into achieving this through the formation of an integrated maritime cluster in Montenegro. Guided by this goal we identified all state bodies and institutions, economic operators (directly or indirectly included in maritime economy) professional and economic associations, the NGO sector etc.

Summing up the methodologies described above and taking into account how specific this field is, we can say that in the process of development of this strategic document we intentionally followed a holistic approach to Montenegrin maritime economy based on the Quintiple Helix Model that reflects all the important parameters that have to be in the basis of every development policy, strategy and activity in the modern economy. In that respect, the process of defining strategic goals included the following components: private sector, public sector, civil society, expert community and the environment.

The Quintiple Helix Model, where the fifth helix is the environment, implies that the future of every progressive economy has to be based on knowledge that is considered a driver of economic growth and productivity. This model grew into a specific analytical framework for modeling development strategies on the regional, national and international level. In defining development plans, all components of the quintiple helix presented below have to be taken into account.

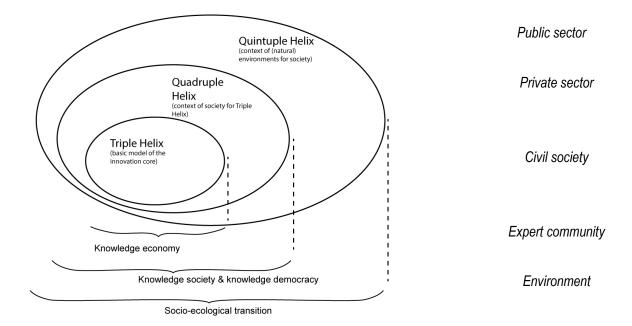


Image 1: Quintuple Helix Model

PART A: VISION AND PRINCIPLES OF THE STRATEGY FOR DEVELOPMENT OF MARITIME **ECONOMY**

A.1: Vision of the Strategy for Development of Maritime Economy

Montenegro by 2030 having restored its reputation of a traditional maritime country with a significantly strengthened competitive maritime economy whose development is based on the principles of sustainability. As such, the Montenegrin maritime economy, that includes all sub-sectors of blue economy, contributes to the overall economic development of Montenegro, having a higher share in the GDP structure.

Competitiveness of economic operators in the field of maritime economy has been significantly increased.

A large number of infrastrucural projects have been implemented according to the model of public-private partnerhsip, in line with the new legislative framework.

Port infrastructure projects have been implemented or are in progress. Their aim is to provide the basis for the Port of Bar to become a port of regional importance.

Port infrastructure built in the ports that are connected with the hinterland by a modern road and railways infrastructure contributes to the increase in economic activities and flows of goods, and in that also to competitiveness of ports. In such a way, Montenegrin ports, that have started using their geostrategic position in an adequate manner, are beccoming the generators of continuous and sustainable growth of the maritime economy.

Shipbuilding ports in Montenegro are recognized in the entire Mediterannean as the ports that primarily offer services of building and refurbishing yachts and mega-yachts at the highest world standards and make thus a high quality support to the growing nautical tourism.

Due to the cause and effect relation, the revenues from concession activities have increased, given the impact of the above parameters on the amount of the variable concession fee.

Capacities of the nautical tourism ports meet the market demand for accepting vessels. On the other side, the volume of maritime transport has been optimized in ports where that was required, primarily in the aim of protecton of cultural and historic heritage and the environment.

Through implementation of the measures related to the Register of Yachts and fiscal policy, the number of yacths entered into the Montenegrin register that use Montenegrin nautical tourism ports as their home ports has significantly increased.

The already recognizable ports for nautical tourims are becoming the centres for maritime operators that manage mega-yachts with all the ensuing multiplication effects.

Through a stimulative fiscal policy, and strengthening of the capacities of the flag state for implementing IMO and other instruments, the gross tonnage of Montenegrin merchant fleet significnatly increased, and Montenegrin shipowners and operators are becoming competitive in the international maritime market.

Montenegro is becoming a recognizable hub for maritime activities, and a significant number of specialized companies for third-party ship management are active in its territory.

National maritime cluster has been established. It connects all stakeholders in maritime economy in the context of blue economy, and in that way the influence of the profession on the developments that impact maritime economy is strengthened, and the professionals, i.e. human resources have gained a very important role in the entire process of improving maritime economy in Montenegro.

Implementation of precisely defined activities has led to improvements in the safety of maritime navigation and security of of ships and port facilities, since they constitute a precondition for development of maritime economy.

National Maritime Single Window - NMSW has been fully implemented.

Montenegrin maritime administration significantly strengthened its capacities, primarliy in the field of flag state control and port state control, and national legislation is fully aligned with the European Union acquis and other undertaken international obligations. Montenegro fully complies with the international obligations it has as a coastal state.

Labour law status and legal-administrative treatment of Montenegrin seafarers is fully regulated. In this strategic document they have been recognized as one of the most important resources of the maritime economy. Reform of the system of education and training of seafarers has ensured resources of even higher quality and thus Montenegirn seafarers have become more competitive in the international maritime market, with all the ensuing effects.

Raising awareness, ensuring stimulative fiscal policy and applying international and national legislation, Montenegro ensured that the growth of its maritime economy is fully based on the principles of "green economy".

A.2: Principles of the Strategy for Development of Maritime Economy

Strategy for Development of Maritime Economy reflects the long-term strategic goal of Montenegro that implies sustainable and inclusive economic growth which will contribute to the reduction of the development gap between Montenegro and EU average and to ensuring higher quality of life to all its citizens. In that respect, the process of developing the Strategy, approached from the perspective of «Blue Economy», did not include only the basic segments of maritime economy like shipping or services in maritime transport, shipbuilding, port infrastructure, port services and human resources, but all related activities as well. To be more specific, «Blue Economy» includes all economic activities related to the sea and coast and the sectors like fisheries, nautical tourism, exploration and production of hydrocarbons, as well as the emerging industries, like biotechnology of the sea. Blue Economy implies the use of sea resources for development of economic activities in a way acceptable for the environment, i.e. the marine ecosystem. Particular attention was dedicated to the activities aimed at strengthening administrative capacities in order to create preconditions for high quality achievement of the defined strategic goals and timely adoption of the appropriate remedial measures.

The principles followed in the process of drafting the Strategy for Development of Maritime Economy can be reduced to the following:

- principle of harmonization of the strategic directions with the priorities of the national planning and strategic documents establishing general development directions, and harmonization with the financial strategic documents and economic policy of Montenegro;
- principle of financial sustainability which implies that, in the process of planning activities aimed at implementing strategic goals, account was taken of economical spending and involvement of relevant state administration bodies in order to ensure appropriate conditions, resources and support for achieving desired results;
- principle of transparency which means that in drafting a strategic document the procedure of
 consultations with the bodies, organizations, associations and individuals was conducted in the
 initial drafting stage and that the public discussion about the text of the proposed strategic
 document was organized in line with the Government legislation regulating the procedure of
 public consultations in the process of drafting laws and strategies;
- principle of continuity, which means that monitoring of implementation and evaluation of effects
 of the strategic document are provided, with a view to ensuring the process of further planing of
 public policies;

principle of cost-effectiveness and economical planning, which means that in planning and drafting of this strategic document the account was taken of the level of human, organizational, financial and material resources available for implementation of such a strategic document, using in that all the existing capacities of state administration bodies in charge of the implementation of the strategic document.

PART B: ANALYSIS OF THE STATE OF AFFAIRS

B.1: Overview of the European Union Maritime Policy

B.1.1 Key Features and Trends in the European Maritime Sector

Europe is nowadays considered a centre of global maritime activities. 329 key sea ports along its coasline and comytolling around one third of the world's merchant fleet. Since almost 75% of the European foreign exchange is done by sea, the maritime sector, which is considered an accelerator of economic growth, significantly contributes to the development of the competitive and efficient transportation system in the EU. Today almost one third of exchange of goods within the EU is done by sea, while 400 million passengers embark and disembark in European ports. However, in spite of this, there are still numerous challenges that limit the potential of this sector and they are primarily related to poor connections and exchange of information, administrative burden and a weak integration with the overall transport network.

European maritime policy aims at improving competitivenes of European shipowners and operators in the international freight market, improving safety of maritime navigation and security of port facilities and ships, introducing innovations and information technology, as well as mitigating the impact of maritime transport on the environment, particularly in terms of limiting emission of harmful gasses from the ships. In this respect, the European Union has developed probably the most voluminous and the most efficient regulatory framework that tackles all aspects of maritime industry, above all safety, environment protection and the obligation to introduce innovations and new sophisticated information technologies into the maritime sector. Although the European approach to a large extent reflects international obligations of the Member States defined by the International Maritime Organization (IMO), it significantly contributes to a balanced implementation of legislation and to an overall upgrade in the operation and efficiency of maritime transport.

European Maritime Safety Agency (hereinafter referred to as: "EMSA") plays an important role in the overall implementation of the maritime policy providing the European Commission with technical, operational and expert support. Among other things, EMSA has the key role in providing specific technical solutions related to supervision and control of maritime transport. Thus EMSA directly cooperates with maritime administrations of the Member States and candidate countries, as well as with other European Union agnecies like Frontex and European Fisheries Control Agency (EFCA).



EU priorities and activities:

- Decarbonisation (Zero Waste Zero Emission, waste management in ports, reduction of the emissions of damaging gasses and the greenhouse effect)
- Digitalisation (automation; single window system, e-manifest)
- Investment (sustainability and competitiveness, state aid rules)
- Innovation (improvement of expert capacities, encouraging research)



Safety:

- SafeSeaNet
- Surveillance and control of maritime transport
- Emergency responses
- Quick identification of high-risk vessels
- Precautionary measures

The European Commission invests significant efforts to reduce the impact of maritime transport on the environment, supporting investment in new technologies in form of subsidies or tax facilities. The Commission also encourages the port sector to implement measures that can stimulate the use of environment-friendly, i.e. «green» vessels.



Reduction of environmental impact:

- Using clean fuels to reduce emissions of damaging gasses and the greenhouse effect
- Treating ship-generated waste and cargo residues in port reception facilities
- Recycling old ships with a view to protecting the environment



Simplifying administrative formalities

- Increase competitiveness
- Decrease costs
- Saving time

Source: Data and figures are taken from the European Commission website

https://ec.europa.eu/transport/modes/maritime/maritime-transport_en

In maritime transport there are complex administrative procedures to comply with. They are related to notifications of arrival and reception of ship and cargo and providing a number of information related to customs, tax, immigration, safety of maritime navigation, security of port facilities and ships, protection of the environment, health care etc. Due to these reasons, before a ship arrives into port, i.e. before it departs, relevant authority of each coastal state requires numerous documents and information regarding the above.

Being aware of the fact that it is necessary to ensure technical modernization and simplification of formalities in the process of notification of arrival and reception of ships, declaration of cargo and passengers, i.e. ensuring free transport in the ports of EU Member States, European Commission adopted the EU Directive 2010/65/EU¹

¹ In relation to the Regulation (EU) 2019/1239 of the European Parliament and the Council of 20 June 2019 Strategy for Development of Maritime Economy 2020-2030

introducing the obligation of implementing the system of the Maritime National Single Window (MNSW), which will be tackled below.

Starting from the fact that digitalization is of key importance for improving the integration of maritime transport into a multi-modal logistics chain, the European Commission is now working on the introduction of the **eManifest** system aimed at ensuring additional simplification and uniformity of customs formalities in the Member State ports. Harmonization of these administrative formalities will shorten the time ships spend in ports, reducing significantly their operational costs. The aim is to improve security and efficiency of maritime transport, and in that also the competitiveness of European ports.

B.1.2 European Union White Paper² 2011

Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system offers 40 specific initiatives for removing obstacles and bottlenecks in the fields related to transport infrastructure, investment, innovation and development of three particular segments of the internal transport market by 2050: long distances, medium distances and urban transport. Development of the Single European Transport Area requires connections between various modes of transport and therefore this document encourages diversification of passengers and goods mobility. This approach aims at achieving a lower degree of dependance of transport on the development of the oil industry, as well as the reduction of emmission of gasses and the greenhouse effect. White Paper perceives maritime transport as a single transport area free from any obstacles if used in its full capacity with clearly established surveillance and management systems. In addition to this, the White Paper envisages the establishment of a single set of rules according to which certain ships can be granted exemptions from the use of pilots in European ports. The White Paper also contains solutions aimed at increasing transparency of port financing and provision of port services, with a view to protecting competition.

The Report on implementation of the White Paper published in 2016 identifies the following European Commission priorities for the period 2014-2019:

- new boost for jobs, economic growth and investment;
- a fairer internal market with a strengthened industrial base;
- an efficient energy union with a forward looking climate change policy;
- a connected single digital market:
- balanced and more progressive trade policy.

It is obvious that the EU focuses on the socio-economic aspect of its policies, which is, of course, reflected in both the short-term and the long-term strategy of further development of the transport sector.

B.1.3. European Union Maritime Policy – priorities and initiatives

The European Union considers its maritime sector to be a catalyst for economic development and prosperity. Maritime transport ensures trade and contacts between all European countries by providing a continuous supply of energy, food and goods. The European Union policy in the field of maritime transport is based on Article 84 paragraph 2 of the Treaty of Rome from 1957, which is today the basis for the adoption of rules on a common European policy in maritime and air transport.

In relation to the external market, the European Union conducts a liberal maritime policy to ensure free access for its shipowners and operators to the maritime-transport services markets of third countries, while in relation to the internal market it establishes the rules removing obstacles on the path of development of a single market where the services of maritime transport will be provided free from any barriers. In addition to this, the European Union uses its policy to try to ensure free access to the shipping market based on the principles of healthy competition.

The European Commission improves competitiveness of the European maritime sector by introducing safety rules preventing sub-standard shipping, reducing the risk of serious maritime accidents and minimising the environmental impact of maritime transport. In addition to this, European policy improves competitiveness of its maritime sector by introducing new technologies and removing administrative barriers. The Comission also actively works on

-

² EU White Paper from 2011 - Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system

combating piracy and terrorism, while one important component of the European maritime policy is related to the social dimension of the maritime sector, i.e. the improvement of conditions for working and living on board the ships, health and safety at work and regulating the professional qualifications of seafarers. In addition to this, the European maritime policy aims at protecting the rights of citizens as users of maritime transport, above all the passengers' rights.

Strategic goals and recommendations of the European Commission had been set out in the EU's Maritime Transport Policy by 2018³. The report on the implementation of this document was published in September 2016 and it quantifies the achievements made by that time, identifying at the same time the areas that require further improvements⁴.

The report on the implementation of that strategic document focuses on five key areas:

(i) <u>Maritime safety and security with the following aspects:</u>

- EMSA got the mandate to assist countries candidates for membership in the European Union and to other neighbouring countries and to extend its scope of activities related to prevention of sea pollution from vessels to include also the installations for production of hydrocarbons;
- b. Improving harmonization between the flag states members of the EU in such a way as to ensure that they efficiently and consistently meet their obligations related to the flag state control, by introducing mandatory audit of the flag state for all EU Member States from 2009 (IMSAS Audit). The audit is implemented by IMO over all member states and one of its crucial matters is the strategy for further implementation of international standards of safety security and protection of the sea from the pollution from vessels;
- c. Port state control: Since 2009 the Commission has been providing technical support to the Member States in the implementation of a new approach to risk-based inspection of ships. EMSA provides all Member states (as well as Norway, Russia, Canada and Paris MoU members) with the technical support related to this inspection regime and management of the information system for identification of high-risk ships that contains data about conducted inspections THETIS;
- d. As for the responsibility of the coastal states, the European system for exchange of data important for maritime safety (SafeSeaNet) is nowadays fully operational and covers all European coastal waters. This system ensures early identification of ships and other high-risk vessels, undertaking prevention measures and better coordination in emergencies, including the operations of search and rescue at the sea. After the novelties were adopted in 2014-2015, the integrated information managerment system used by EMSA based on SafeSeaNet, LRIT, T-AIS, and SAT-AIS became fully operational, as well as CleanSEaNet that is also used by other European agencies;
- e. Application of the European Union guidelines on places of refuge for ships in need of assistance, i.e. providing for ships in emergencies;
- f. Investigations of maritime casulties and incidents: the focus is on ensuring proper application of European regulations and IMO Code on investigation of maritime casualties and incidents, according to which Member States are obliged to establish an independent investigative body for maritime casualties and incidents focusing on the implementation of safety-focused investigation and preventive action with the application of a clearly defined system of reporting to EMSA;
- g. As for safety of passenger ships, the focus was on improving efficiency and applicability of the existing European legislation. In relation to this, on 6 June 2016 the Commission adopted a number of measures to simplify and improve the application of common rules on safety of ships carrying passengers in EU waters.
- h. When it comes to liability and compensation for damages by shipping activities, in March 2016 the Commission published the Report on the application of EU Directive 2009/20/EC on the insurance of ship owners for maritime claims. The Report noted that significant progress was

-

³ European Commission, Brussels, 21 January 2009 (2009) - Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions

⁴ Strategic goals and recommendations for the EU Maritime transport policy by 2018, Brussels, 30 September 2016 – Final working document of the Commission on the implementation of the EU Maritime transport policy 2009-2018.

achieved in this respect. In the international context, since 2009 the Commission has been continuously promoting ratification and implementation of all IMO conventions that regulate issues of liability of shipowners and the system of damages related to shipping activities. In that respect significant progress was made as well, particularly after coming into effect of the Protocol from 2002 to the Athens Convention related to the Carriage of Passengers and their Luggage by Sea and Nairobi Wreck Removal Convention from 2007.

i. As regards security, in addition to SOLAS Chapter XI-2 and Part A, i.e. Ship and Port Facility Protection Security (ISPS) Code, a significant part of the recommendations given in the Part B of the Regulation of the European Parliament and the Council 725/2004 on enhancing ship and port facility security constitute an additional instrument aiming at harmonization in the implementation of these international regulations.

(ii) <u>Digitalisation and Administrative Simplification, with the following aspects:</u>

- a. Establishing true "European maritime transport space without barriers" by removing unnecessary administrative obstacles for maritime transport related to the internal European Union market;
- b. Additional enhancement of the SafeSeaNet system for data exchange with a view to achieving an enviable level of efficiency of maritime transport within the European Union;
- c. Full harmonization in the implementation of the National Maritime Single Window NMSW;
- d. Further simplification of customs formalities, i.e. full liberalisation from customs formalities for the goods transported between the ports of the EU Member States – this was initiated by the Blue Belt initiative from 2013;
- e. Further work on establishing framework rules for investing into the port sector and projects aimed at improving connections between the ports and hinterland valorising the European funds with a view to developing further the trans-European network and strengthening internal market;
- f. The initiative "Ports: drivers of development" underlines the need for additional measures to improve competitiveness and environmental performances of European ports;
- g. In the field of Trans-European Networks (TEN-T) the Commission appointed "European coordinators" to follow further implementation of activities and adoption of remedial measures aimed at improving the connectivity of European ports with the Trans-European Network corridors;
- h. Particular attention is attached to the research and innovation initiatives that provide a significant contribution to achieving a higher level of competitiveness of the European maritime industry and in essence determine its capacity to deal with the challenges related to the protection of the environment and the safety of maritime navigation.

(iii) <u>Sustainable development and de-carbonization of the maritime industry, with the following</u> aspects:

- a. Intensifying activities aimed at achieving better environmental performances of the maritime industry, i.e. achieving a long-term goal sublimed in the concept of "zero waste and zero emissions". In comparison to 2009 there is significant progress in this segment manifested in the adoption of the Regulation 2015/757 of the European Parliament and Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport that has been applied on all ships above 5,000 BT since 1 January 2018, regardless of their flag or European port that such ships are or might be located in:
- b. As for European regulations about port reception facilities for ship-generated waste and cargo residue, the Commission undertook a number of activities in their efforts to improve this segment of the European maritime Industry. The European Commission issued a number of guidelines aimed at improving the ship-generated waste manipulation in European ports and more efficient

- supervision of coastal states over the implementation of the MARPOL convention and other related regulations:
- c. Global shipowners mostly use heavy fuels with a high sulphur content (even up to 3.5%). New restrictions on sulphur emissions were adopted by the IMO in 2008, and their solutions were incorporated into the Directive 2012/33/EU of 21 November 2012 that defines the content of sulphur in marine fuels. Directive 2012/33/EU on amending the Directive 199/32/EU as regards the sulphur content in marine fuels was adopted to ensure alignment with international law (Annex to the VI MARPOL Convention) and implementation of new globally established standards of S02 emissions in the EU. This Directive sets the standards for the contents of sulphur in marine fuels and regulates stricter values. According to the provision of Article 4a, paragraph 1, Member states are obliged to take all necessary measures to ensure that as from 2020 marine fuels are not used in the areas of their territorial seas, exclusive economic zones and pollution control zones if the sulphur contents of those fuels exceeds 0.5%. Article 4 b) of the same Directive stipulates that the contents of sulphur in marine fuels used while calling EU ports may not exceed 0.10% of the total mass. To comply with these new limits, shipowners nd operators may use fuel with low sulphur concentration; install wet filters (seawater scrubber) or use alternative fuels.

(iv) <u>Improving labour-law status of seafarers and the system for their professional development and training:</u>

- a. European maritime policy recognizes that maintaining high qualification standards in the field of professional development and training of seafarers and improving conditions for working on board of ships under the flag of EU Member States is of key importance for achieving the desired level of maritime safety, ship security and protection of the environment, and in that also for achieving competitiveness of the European maritime sector. European Union policies focus, inter alia, on the continuous improvement of the labour-law status of seafarers and increasing the attractiveness of this occupation. Maritime Labour Convention of the International Labour Organization from 2006 (MLC, 2006) was incorporated into EU legislation after the agreement was achieved between social partners. Monitoring of the implementation of this key convention regulating labour law status of seafarers on the global level is ensured by clear mechanisms that make a constituent part of two European directives whose adoption was aimed at ensuring harmonization in the implementation of the convention provisions related to the flag state control, but also port state control within the PARIS-MoU:
- b. Since 2015 EU seafarers have been included into the scope of five EU Labour Directives. The goal is to improve additionally the conditions for working and living on board of a ship and to ensure equal legal and administrative treatment of seafarers in all EU Member States;
- c. As for the standards of training, amendments to the STCW Convention adopted in Manila have been incorporated into the European regulatory framework in the EU Directive 2012/35/EU of the European Parliament and of the Council amending Directive 2008/106/EU on the minimum level of training of seafarers. Directive 2008/106/EU also includes the common system for recognition of authorities on qualification of seafarers issued by non-member States. Decision on recognition by the EU of a third country, according to this Directive, is based on the assessment of the training system of such a third country and the system for issuing authorities to seafarers. The required control of alignment is conducted by EMSA;
- d. The European Union has about 220,000 seafarers today, who make up about 18% of the total number of seafarers globally. European policies also focus on the more flexible tax treatment of seafarers' salaries to ensure their competitiveness in the international maritime market. These measures also aim at encouraging European shipowners to hire European seafarers, particularly on the ferry lines that serve maritime transport of the European Union. In spite of the enlargement of the European fleet, the level of employment of seafarers on EU ships under the flags of EU Member States has not increased proportionally. The analysts think that these trends can be explained by technological progress and automation of ship systems because modern technologies require more complex and more advanced skills of maritime labour but also a smaller number of crew members.

(v) <u>Enhancing global competitiveness of the European maritime sector with the following</u> aspects:

- The maritime sector faces challenges of international trade, unfair competition, administrative barriers, state protectionism, sabotage and in some cases also restrictions related to maritime transport of empty containers;
- b. Bilateral and multilateral agreements on international maritime transport have proved to be particularly efficient in achieving global competitiveness of the European maritime sector. The existing bilateral dialogues and annual meetings with China, Japan, Norway, Brazil and the USA identified areas where cooperation could be enhanced and market conditions for the European maritime sector improved. An agreement on maritime transport between the EU and China is considered the example of "best practice" because it does not only provide a legal framework for actions of its signatories, but also offers a mechanism of regular dialogue and exchange of information. In this way, the agreement offers an official platform and mechanism for solving all restrictions and overcoming all barriers, creating thus the conditions for all shipping companies from the European Union;
- c. Free Trade Agreements (FTA) also constitute mechanisms that improve the functioning and profitability of international maritime transport. They provide legal certainty, predictability and clarity, while in the majority of cases they ensure clear solutions for access of third countries to the market.

For the European Union, which is still the most important exporter globally and the second largest importer, the maritime industry and all related activities connected to the sea are of essential importance for achieving global competitiveness of the European economy. In order to achieve that goal, always bearing in mind the context of sustainability, the European Union has to focus on coordination between several different sectors and fields, which is one of the principles that this strategic document is based on.

The analysed data show that the European maritime industry and its maritime centres lose dominance in relation to other world maritime centres. Relocation of shipping activities and further re-registration of ships from the flags of EU Member States to the flags of third countries (de-flagging) can in a mid-term have a negative impact on the economy and competitiveness of European Union.

Analysis of the European maritime policy in comparison to the policies of five international maritime centres indicates that there is a number of important deficiencies because the European Union currently offers less attractive or less consistent policies in certain segments. The European Union has to consider changes in its policy if it wants to retain its competitiveness as a centre of maritime activities.

The analysis included eight competitiveness factors, i.e.:

- i. taxation and other tax incentives.
- ii. regulatory, economic and political factors,
- iii. availability of professional services,
- iv. skills and competitiveness of maritime experts,
- v. flag attractiveness,
- vi. simple operations (no business barriers),
- vii. legislative framework,
- viii. availability of funds.

The deficiencies identified within the European Union that can constitute an opportunity for the Montenegrin maritime administration include:

Taxation and other tax incentives:

Simplicity of relocation of maritime activities in combination with aggressive tax incentives offered by other international maritime centres show that effective taxation on the level of shipping companies and shareholders is a precondition for retaining a significant market share in the international maritime market. Current regime that is facilitated by incentives in the policies of EU Member States, which in some countries include tonnage tax as an

alternative way to tax maritime activities, ensures a relatively competitive European maritime sector. It is clear that a regulatory framework that includes tax incentives aimed at improving competitiveness is necessary for maintaining equal conditions for shipping companies based in EU countries in comparison to global competition. But this does not mean that there is no room for further improvement of the European maritime policy, which would additionally boost competitiveness of European flags and Europe as a centre of maritime activities.

Regulatory, economic and political factors:

A significant deficiency has been identified in the implementation of policies and the regulatory framework of EU Member States. Although EU policies in their current form provide more than a solid regulatory framework, the freedom of Member States to align the framework to fit their specific needs is limited. There is a weakness manifested in the lack of flexibility in adoption and implementation of incentive measures, while maritime administrations that run other international maritime centres are frequently more pragmatic and profit oriented.

Accessibility of professional services:

There is a significant difference between the European Union and other maritime centres. In other maritime centres the key ambition is to support development of the connected maritime-professional services in order to develop and support the maritime cluster and its overall competitivenes. This trend is followed by the Singapoore Maritime Cluster Fund for Manpower Development and the Hong Kong Maritime and Aviation Training Fund (MATF). The European Union does not have any similar policies that would focus on the development of a strong maritime sector, which is the core of a successful maritime cluster, and where the priority is to strengthen the skills in all parts of the maritime industry – from the seafarers to sea managers and brokers. Cluster development strategies of the largest international maritime centres focus on the entire chain of related maritime services, while the European policy for cluster development (prepared in the context of Integrated European Maritime Policy) lacks a similar fundamental focus.

Skills and competitiveness of maritime experts (on the ship and on the land):

The analysis indicates that there are no significant deficiencies in the regulatory framework of the European Union in the field of subsidies for training of seafarers and in the field of exceptions for income tax and contributions for social insurance. Training for seafarers can be subsidized fully under certain conditions. In the European Union it is most frequently the subsidy that covers 50% of training costs, which is lower than in Singapore, where subsidies usually cover around 70 - 90% of the costs.

Attractiveness of the flag:

There are certain deficiencies in the European maritime policy that can have negative consequences on competitiveness, and in that also lead to relocation of maritime activities and de-flaging of ships to navigate under the flags of third countries outside of the European Union. These deficiencies can primarily be seen in the requirements for registration of ships related to the nationality of shipowners, and the restrictions related to nationality of the crew members and age of the ships that can qualify tor registration (the case of Greece). There are efforts to remove these deficiencies by offering special conveniences that European maritime countries offer to shipowners and operators (tonnage tax, more flexible regime to tax seafarers, releasing restrictions and requirements related to nationality of shipowners and the crew, etc.)

Simple operations (no barriers for business):

Continuous focus of the European maritime policy on the removal of administrative barriers in the maritime sector is considered to be very important. However, it was identified that the European Union does not perceive its maritime sector as part of the global maritime sector, and thus the policies of concern here could be additionally improved in that respect.

Accessibility of funds:

Private shipping companies manage about 70% of the European fleet that finances its investment projects through loans from commercial banks. Current regulatory framework is already restrictive, while proposals of Basel IV (and probably the mandatory implementation in the European Union) will make financing of shipping activities even more

difficult. Therefore, it can be concluded that it is possible that shipping companies who do not do business in the European Union might have more available sources of finance since they do not use traditional bank loans exclusively.

B.1.3.1 EU Integrated Maritime Policy

Integrated maritime policy is a coherent approach to all policies related to the sea and it implies an enhanced coordination between various and diverse sectors and fields like shipping, ports, environment, sea and offshore explorations, generating energy from the sources coming from the sea, shipbuilding and other connected activities in the maritime transport, maritime and coast tourism, fisheries and mariculture, employment, development of coastal areas, as well as foreign policy related to maritime sector.

Integrated maritime policy focuses on the issues that do not belong to one sectorial policy, e.g. "blue growth" (economic growth based on the synergy and coordination of various sectors and fields connected to the sea). As such, the EU Integrated maritime policy is a framework for valorisation of development potentials through harmonization of development policies of diverse and sometimes conflicting sectors that are related to the sea.

Key goals of the integrated maritime policy are summed up below:

- Achieving sustainability in exploiting the sea in order to ensure economic growth of coastal areas in segments of ship transport, sea ports, shipbuilding, ship refurbishments, environment, and management of living marine resources;
- Encouraging research and innovation and strengthening scientific capacities and knowledge;
- Improving quality of life in coastal areas;
- Improving the position and recognisability of the European Union in the global maritime industry, etc.

Integrated maritime policy should be an instrument for coordination of all existing policies given the mutual interconnections between various economic activities and human activities focused on the sea.

B.1.3.2 Motorways of the Sea

The concept of "Motorways of the Sea" aims at introducing new intermodal logistics chains which should in the end contribute to higher quality of transport and its more efficient organization. Intermodal logistics chains will be sustainable and will bring significant benefits not only in the transport-logistics chain, but also in commercial ones. Motorways of the Sea will improve access to markets around Europe and the world and at the same time bring relief to the European road network. For this purpose, fuller use will have to be made not only of the maritime transport resources, but also of the potentials of rail and road infrastructure, as well as inland waterways, as indispensible parts of the transport chain.

Four corridors were designated for setting up projects of European interest:

- Motorway of the Baltic Sea (linking the Baltic Sea Member States with the Member States in Central and Western Europe, including the route through the North Sea/Baltic Sea canal);
- Motorway of the Sea of Western Europe (leading from Portugal and Spain via the Atlantic Arc to the Norh Sea and the Irish Sea);
- Motorway of the Sea of South-East Europe (connecting the Adriatic Sea to the Ionian Sea and the Eastern Mediterranean, including Cyprus);
- Motorway of the sea of South-West Europe (western Mediterranean, connecting Spain, France, Italy and including Malta and linking with the Motorway of the Sea of South-East Europe and including links to the Black Sea).



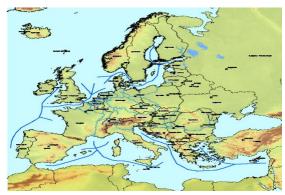


Image. 2: TEN-T corridors

Image: Motoways of the Sea

TEN-T⁵ Guidelines from 2013 (Regulation (EU) 1315/2013) redefine Motorways of the Sea as the maritime dimension of the trans-European transport network that will contribute towards the achievement of a European maritime transport space without barriers. Due to the importance of connection of Montenegro to the key network of European transport corridors, and in the context of the development of maritime industry, Chapter D – External Environment offers a detailed overview of these corridors and an indicative transport network that connect Montenegro with key European corridors.

B.1.4 Development of the basic regional transport network in South-East Europe (SEETO)

The aim of SEETO⁶ (South East European Transport Observatory) is to promote cooperation on the development of the main and anciliary infrastructure on the multimodal SEETO Comprehensive Network and to enhance local capacity for the implementation of investment programmes as well as data collection and analysis on the SEETO Comprehensive Network.

The main objectives of SEETO cooperation:

- Develop the SEETO Comprehensive network;
- Improve and harmonise regional transport policies and technical standards for the SEETO Comprehensive network;
- Maintain an effective coordination and communication network; and
- Integrate the SEETO Comprehensive Network in the framework of the wider Trans-European Network.

-

⁵ Trans-European Transport Network (TEN-T) was established to ensure a faster and simpler flow of goods and people among the EU Member States. The key goal of TEN-T is geographic and economic approximation of various parts of Europe through development of railways, roads, ports, airports and systems for managing transport, as well as the development of the lacking links on the transport network, removing bottle necks and eliminating technical barriers that exist between transport networks of EU Member States. All of this is aimed at strengthening social, economic and territorial cohesion of the Union and the establishment of a single European Transport Area. These goals will inter alia be implemented through the construction of new transport infrascuture, as well as modernization and upgrading of the existing transport infrastructure.

⁶ Memorandum on understanding for the development of a basic regional transport network in South-Eastern Europe (SEETO Memorandum) was signed in Luxembourg on 11 June 2004 by the governments of Montenegro, Croatia, Bosnia and Herzegovina, Macedonia, Albania, Serbia and Kosovo, as well as by the European Commission. According to the Memorandum, Montenegro participated in this format and is a full-fledged member. Thus, it participated actively in regional cooperation that was the basis of the policy of action of the European Union towards the Western Balkan countries in the field of transport. Further positioning of the Memorandum was made possible through the implementation of Protocol IV on land transport within the Stabilization and Association Agreement between the European Communities and their Member States on the one side and the Republic of Montenegro on the other.



Image 3: Road infrastructure within SEETO initiative

Image 4: Railway network within SEETO initiative





Image 5: Integration of SEETO and TEN-T projects

Image 6: SEETO comprehensive area

B.2: Overview of Montenegrin Strategies, Planning and Spatial Planning Documents

B.2.1 Programe of Economic Reforms for Montenegro 2019-2021

A strategic development goal of Montenegro defined in the Programme of Economic Reforms is sustainable and inclusive economic growth that will contribute to reducing the gap between Montenegro's development and the EU average, as well as to better quality of life of all its citizens.

To achieve the above strategic development goal, the Government of Montenegro will in the mid term combine two sets of economic policy measures. The first set of measures is related to the strengthening of macro-economic stability of the country, both fiscal and financial. The second group of economic policy measures is focused on the implementation of structural reforms, i.e. eliminating key obstacles for improving the country's competitiveness and increasing the potential economic growth in the medium and long term.

The Programme of Economic Reforms 2019-2021 defines the reform measures as the answer to the problems of competitiveness and growth, in line with the European Commission guidelines.

B.2.2 Tranport Development Strategy 2019–2035

Montenegrin Transport Development Strategy 2019-2035 identifies the state of affairs in the fields of transport, defines infrastructural, organizational and operational goals for transport system development that are to be implemented through short-term and long-term implementation plans.

The Transport Development Strategy defines five strategic goals:

- Economic Welfare,
- Accessibility, Performance of Operations and Quality of Services,
- Safety and Security,
- EU Integration, and
- Environmental Sustainability.

In the context of development of blue economy below is an overview of the specific objectives and measures focused on infrastructure, organization and operations.

Specific objectives and measures focused on infrastructure development

- 1. Complete all infrastructural projects included in SPP (Single Project Pipeline) renewal of the permanent line Bar-Bari-Bar;
- 2. Improve connections of the port of Bar increased cargo flows, improved competitiveness of the port, full valorisation of the port of Bar capacities:
 - Improving railway connections with the port of Bar and
 - Extending quays in the port of Bar;
- 3. Revitalization and/or reconstruction of the maritime transport infrastructure using the existing/abandoned transport infrastructure
- 4. Development of the port area in the port of Bar will include:
 - Increasing trans-shipment of general cargo and containers by receiving the status of a trans-shipment port
 - Extending the capacities for trans-shipment and storing dry bulk cargo in the North slopes of the hill Volujica and
 - Increasing trans-shipment of liquid and bulk cargo;
- 5. Strengthen the development of an efficient integrated transport system through inter-modality development of favourable conditions for intermodal and combined transport and logistics, attracting investment, reducing logistic costs:
 - Establishing intermodal stations in Podgorica and Bijelo Polje;

- 6. Applying ITS technologies in the sector of road, railway and maritime transport improved services for users and passengers:
 - Finalization of the activities on the implementation of the Vessel Traffic Monitoring and Information System (VTMIS).

The Strategy also recognized: the need to introduce new sources of financing and new companies to the market, dominantly through concessions; the need to achieve efficiency in operations, costs of maintenance and allocation of the budget with a view to promoting environmentally acceptable projects in the field of transport.

Establishment of an inland water way – Virpazar was also planned, as well as the improvement of connections of the Port of Bar, through better valorisation of port services and valorisation of the Port of Bar as the new destination for cruisers.

B.2.3 National Strategy for Sustainable Development by 2030

National Strategy for Sustainable Development by 2030 (NSSD) is a strategy for long-term development of Montenegro that defines solutions for sustainable management of national resources.

NSSD establishes principles, strategic goals and measures for achieving long-term sustainable development of the Montenegrin society, taking into account the current state of affairs and international commitments, primarily the UN Sustainable Development Agenda and the implementation of measures defined in the Action Plan for the period by 2030.

The Strategy promotes the need to integrate economic development, management of natural resources and their protection. Environmental, economic and social aspects of the development of Montenegro in the last decades show that there is a possible danger of qualitative and quantitative degradation of natural resourcess and lower availability of other resources (human resources, as a precondition for development, economic capital).

The Strategy defines management of coastal area resources, which are among the most valuable resources of Montenegro and which have huge potential for innovation and development.

The most important economic activities in the coastal area are in the fields of tourism, maritime industry, shipbuilding, fisheries and aquaculture.

The Strategy also indicates to negative effects: inadequate development of tourism and maritime economy, as well as exploitation of mineral raw materials (sand and stone), lower share of agriculture and fisheries, fast urbanization, unsatisfactory quality of the environment, harvesting of fish stocks, inadequate treatment of waste and waste waters on the land as well as pollution from vessels, inappropriate methods for management of solid and oily waste, ballast water in ports etc.

Lack of quantitative indicators to asses marginal bearing capacity of land and sea contributes to unsustainable management of the coastal area.

B.2.4 Strategy for Development of Tourism by 2020

The vision of the Tourism Strategy by 2020 is the achievement of the strategic tourism development goals through the development of the required tourism and anciliary infrastructure, in particular: improvement of accessibility of Montenegro, enhancement of utilities infrastructure, development of new high-quality accommodation capacities, increasing standards of existing accommodation capacities, improving quality of services in tourism, establishing a "clean image" of Montenegro, promoting regional cluster development, strengthening the institutional framework and including the local population in tourism.

The strategy particularly focuses on several tourism clusters with a view to establishing their larger scope, quality and variety. Within the coastal area there are clusters that differ between themselves with regards to features of nature and culture.

B.2.5 Montenegrin Fisheries Strategy 2015-2020

Montenegrin Fisheries Strategy provides guidelines for the development of Montenegrin fisheries in the context of the general commitment of Montenegro to implement the EU integration policy. Key goals of development in this sector are divided into short-term and long-term goals.

Short-term goals in the field of exploiting existing resources include: activating and modernizing the fleet, as well as establishing appropriate market outlets to secure the economic viability of this activity. The first step in that respect is ensuring coastal infrastructure (ports, landing places, storage capacities) and finding market outlets (connections with processing capacities or development of other market possibilities).

Development of the sustainable aquaculture sector (both fresh and marine water) shall continue through modernization of existing farms in order to increase production and strengthen competitiveness and efficiency of this sector, while respecting high environmental, animal health and welfare standards. In addition to the species presently farmed in Montenegro (sea bass, sea bream, trout, mussels, oysters), Montenegro sees the development of aquaculture in production of other species that have not been grown in Montenegrin farms, primarily in the segment of shellfish farming. In doing so priority will be given to growing indigenous species.

Investment in processing capacities, connecting primary production (caught and farmed) with processing capacities can secure development of higher value added products, as well as marketing of products intended for indirect export through the development of tourism and new targeted markets that Montenegro plans to define.

In terms of small pelagic fisheries and the purse seine fleet segment, the goal is to ensure activity of the current fleet, to modernize it and to increase its viability, while securing overall sustainable development of the sector. In terms of coastal gears, Montenegro intends to maintain the fleet capacity at the estimated number of 180 vessels. In bottom trawl fisheries Montenegro intends, during the pre-accession period, to ensure the replacement of engines (fuel) and modernization of vessels with the aim to increase the safety of vessels.

In addition to the creation of new sites, development of aquaculture is also seen in the opening of new locations as well as in the continued modernization and automatization of production in both the freshwater and marine environment.

Montenegro intends to modernize and develop its processing capacities by linking them with domestic farming and capture fisheries. It is foreseen that the process of linking of primary production and processing will continue through the creation of cooperatives in fisheries. Development of markets is seen in the branding of products and meeting certain standards.

B.2.6 Regional Development Strategy 2014-2020

Key goal of the Regional Development Strategy is an achievement of a more balanced socio-economic development of Montenegro by creating conditions for increasing competitiveness of all parts of the country and implementing their development potentials.

In the coastal region, key development challenges for local self-government units are related to the development of communal and new road infrastructure, development of tourism and valorisation of cultural and historic heritage. Priority areas for achieving the identified development goals in local self-government units of the coastal region include: accelerated development of tourism, development of coastal navigation, encouraging competitive entrepreneurship development, development of agriculture and processing of agricultural products, better valorisation of marine potentials, and development of the required institutional capacities.

In the field of transport the Strategy recognizes the following priority tasks:

- Upgrading road infrastructure,
- Creating conditions for improving maritime transport (development of coastal navigation projects and ports) and
- Upgrading air transport.

B.2.7 National Air Quality Management Strategy 2013-2020

National Air Quality Management Strategy focuses on timely response of authorities in case of violation of stipulated air quality standards. This strategic document envisages measures for protection and preservation of air quality and for prevention of deterioration of air quality through careful planning of sustainable development, particularly in the sectors that significantly contribute to pollution.

National Air Quality Management Strategy focuses on a timely response of authorities in case of violation of stipulated air quality standards. This strategic document envisages measures for protection and preservation of air

quality and for prevention of deterioration of air quality through careful planning of sustainable development, particularly in the sectors that significantly contribute to pollution.

The Strategy identifies the most significant pollution sources: transport, energy production, industry, agriculture and household heating and adopts special prevention measures. It is clear that sustainable development principles are necessary in all identified areas.

Action plan for the implementation of the Strategy envisages adoption of legislation on the manner of keeping the inventory of polluting matters and GHG, legislation on control of emission of volatile organic compounds that originate from storage and racking of fuels and use of paints and varnishes, as well as improvement of the information system to make the air quality data available in real time, which would ensure reporting in line with the requirements.

It should be noted here that the legal framework that Montenegro uses to regulate the protection of air from pollution is aligned with the EU aquis.

B.2.8 National Strategy for Integrated Coastal Zone Management 2015 – 2030

National Strategy for Integrated Coastal Zone Management 2015-2030 treats, inter alea, complex issues that require an integrated multi-sectorial approach and a coordinated harmonization of priorities. Municipal waste management and waste water management are also included in the Strategy because the overall spatial, economic and social development of the coastal zone depends on the success in dealing with them.

The National Strategy for Integrated Coastal Zone Management 2015-2030 identifies the following strategic goals:

- Efficient preservation of nature, landscape and cultural assets
- Spatial planning and sustainable spatial development
- Development of infrastructure for pollution prevention and remediation
- Improving the performance of the coastal zone economy
- Improving the coastal zone management system
- Strengthening of human resources and social cohesion

The Strategy focuses also on recognizing the need to protect marine ecosystems and on Blue growth.

B.2.9 Second National Biodiversity Strategy with Action Plan 2016-2020

The second National Biodiversity Strategy with Action plan 2016-2020 follows the strategic commitment of the state in terms of the need to preserve biodiversity expressed in current strategic documents. The Strategy also adopts a new conceptual approach based on the need to give a strong contribution to the development of key areas for implementation of the strategy such as education, communication, raising awareness in the field of biodiversity and a more efficient integration of biodiversity protection into other sectorial policies and activities.

This Strategy defines seven strategic goals:

- By 2020 biodiversity protection is in practice one of the several most important social and political priorities in the overall development;
- Biodiversity is protected by a multi-disciplinary and a multi-sectorial approach;
- Efficient mechanism for financing biodiversity has been designed, inter alia, as a transition to a sustainable biodiversity economy (as a part of green economy) by 2020;
- A significant reduction of identified direct pressures on biodiversity is registered by 2020;
- By 2020 preconditions have been created and targeted measures for biodiversity protection are implemented;
- By 2020 environmental infrastructure is designed and functions as the basis for preserving national biodiversity;
- Knowledge about biodiversity is improved and systematized and broadly and equally accessible through developed mechanisms.

B.2.10 Municipal Waste Water Management Plan 2016-2020

Municipal Waste Water Management Plan 2016-2020 is focused on providing the Consolidated Waste Water Management Plan for the entire territory of Montenegro (2018-2035) and will be the basis for the development of the Plan of Implementation of the Urban Waste Water Treatment Directive.

The Strategy contains all key aspects of a report that include: volume and current state of affairs of the infrastructure and services in the field of waste water; projections; and assessment of gaps in terms of the Urban Waste Water Treatment Directive. The Strategy presents and proposes measures for waste water management aimed at achieving alignment with the Directive. Cost assessment is done, financial analysis and analysis of affordability is prepared, as well as the conclusions of the analysis of legislation and institutions. Goals of the strategy are presented as general and specific. The general goal of the strategy is to ensure implementation of legislation in the field of environment, i.e. waste water management. The specific goal is to develop a consolidated waste water management master plan that would cover the entire territory of Montenegro and be based on the two existing Master plans and drafts of the specific plans for the implementation of the Urban Waste Water Treatment Directive.

B.2.11 National Climate Change Strategy 2015-2030

The Strategy is divided into ten chapters. It deals with the methodology for the development of scenarios for the projection of green house gasses emissions. The strategy analyses goals of EU policy, given the fact that Montenegro as a candidate country has to align its long-term goals in the field of climate change with the goals of the EU. Therefore the key documents that were discussed were the 2030 Climate and Energy Framework and the Roadmap for Moving to a Competitive Low-Carbon Economy in 2050.

The key message of this strategy is that the strategy cannot be implemented without the integration of its goals into important sectoral strategies and policies.

B.2.12 Special Purpose Coastal Zone Plan

Special Purpose Coastal Zone Plan (SPCZP) defines the organization and regimes of the use of territory of the coastal region, as well as the distribution of functions and zones for certain purposes in space. The belt between 100 and 1,000 m (except in the islands) is defined as the zone reserved for the development of tourism, respecting all protection regimes. The area beyond 1,000 m from the coast and settlements are not within the scope of the detailed elaboration in this plan. For that area the Plan provides development guidelines and rules that will be used in developing Zoning Plans for municipalities and the General Regulation Plan.

SPCZP recognizes tourism as the key driver for development of this region. The projects which are developing marinas for mega-yachts like the Port of Tivat – Porto Montenegro, and the tourism developments in the peninsula Luštica, Portonovi and others, create preconditions for shifting the current tourism product towards high-end tourism. However, development has to be based on the dispersion of economic activities that is, inter alia, achieved by the development of modern maritime economy. Maritime transport, ports, free zones and support to maritime engineering are significant in that orientation. Port of Bar and the shipyard port in Bijela create the basis for the development of this activity in the Mediretarranean zone.

The analysis of maritime economy indicates the existence of significant unused potentials. Above all there are problems with financing, obsolete technology, capacities that are not used, insufficient foreign and domestic investment, surplus of employees on one side and lack of qualified human resources on the other. According to the guidelines of SPCZP, the activities aimed at the rehabilitation and further development of the maritime sector include: liberalization of business, finalization of the legal framework, harmonization with international standards, improvement of data accessibility and reform of statistics. Particularly important is the fact that maritime affairs are capital intensive and that they require long-term development. Therefore, any lagging behind contemporary trends (obsolete equipment, great depreciation costs, idle ships etc.) inflict significant damage to the sector. On the other side, Montenegro is among the countries with the priviledge of sea access and given its size, the maritime sector can be a significant generator of development.

According to SPCZP, the maritime economy has not been sufficiently supported in the previous period and therefore its potentials are not adequatly used. The plan envisages activities aimed at the development of the maritime sector through liberalization of business operations, harmonization with international standards and foreign direct investment. The key for revitalization and development of the maritime economy in Montenegro is foreign direct

investment. Free zones (FZ), particularly the Free Zone of the Port of Bar have significant economic potential. Attracting foreign investment through free zones, that offer a number of advantages to the host country and foreign investors, is recognized as one of the priorities.

As for the nautical tourism facilities, SPCZP envisages that their construction will be possible in line with the following conditions: maritime conditions, spatial context in terms of purpose and terrain, environment protection and capacity of communal infrastructure (utilities). Locating nautical tourism facilities outside of settlements, and within separate tourism zones depends on maritime and weather factors, type, size and spatial organization of the tourist zone, seasonality etc. For each tourism zone that has access to the sea there is a possiblity of commercial berths, which means that on a lower level for each of the locations where tourism developments will be located a detailed study should be made to analyse natural preconditions, as well as an environment impact assessment study.

Number of berths of one or several mooring facilities near the tourism zone in the direct hinterland amounts up to at most 20% of the total number of accommodation units, but not more than 50 berths. Construction of nautic tourism ports should primarily be envisaged in clearly degraded parts of the coast, while in other parts larger changes of configuration should be prevented by filling and digging the coast.

Main directions of development of ports in Montenegro should be in line with the fact that modern ports are products of global containerization and intermodality; that ports became dynamic hubs of the "complex intrnational production/distribution network" and that port services with an increasingly high level of specialization are variable and integrated.

The Plan envisages the Port of Bar to be the main intermodal terminal in the coastal area of Montenegro, where truck terminals, Ro-Ro terminals, container terminals etc. are planned.

The Plan also envisages the construction of the International container terminal which is presented in graphic form in Images 8 and 9. Feasibility and features of the potential container terminal will be established in the forthcoming period, given the fact that this project should be additionally elaborated and adapted to real potentials of the Montenegrin maritime economy and the relevant market.

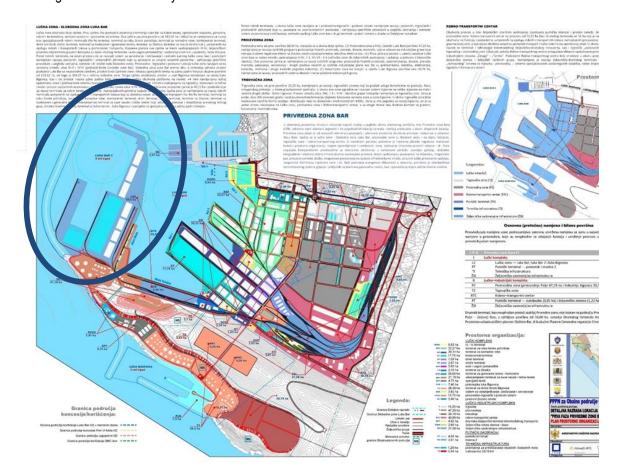


Image 7: Graphic presentation of the new container terminal in the Port of Bar





Image 8: Graphic presentation of the new continer terminal in the Port of Bar

Second stage of development of the Port of Bar should ensure additional 5 million tons of transhipment annually. In that way, the full capacities of the Port of Bar of 12 million tons established in the Spatial Plan of Montenegro would be used. Increasing the capacities of the Port is possible if a new port aquatorium is built and developed from the existing breakwaters to the top of the Volujica hill. It would consist of the following hydro-constructions:

- New jetty on top of the cape Volujica 1,665 m long with the allegation of the crown on +7mnv and the protecting jetty of 330 m in length;
- New quay with the operational coast of 1,500 m in length that is obtained through reconstruction and extension of the existing main jetty where six berths can be created. Four berths are 240 m long, while the bottom is on -14 m, one 220 m and one 260 m with the depth of the bottom of -16 mnv;
- Two new quays, 600 m long and 100 m wide where 14 berths in total are established with the depth of the bottom 14 mnv I 18 mnv;

Within the pool, the area for turning boats of the diameter of 500 m is to be established.

Depending on the transport-distribution requirements and economic possibilities, the centres for transport of goods can be developed in Zelenika and Lipci.

According to the Special Purposes Spatial Plan (SPSP) the Port of Bar is still being developed as the main international cargo port in Montenegro. Management activities should be focused on increasing the level of use of existing capacities, development of new capacities in line with realistic demands of the users of services and the upgrading of operations in line with relevant international standards.

Special Purposes Spatial Plan offers the guidelines for the basic network of marinas in Montenegro with about 2000 berths. Typology of marinas, as proposed below, primarily refers to their market orientation and the need to meet special specifications for each site. Proposed "VIP" and "Eco" marinas (as sub-categories of special marinas) should be subject to the same legal requirements as other marinas. Classification of marinas is done as follows:

- Two large service marinas of the capacity of 400-800 berths,
- Six standard marinas of the capacity of 100-300 berths and
- Four special marinas with a smaller number of berths.

In addition to these, berths are envisaged in the ports of Kotor, Budva, Zelenika and Herceg Novi. Each of them has parts intended for this kind of berths. According to Special Purposes Spatial Plan a marina, i.e. a nautical tourism port has to contain: an area for devices for lifting and lowering boats and yachts to and from water and land surfaces; area for storing boats and yacht on the land; devices and equipment for maintenance and servicing of boats and yachts. These conditions are decisive criteria for defining the concept of marinas in this planning document.

Before starting any intensive construction of nautical capacities certain systemic measures are to be undertaken on the state level, particularly when it comes to transport and utility infrastructure, insurance of ships and distribution of weather data.

In the process of drafting this strategic document, during the public consultations and debate, certain inconsistencies were noticed between the concerned spatial-planning documentation and the decision related to the ports, including, for example their classification. To be more specific, Special Purpose Coastal Zone Plan

(SPCZP) recognizes certain categories of nautical tourism ports, like service marinas, standard, VIP marinas, eco marinas etc., while in the Law on Ports and in the decisions adopted on the basis of that law that refer to defining ports according to their importance, purpose and type of maritime transport, this classification of the nautical tourism ports was not envisaged. Given the above, it is necessary to ensure the harmonization of terminology and concepts of concern in this field, so that in the legal order the uniform approach could contribute to avoiding any possible lack of clarity and different treatment of ports.

However, given the importance of the spatial-plan document like SPCZP, we hereby present an excerpt from that document which is relevant for strategic planning in the maritime economy sector.

Marinas – service marinas (400-800 berths): Marina Bar and Port of Tivat – Porto Montenegro; standard: Kobila

(up to 150 berths), Liman - Ulcinj (up to 300 berths), Bigova (up to 150 berths), Luštica (up to 150 berths), Kumbor (up to 250 berths), Bonići (up to 150 berths with restrictions related to the height of the mast of vessels) and **special**: Ada Bojana (up to 50 berths), Buljarica (up to 100 berths), Kotor (up to 150 berths), Risan (up to 150 berths).

Shipyards: Bijela and Bonići.

Piers: Pristan, Petrovac, Đenovići, Igalo, Kumbor, Muo, Perast, Opatovo,

Pine, airport Tivat (cove Kukuljina – water terminals in the function of

air transport), Prčanj, Dobrota, Solila, Dobra luka, etc.

Mooring facilities: Oblatno, Luštica bay, Njivice, Lazaret - Meljine, Zelenika, Glavati -

Prčanj, Bonići – Župa, Rose, island St Nikola, Perazića do, area from

Cape Derane to Port Milena, etc.

Acceptance of technical vessels: port-operational coasts of the ports of Bar, Zelenika and Lipci.

Anchorages – for larger and smaller vessels: Between the Port of Zelenika and the settlement Kumbor, as well

as in front of the cove Meljine, and in front of the Port in the cove of Kukuljina, in front of Risan, next to the St. Stasija church (Dobrota), near St. Matija church next to the port lights in the Port of Kotor, in front of the settlement Prčanj, near the cape of Trašte and in the Bigova cove, Kekavica cove, South-West from the church of St. Ilija, cove of Jaz under the North-East coast in the cove, East from the port of Budva, near the cape Zavala, near the island St. Nikola, North from the island Stari Ulcinj, next to the chapel on the cliff St. Neđelja, Port of Bar. Anchoring is prohibited in the sea area whose boundaries go along the link between the cape Volujica and cape Ratac and along the coast E from that link. West from that link anchoring is permitted. while in Ulcinj if the weather is fine and during tempest, ships can be anchored in front of the pier, and during tempests they can be anchored in the part of the coast between the cape of Mendra and the

cape of Đeran.

Lake transport: river Bojana, system of Porto Milena - canal (South from the salt pans)

> - river Bojana - Skadar Lake, which would activate and revitalize transport in the inland waterways. Waterway should be of appropriate water depth and it should be marked by stipulated signalization and

lighthouses. Key facilities of the lake transport are the existing piers: Plavnica, Rijeka Crnojevića, Virpazar, Lipovik.

Special Purposes Spatial Plan for the coastal area of Montenegro recognizes fisheries and mariculture as important economic activities with development potential. With a view to using the existing potentials in the future, the plan proposes enlargement of the fleet to the full fleet capacity of 223 vessels, out of which 85% would be the vessels below 10 meters in length. Segmentation of that fleet will depend on the available fish resources in the Adriatic sea and all kinds of fishing will be covered by the management plans. The plan also underlines the need to ensure logistics on the coast, which means establishing infrastructure for fisheries on the land, i.e. establishing the place of first landing, place of first sale, place for berthing fishing boats in ports and places for refurbishing fishing boats and the so called fishing huts.

Definition, construction and equipping of the fishing port in Ulcinj (Cape Đeran), Bar (AD Marina Bar) and Herceg Novi (optional: Škver, Meljine-Lazaret, Njivice, Zmijice etc.), with anciliary land infrastructure that includes managing the catch and supplying vessels with fuel, water, electricity, ice etc, and if possible places for taking vessels out of the water, refurbishment, storage and processing areas;

Ports that are declared to be of local importance (Port of Budva, Port of Tivat – Porto Montenegro, Port of Bonići, Port of Tivat – Kalimanj, Port of Zelenika and Port of Herceg Novi – city port Škver and Port of Risan) should designate berths for industrial fishing vessels as well as places for unloading of fish on the land.

Apart from the defined places within the ports declared to be of local and national importance, berths should be designated for a certain number of industrial fishing vessels within the following sites: Bigova; Zelenika, between the port of Zelenika and marina Zelenika; Kumbor, small mole-closed harbour below the school; Đenovići, Vojvodića wharf; Baošići, wharf of Fishing Cooperative; Bijela, wharf in front of the shipyard in Bijela.

Mariculture is artificial growing of shellfish and fish, which requires floating parks, i.e. cages. The Plan proposes the following sites as possible new zones for mariculture in Boka-Kotor Bay: South-West part of Ostrvo cvijeća (Island of Flowers), Rose and cape Mirište, and in the open sea there are: Cove Dobreč, Vučja vala, Zlatna luka, Drobni pijesak, Crni rt (Black cape), Cove Valdanos and the surroundings of the river Bojana delta. Potentially convenient area for growing sea organisms in an extensive or strictly controled semi-intensive way is the area of the Ucinj salt pans.

B.2.13 Energy Development Strategy by 2030

In the context of blue economy an important element is the field of oil and gas. Key recommnedations of the Strategy in the area of oil and gas sector include: explore wider opportunities for structural changes in the transport sector with a view to reducing specific consumption of fuel per service unit and possibilities to introduce renewable energy sources (biofuels and electricity from renewable energy sources); continue with intensive offshore research on the potential reserves of oil and gas in the Adriatic sea, and support the introduction of Liquified Petroleum Gas (LPG) as a replacement for oil derivatives and coal and for electricity in services (tourism) and households.

B.2.14 Smart Specialization Strategy

In its meeting of 20 June 2019 the Government accepted the proposal of the Ministry of Science and adopted the Smart Specialization Strategy 2019-2024. Smart specialization is the concept that ensures regional development based on innovation and sinergy of diversity. Key features of smart specialization include: stimulating innovations through entrepreneurship, modernization and adaptation; courage in adopting innovative solutions for public administration; strategic technological diversification in the areas of relative strengths and potentials; increasing diversification through promoting new links, synergy and spill-over effect (Phillip McCann (2012)). Smart Specialization Strategy (S3) is the key principle that brings together the business community, research and public institutions as well as citizens, with the primary goal being development and using innovation for boosting economic growth and competitiveness through the use of the existing base of knowledge and competences with a view to using market potentials and dealing with social challenges.

Montenegro is also included in the work of the S3 platform that provides information, research and professional advice to decision makers for establishing and implementing their smart specialization strategies.

Key goal of S3 is to increase the competitiveness of the Montenegrin economy, concentrating knowledge resources and linking them with the limited number of priorities. S3 will ensure the development of new sectorial areas or industries by investing in research and innovation in the fields that contain strategic potential in our state.

Identifying key priorities in S3 ensures the concentration of research capacities and infrastructure. That will be beneficial to both the public and private sector that will in that way gather the critical mass of researchers to work together on the research and development strategic topics with a view to achieving research excellence and commercialization.

This strategy will help Montenegro to encourage public and private investment in research, technological development and innovation.

B.2.15 Strategic plans for the development of local self-governments

Regional Development Law⁷ defines the duty to adopt strategic plans for the development of local self-government units. Such a plan is to be adopted for the period of seven years by local-self government bodies in each local selfgovernment unit. In line with the Regional Development Law, four coastal municipalities have the current strategic plan (Tivat, Ulcinj, Kotor and Bar), while remaining municipalities are in the initial stage of development of new strategic plans, to be in force after the current plans expire.

Strategic plan for development of the municipality of Ulcini for the period 2016-2020 defines the following priorities and measures:

- 1. Development and enhancement of tourism:
- 2. Sustainable development of the local economy;
- 3. Protection and preservation of the environment;
- 4. Municipal services to the citizens and the economy.

Strategic plan for the development of the municipality of Tivat for the period 2019-2022 defines the following strategic goals and priorities:

- 1. Upgrading the existing and construction of new transport infrastructure;
- 2. Creating favourable conditions for a high quality social life of citizens through the development of culture, improvement of health services and status of certain social groups;
- 3. Ensuring a continuous water-supply and improving communal infrastructure (utilities);
- 4. Improving the field of environment protection and increasing the level of energy efficiency.

Strategic plan for the development of the municipality of Kotor for the period 2020-2024 defines, inter alia, the Specific strategic goal: Development of infrastructure with the following priorities:

- 1. Developing road infrastructure (15 projects)
- 2. Improving water supply (10 projects)
- 3. Improving sewage system (9 projects)
- 4. Developing buildings for common utilities (16 projects)
- 5. Improving the electrical supply (16 projects)
- 6. Developing the Port of Kotor (8 projects)

Strategic plan for development of the municipality of Kotor notes that, given the need not to burden the occupancy additionally and not to jeopardize the aquatorium of the Boka-Kotor Bay, the municipality of Kotor has the possibility to develop marine and cruise tourism in the parts of the bay that are currently less occupied (around Orahovac, Stoliv...) and in the aquatorium of Risan Bay. Projects related to the Port of Kotor, contained in the Strategic development plan, correspond to the projects defined in the Business Plan of AD "Luka Kotor" for the period of 12 years that actually includes the concession period on the basis of the Priority Concession Agreement concluded between the Government of Montenegro and this company.

Strategic plan for the development of the municipality of Bar for the period 2020-2025 creates a favourable environment for future investment, as well as for the further development of infrastructure, strengthening the economy, tourism, and agriculture, and preserving the environment at the same time. The Plan is harmonized with the Regional Development Strategy 2020-2025 and the Regional Development Law. In addition to the framework

⁷ Regional Development Law (Official Gazette of Montenegro 20/2011, 26/2011-spr I 20/2015 and 47/2019)

budget for the implementation of the projects from the Strategic plan, the Strategic plan for development identifies potential partners that will support the implementation of the plan in financial and technical terms. In addition to the funds allocated in the budget of the Municipality of Bar, the focus will be on the possiblity to use state funds, EU funds and funds from other donors. As stated in the Strategic plan, the strategic priority in the field of transport and maritime affairs is to optimize the transport system in Bar to ensure better cooperation, coordination and consolidation of the flow of people, goods and services. Activities should be guided towards the implementation of transport flows with a view to achieving greater economic, spatial, technical-technological and environmental effects. The process of optimization of the transport system of Bar, with a view to ensuring overall economic development of Bar, requires an adequately designed approach to planning and implementing activities that will result in modern sustainable solutions.

In the process of development of the Draft Strategy for the Development of Maritime Economy, the municipality of Budva provided the drafters with the investment-technical documentation for the project "South Adriatic" – tourism settlement Jaz, Budva, developed in 1970 by the Republic Institute for Urban Planning and Design of the Socialist Republic of Montenegro.

At the time of development of that investment-technical documentation, construction of the tourism settlement Jaz was recognized as an "intervention of capital significance for the development of tourism industry in SR Montenegro". A part of that project also includes the construction of a marina in that location.

The estimated costs of works in 1970 amounted to 753,900.00 USD, out of which 584,500.00 USD for infrastructure and 169,400.00 USD for suprastructure.

This project contains significant potentials and as such it should be analysed and its feasibility and sustainability should be considered in the context of our time.

B.3: Analysis of legal and institutional framework

B.3.1 Institutional development of the maritime market – harmonization as a cost factor

Institutional development in the maritime industry is always the key factor for shipowners' short-term and long-term decisions related to their position in the maritime market.

The 74th sessions of the IMO Marine Environment Protection Committee (MEPC) that was held in the period 13 – 17 May 2019, rendered decisions about the following most important items of the agenda that already significantly influence the global maritime industry (i.e. all types and segments of ships):

- 1. GHG policy: Reduction of GHG emission from ships;
- 2. Policy related to damaging emissions from ships: implementing the 2020 global sulphur limit;
- 3. Policy for protection of sea water: Implementation of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (the Ballast Water Management Convention BWM Convention) from 2004.

B.3.2 Decisions related to GHG policy: reduction of GHG emission from ships

In its 72nd session the IMO Marine Environment Protection Committee (MEPC) adopted the initial strategy for the reduction of GHG emission from ships, defining the vision of reducing the GHG emission from international maritime transport and its implementation in stages. The vision confirms the dedication of the IMO to the reduction of GHG emissions from the international maritime sector and, most importantly, to its fast achievement.

Identifying the "ambition levels", the initial strategy for the first time envisages the reduction of the overall GHG emission in international maritime transport, which is to happen as soon as possible. The overall annual GHG emissions should be reduced to at least 50% by 2050 in comparison to 2008, while at the same time the efforts to eliminate them fully are to continue.

The strategy includes the specific reference to a "path towards the reduction of CO2 emissions in line with the goals of the Paris Agreement on temperature".

The initial strategy is a framework for the member states that defines the future vision of the international maritime sector, the level of ambition to reduce GHG emissions and the guiding principles. It includes short-term, mid-term

and long-term measures of the candidates with the possible deadlines and their impacts on the states. The Strategy also identifies barriers and support measures, including the construction of capacities, technical cooperation and research and development (R&D).

According to the "Roadmap" that the IMO member states approved in 2016, the initial strategy should be revised by 2023.

The Initial IMO Strategy⁸ on the reduction of GHG emissions from ships identifies the level of ambitions for international transport sector, emphasizing that technological innovation and the global introduction of alternative fuels and/or energy sources for international transport will be important for achieving the overall ambition. Reviews of the Strategy should take into account the updated emission estimates, options to reduce emissions for international transport and reports of the Intergovernmental Panel on Climate Change (IPCC). Goals that guide the Initial Strategy are as follows:

- Carbon intensity of ships to decline through implementation of further phases of the energy efficiency design index (EEDI) for new ships: to review, with the view to strengthening the energy efficiency design, the requirements for ships with the percentage improvement for each phase to be determined for each ship type, as appropriate;
- Carbon intensity of international shipping to decline: to reduce CO₂ emissions per transport, as an average
 across international shipping by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared
 to 2008: and
- GHG emissions from international shipping to decline: to reduce the total annual GHG emissions from
 international shipping as soon as possible by at least 50% by 2050 compared to 2008. According to the
 Paris Agreement the goal is absolute elimination of GHG.

B.3.3 Decisions on Energy Efficiency Requirements

MEPC adopted amendments to the MARPOL Annex VI related to the requirements of the energy efficiency design index (EEDI) for RO-RO cargo and RO-RO passenger ships.

Energy efficiency standards for new ships and operational energy efficiency measures for the existing ships became mandatory in 2013 when the relevant amendments to the MARPOL Annex VI came into force.

The Committee was informed that more than 2,700 new transatlantic ships were certified as having met the energy efficiency standards.

MEPC received a progress report from the correspondent group on the review of the energy efficiency index design (EEDI) outside of the stage 2 and re-established the group to continue its work.

⁸ In 2011 IMO became the first international body that adopted mandatory measures of energy efficiency for the entire industry sector with a set of technical and operational requirements for the new and existing vessels that came into force in 2013. By 2025 newly built ships will be 30% more energy efficient than those built in 2014.

The system of mandatory collection of data on fuel consumption on ships that came into force in March 2018 will ensure that there are data and information that could be used as a foundation on which future decisions on additional measures could be adopted. The system of mandatory collection of data is to be the first in a three-direction approach where the analysis of the collected data will provide the basis for an objective, transparent and inclusive policy debate in MEPC within the Roadmap (by 2023) for the development of the Comprehensive IMO Strategy for the reduction of GHG from ships. The agreement on the plan was achieved in 2016.

Project of Global Maritime Energy Efficiency Partnership (GloMEEP) aims at encouraging adoption and implementation of energy efficiency measures for navigation, which leads to a reduction of harmful emissions. Project was started in 2015 in cooperation with the Global Environmental Facility and the United Nations Development Program. "Global industry alliance to support low carbon shipping" (GIA) was started in 2017 under the auspices of GloMEEP. It identifies and develops solutions that can support overcoming obstacles for the application of energy efficiency technologies and operational measures in the shipbuilding sector. Website: http://glomeep.imo.org/

Global Maritime Technology Network (GMN) financed by the European Union, established a network of five Maritime Technology Cooperation Centres (MTCC) in Africa, Asia, the Caribbean, Latin America and the Pacific. Through cooperation and field activities on the regional level, MTCC will focus its efforts in 2018 and beyond to support countries in developing national policies and measures for energy efficiency, promote the use of low carbon emissions and operations in maritime transport and establish voluntary pilot data – systems for selection and reporting.

B.3.4 Mandatory system for collecting data on fuel consumption on ships

MARPOL amendments that introduced the obligation to have a system for collecting data⁹ about consumption of fuel on ships came into force on 1 March 2018. Collection of data became mandatory from 1 January 2019.

MEPC 74 was updated about the status in the process of development of IMO database on fuel consumption that started in March 2018.

Relevant issues related to the implementation of requirements were discussed. MEPC previously approved the format of sample for confirmation of alignment, early SEEMP II submission – the part related to fuel consumption on a ship and timely checking in line with the rule 5.4.5 MARPOL Annex VI. Confirmation of alignment should confirm that prepared methodology and the procedures on the basis of which the ship reports the data required in legislation are in alignment. The 74th session of the Committee adopted the amendments to Annexes I, II, V and VI of the MARPOL Convention. They are to come into force on 1 October 2020.

B.3.5 Implementation of sulphur limit by 2020 – Approved prohibition for non-compliant fuels

Since 1 January 2020 the content of sulphur in ship fuel has been limited to 0.50% (outside of certain areas for control of emission or ECA, where the limit is 0.10%).

MEPC adopted draft amendments to the MARPOL Annex VI, prohibiting transport of non-compliant fuel for the needs of combustion for driving or operations on the ship.

Ships equipped by the approved "equivalent arrangement" should be exceptions to meeting the sulphur limits – like the Exhaust Gas Cleaning System (EGCS) or the so called "Scrubber" – that are already allowed according to the provision 4.1 MARPOL Annex VI. These arrangements can be used with "heavy" fuel with high sulphur content because EGCS cleans the emissions and therefore can be accepted as a least efficient system in meeting the required sulphur limits. In addition to this, the ships that conduct research processes through technologies for the reduction of emission and control can be exempted in line with the Rule 3.2 of the MARPOL Annex VI.

Consistent implementation of the sulphur limit of 0.50% for all ships will ensure maintenance of equal conditions, which will result in the expected improvements of the environment and people's health. Sulphur oxides (SOx) are harmful for human health. They cause respiratory symptoms and lung diseases. In the atmosphere SOx can lead to acid rain, wich can harm crops, forests and species, contributing at the same time to ocean acidification.

Quality of fuel – best practices

In its 72nd session the MEPC Committee adopted the Guidelines on best practices ensuring quality of ship fuel. The best practices aim at providing support in ensuring quality of fuel delivered and used on ships, taking into account MARPOL requirements and safe and efficient work of ship engines.

Draft of best practices for fuel suppliers and best practice for Member States/maritime states is also being prepared.

_

⁹ Requirements for submitting data on fuel consumption are the latest mandatory requirements aimed at increasing energy efficiency in the international maritime sector.

Collection of data started on 1 January 2019 with the data submitted at the end of each calendar year. The data will be submitted to the International Maritime Organization (IMO), a UN agency responsible for regulating safety and security of shipping and the prevention of marine pollution and atmospheric pollution by ships.

The data collection system is aimed at submitting concrete data on fuel consumption to IMO. These data should help member states to adopt decisions on further measures needed for improving energy efficiency and eliminating GHG emissions from international maritime transport. Mandatory requirements were adopted by the IMO Marine Environment Protection Committee (MEPC) in 2016 through the amendments to Chapter 4 of Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL). According to the new Regulation 22A on collection and reporting on marine fuel oil consumption data, ships of 5,000 BT and above will have to collect consumption data for each type of fuel, as well as other, additional, specified data, including proxies for transport work. These ships are responsible for about 85% of CO2 emissions of the international maritime sector.

In addition to this, for the ships of 5,000 BT and above, the mandatory Ship Energy Efficiency Management Plan (SEEMP) has to contain a description of methodology to be used for the collection of data and processes to be used for reporting the data to the flag state. New system of mandatory collection of data is intended to have three steps where the analysis of the collected data will provide a basis for an objective, transparent and inclusive political debate in MEPC, within the Roadmap (by 2023) for development of the Comprehensive IMO Strategy for the reduction of GHG from ships. The plan was agreed in 2016.

B.3.6 Implementation of the BWM Convention

BWM convention came into force in September 2017. So far it has been ratified by 81 countries, which is close to 80.76% of the global tonnage.

In its 72nd session, the MEPC adopted amendments to this international instrument. They came into force on 13 October 2019.

The amendments are related to the implementation of contracts, including the schedule of ships that comply with the requirement to meet the so called D-1 standard (amendments in the part B). According to the resolution of the MEPC 287 (71) signatories of the BWM convention have already implemented the schedule for alignment described in the amendments after the BWM convention came into force.

Other amendments (in the parts A and D) make mandatory the compliance with the Rulebook on approving the system for ballast water management adopted in that session.

From the day of coming into force, the Convention requires shipowners to manage ballast waters in such a way as to avoid the transfer of potentially invasive water species. All ships have to have a plan for managing ballast water and keep records on the condition of ballast waters. Ships are obliged to manage ballast waters to meet the D-1 standard for exchange of ballast waters or D-2 standard, that sets the maximum limits for release of sustainable organisms, as well as of certain microbes that are harmful for human health.

Experience Building Phase

After the BWM convention came into force and after the first set of amendments was adopted, the focus is now increasingly on its effective implementation and application.

The Experience Building Phase (EBP), established in the Resolution MEPC.290 (71), will enable countries which have ports, flag states and other stakeholders, to collect, prepare and deliver data, the analysis of which will ensure a systematic overview based on the Convention requirements and the development of the package of amendments to the Convention, as needed.

B.3.7 Operational/financial impact of the regulatory framework

The institutional environment presented so far shows the agenda of the global maritime industry in the short-term and long-term period. To sum up, key direction of shipping companies is an unrealistic path towards compliance with rules and regulations that increase operational costs of those companies. Economies of scale are of utmost importance when it comes to reducing operational costs. In this institutional setting the control of costs and maximizing profit are also important because both factors can impact the sustainability of every shipping company, particularly those that cannot develop the economies of scale and certainly those that cannot maintain their running costs below average.

Adoption of BWM, implementation of the System for collection of data, reducing air pollution and using fuel with low sulphur are some of the fastest policies with a particularly negative financial impact that all shipping companies have to implement.

To conclude, the compliance of Montenegrin shipping companies to the above pieces of legislation will lead, i.e. is already leading, to a drastic increase in the running operational costs (about 1 million euro per ship), which certainly increases the decisive point of cost-effectiveness in the short run.

B.3.8 Legal aspects of maritime economy development

Maritime law is one of the branches of law that is subject to the strongest international unification, precisely because maritime navigation is inherently international. Without a minimum unification maritime transport would be almost impossible, particularly when it comes to international navigation where ships travel between ports of different states, i.e. different jurisdictions. Unification of maritime law is the product of work on unification of legal norms that already existed, either as national legal norms of certain maritime countries, or as a so-called maritime customs. In that respect it could be said that the goal of unification of maritime law is actually to achieve legal certainty, i.e. smooth maritime navigation. Many international treaties and conventions are adopted precisely due to this reason. The most important role in that field certainly belongs to UNCITRAL – UN Commission on International Trade Law, International Maritime Organization – IMO in the field of security of navigation, and International Labour Organization (ILO) in the field of labour-law status of seafarers.

Historically speaking, in the context of the existing legal and institutional framework in Montenegro, it is worth noting that the Constitution of the Socialist Federal Republic of Yugoslavia from 1963 envisaged adoption of the Maritime Code. At that time the idea to work further on individual laws was abandoned and in 1968 the Commission was established to work on the Maritime Code. In its first meeting this Commission proposed not to adopt the maritime code, but navigation code that would include maritime and inland navigation. That proposal was accepted in the Federal Parliament. Work of this Commission lasted for almost eight years and the piece of legislation they produced was finalized in 1977.

In the meantime new Constitution was adopted in Yugoslavia in 1974. It did not envisage the possibility of adoption of codified pieces of legislation in form of codes, so this comprehensive codification act for maritime and internal navigation law was adopted in 1977 under the name Law on Maritime and Inland Navigation (Official Gazette of the Socialist Federal Republic of Yugoslavia 22/77). It came into force on 1 January 1978. That law for the first time codified maritime law in one legal enactment in the state. But it also regulated for the first time ever the law of inland navigation.

This Law started from the concept of single regulation of maritime law and law of inland navigation but of course, that was not possible at all instances. Therefore certain legal institutes were regulated by separate provisions for maritime law and others for inland navigation.

In the period of SFRY the Law was subject to only one significant set of amendments in 1985. After Yugoslavia fell apart, new Law on Maritime and Inland Navigation¹⁰ was adopted in 1998 with minor changes in comparison with the Law from 1977. This legislation project is characterised by the fact that the law was prepared in the spirit of some international conventions that did not oblige the state at that time, and it was prepared because there was the need to unify maritime-law regulatory framework. Large part of this federal Law is still being used, which will be tackled below.

Montenegro adopted its republic Law on Maritime and Inland Navigation in 1978¹¹. It regulated a number of issues that were not regulated by federal law. This republic Law was innovated last time in 1991, but most of the provisions were repealed after the Law on Safety of Maritime Navigation¹² was adopted. That is why our legal order today has two laws with the same name.

After restoring its statehood Montenegro adopted the Law on the Sea, Law on Ports, Law on Yachts, Law on Prevention of Marine Pollution from Vessels, Law on the Safety of Maritime Navigation, Law on Safety Protection of Ships and Ports, and Law on the Manner of Registration of Ships, Floating Objects and Installations for Hydrocarbons Production and In Rem Rights over the Ships Installations for Hydrocarbons Production. As for other matters in the maritime-law field, the federal Law on Maritime and Inland Navigation from 1998 is still in force, as well as other pieces of legislation and secondary legislation originating from that Law.

It should be noted here that there are countries, like Montenegro, that gave up on the idea to have a code or a law that would codify maritime law. Those countries regulate maritime law matters in several separate laws. On the other side, there are countries that put several separate laws together in one piece of legislation, which is a Code. There is no need to analyse here the advantages and disadvantages of either of these approaches, because Montenegro already decided to regulate legal matters in this field in several pieces of legislation, some of which are already in force and implemented for more than a decade.

Therefore we are just offering a brief overview of the key national pieces of legislation regulating maritime law matters, with a glance on the issues that directly impact development of maritime economy in the context of blue economy.

B.3.8.1 Law on Ports

Law on Ports¹³ regulates the legal status, division of ports, management, fees, concessions, order, inspections and other issues that are of importance to ports in Montenegro. From the perspective of maritime economy development, it is important to note that, according to the current legislation,

¹⁰ Law on Maritime and Inland Navigation (Official Gazette of FRY 12/98, 44/99, 74/99 and 73/2000)

¹¹ Law on Maritime and Inland navigation (Official Gazette of State Union Serbia and Montenegro 19/78, 8/79 - corrigendum, 19/87, 29/89

⁻ other law, 39/89 - other law, 22/90, 13/91 and Official Gazette of the Republic of Montenegro 48/91 - other law, 17/92 - other law, 59/92

Decree on alignment of pecuniary sanctions, 4/93 - Decree on alignment of pecuniary sanctions, and 27/94 - other law and Official Gazette of Montenegro br. 51/2008 - other law, 40/2011 - other law and 62/2013 - other law)

¹² Law on Safety of Maritime Navigation (Official Gazette of Montenegro 62/2013, 6/2014 - corrigendum, 47/2015, 71/2017 and 34/2019)

¹³ Law on Ports (Official Gazette of Montenegro 51/2008, 40/2011 – other law, 27/2013 and 18/2019)

Ports of national importance are managed by the administration body responsible for ports (Maritime Safety and Port Management Administration). Ports of local importance are managed by a legal entity managing coastal zone in line with this law and the law regulating coastal zone management (Montenegrin Public company for coastal zone management). In the context of development projects related to port infrastructure and suprastructure that this document focuses on, the Law stipulates that the right of managing a port is acquired through concession. Law on Concessions is applied as a subsidiary piece of legislation in the process of granting concessions in this field. The object of concession granted in this way can be the use of the port or a part of the port, port infrastructure and suprastructure, provision of port services and performing other activities in the port related to such services in economic, transport or technological terms. Object of concession can also be construction, reconstruction and maintenance of port infrastructure and suprastructure according to the BOT system (build-operate-transfer), including also other forms of this system. Concession for using the port or a part of the port, port infrastructure and suprastructure is granted for the term of up to 30 years, while the concessions for provision of port services can be granted for the term of up to 10 years and exceptionally, where the concession for provision of port services includes investment required for performing such services, the concession may be granted for up to 30 years. The term of concession is as a rule determined depending on the object of concession, overall economic effects achieved by the concession, the amount, purpose and timing of the investment and the time needed for the return of the investment. According to this legislation, if concession for certain port cannot be granted, the Government may assess the public interest and on that basis establish one or several companies to provide port services. It is worth noting here that the Parliament of Montenegro adopted the Public-Private Partnership Act – a piece of legislation creating a new legal framework for the implementation of the public-private partnership projects. The umbrella law in this field, the Law on Participation of Private Sector in Providing Public Services (Official Gazette of the Republic of Montenegro 30/02), was thus repealed. Public-Private Partnership Act was published in the Official Gazette of Montenegro 73/2019 of 27 December 2019. It came into force on 4 January 2020 and its implementation will start six months after the date of coming into force. Since the adoption of this new legislative framework, new opportunities and models of implementation of the potential development projects related to port infrastructure are opening in the PPP field. Hence, the Ministry of Transport and Maritime Affairs started developing a new Law on Ports aiming at harmonizing this field with the new legislation and EU acquis as well as at creating conditions for investment in port infrastructure and activities and implementation of modern PPP models.

In addition to the fact that investment programmes in ports will now be implemented in line with a new legal framework and according to different models, it is important to underline that this strategic document recognizes the need to establish a centralized port management system for both national and local ports, regardless of the purpose of the ports or whether they are open for international transport. In that respect, one of the activities includes establishing a centralized port management system. This will be done through amendments of current legislation regulating the field of ports so that only one authority becomes responsible for implementation of development policy in this field. This approach is also used in the legislation of traditional maritime countries and it will ensure that all ports in the Montenegrin coast can develop with a clear strategy coordinated from one institution. It is expected that under such a management system the level of harmonization of the development policy and spatial planning policies will be raised to a higher level.

Adoption of the Law on Ports in 2008 (Official Gazette of Montenegro 51/2008) established the competence of a legal entity managing the coastal zone to manage ports of local importance. It also defined the procedure for granting concessions for the ports of local importance, which is to be initiated by the Legal Entity (in this particular case the Public Company for Coastal Zone Management of Montenegro). The object of concession is the use of the port or a part of the port, port infrastructure and suprastructure, provision of port services and performing other activities in the port that are related to such services in an economic, transport or technological respect.

However, in spite of this, the authority that is in charge of managing the ports of local importance – Public Company for Coastal Zone Management of Montenegro – did not grant any concession in the period of 12 years, either for using the ports or for providing port services and performing other activities in the port that are related to such services in an economic, transport or technological respect. It is therefore obvious that the system for managing ports of local importance, as defined in the law in 2008 and maintained in the innovated legislation, has not produced the expected results.

In addition to this, the practice has shown that the problems that occur in relation to unlawful berthing and anchoring of vessels in the aquatorium of the ports of local importance cannot be solved in the existing system for managing these ports, since the Public Company for Coastal Management Zone, although managing the ports of local importance, has no administrative authorities or any other authorities to perform inspection supervision in the ports of local importance. This could jeopardize even the safety of navigation.

It is therefore the official position of the Ministry of Sustainable Development and Tourism, as the line ministry for managing the coastal management zone, that the existing legislation has to be amended. The amended legislations should stipulate that the ports of local importance shall be managed by the same entity that manages the ports of national importance – the administration body responsible for ports (Maritime Safety and Port Management Administration).

B.3.8.2 Law on Safety of Maritime Navigation

Law on Safety of Maritime Navigation¹⁴ was adopted in 2013 to regulate in more detail the conditions for maritime structures, crew and vessels navigating in the internal marine waters and territorial sea of Montenegro in terms of safety of maritime navigation and other issues ensuring the safety of maritime navigation.

When this law came into force certain provisions of the federal Law on Maritime and Inland Navigation were repealled.

The process of drafting the Law on Safety of Maritime Navigation can be described as a very ambitious and demanding legislative project worked on for more than two years. In practice this Law proved to be very applicable and it went through the process of alignment with internationally undertaken commitments and needs of navigation several times.

In July 2020 the Parliament of Montenegro adopted the Law on Amendments to the Law on Safety of Maritime Navigation in order to ensure further alignment with the IMO conventions that Montenegro is obliged to transpose into its national legislation. Since Montenegro, as a signatory to the Agreement on the Paris Memorandum of Understanding, has the obligation to ensure full implementation of the provisions defining inspection supervision, the amendments to this Law regulate these issues too. This means that some of important preconditions for full-fledged membership in the Paris Memorandum of Understanding on Port State Control or on State Control in Ports from 1982 (Paris MoU) are met.

In addition to this, to take into account the increased interest of domestic and foreign investors to invest in internal maritime transport, the Amendments to the Law on Safety of Maritime Navigation regulated the issues related to activities of regular lines for passenges and goods in the internal maritime transport. Thus preconditions are created for the implementation of the key operational goal defined in this stretegic document.

B.3.8.3 Law on the Sea

Law on the Sea¹⁵ regulates the maritime and undersea territory of Montenegro: internal maritime waters, territorial sea, exclusive economic zone, continental shelf, ban on entering ports, stopping and pursuing vessels. The Law on the Sea contains provisions about internal navigation. The Law was adopted in 2007 and when it came into force the provisions of the Law on Coastal Sea and Continental Shelf of the Socialist Federal Republic of Yugoslavia (Official Gazette of SFRY 49/87 and 57/89) and provisions of Articles 38, 39 and 40 of the Law on Maritime and Inland Navigation (Official Gaette of Federal Republic of Yugoslavia 12/98, 44/99, 74/99 and 73/00) were repealed.

This Law includes provisions of the key international convention in the maritime public law, i.e. the UN Convention on the law of the Sea adopted in 1982. This Convention was signed in 1982 and it came into force in 1994, i.e. one year after it was ratified and/or acceeded by 60 countries. As such this Convention is a document of exceptional legal, political and economic importance that regulates in a comprehensive manner all modes of using and exploiting the sea, as well as modes of protecting, preserving and improving the quality of the sea, sea bed and offshore and ensures the establishment of a global legal order in this field. Former Yugoslavia ratified the UN Convention in 1986, and by this Law Montenegro transposed it in its legislation. One of important international conventions that is implemented through the Law on the Sea is the Convention on the Protection of the Mediterranean Sea against Pollution (Barcelona Convention).

-

¹⁴ Law on Safety of Maritime Navigation (Official Gazette of Montenegro. 62/2013, 6/2014 - corrigendum, 47/2015, 71/2017 and 34/2019 - other law)

¹⁵ Law on the Sea (Official Gazette of Montenegro 17/2007, 6/2008 – corrigendum and 40/2011 - other law)

B.3.8.4 Law on Yachts

Law on Yachts¹⁶ regulates flagging, identification and registration of yachts, manner of entering, staying and leaving of yachts, as well as rights and obligations related to chartering. On the day of commencement of implementation of this law the provisions of the Federal Law on Maritime and Inland Navigation (Official Gazette of FRY 12098, 44/99, 74/99 and 73/00) that refer to yachts were repealed. Repealed were also pieces of secondary legislation that used to govern conditions for entry and stay of foreign yachts and foreign boats for leasure or sport in the coastal sea, rivers and lakes of FRY and other pieces of legislation that refer to yachts. This Law was addopted in 2007 since Montenegro decided to create conditions for the development of nautical tourism. It is worth noting that the Register of Yachts was formed on the basis of this Law, i.e. a Division for Register of Yachts was established within the Maritime Safety and Port Management Administration. It is most frequently the yachts for private use with the registered length of up to 24 meters that are entered in the Register of Yachts. The Register of Yachts of Montenegro is considered an open register from the perspective of nationality of the owner of the yacht that is to be entered in the register. However, in spite of that it can be noted that so far no comprehensive analysis has been done that could show comparative advantages and development directions of the Montenegrin Register of Yachts. but also the barriers that should be removed to increase the number of yachts in the Register, which would justify the adoption of a separate piece of legislation to regulate this field. It is also worth noting that, in spite of the expansion of nautical tourism in Montenegro, and particularly after implementation of infrastructural projects for acceptance of yachts, not much has been done to promote the Montenegrin flag and simplify the procedures for entering yachts in the Register, like introducing modern information technologies as other registers have done. This strategic document recognizes the activities that should be undertaken to improve the competitiveness of the Montenegrin flag in comparison to all other third country flags, i.e. flags of countries that are not EU members. This should lead to an increase (to the extent possible) in the number of registered yachts that would have their homeport in Montenegro. It would certainly have significant multiplication effects on the Montenegrin economy. One of the activities envisaged in this strategic document is related to the establishment of a multi-sectorial working body in charge of monitoring the development of nautical tourism. This body will timely indicate to the measures that are to be undertaken to ensure continuous monitoring, but also upgrading of nautical tourism in Montenegro. A stimulating tax policy that will be implemented through the activities envisaged in this strategic document aims at increasing the number of yachts entered in Montenegrin register. These activities aim also at attracting economic entities that manage mega yachts commercially to relocate their activities to Montenegro. Such a development would lead to generation of new jobs and strengthening competitiveness of Montenegro as a nautical destination.

B.3.8.5 Law on Prevention of Marine Pollution from Vessels

Law on Prevention of Marine Pollution from Vessels¹⁷ defines the manner of protection of the sea from pollution from vessels that navigate or are located in internal sea waters and territorial sea of Montenegro, and the reception and handling of waste in ports, as well as the liability and compensation of damage in case of pollution. This law incorporates into Montenengrin legislation the obligations that Montenegro undertook based on international legislation and some EU pieces of legislation. These include: International Conveniton on Prevention of Pollution from Ships (MARPOL 73/78), International Convention on the Control of Harmful Anti-fouling Systems in Ships (AFS 2001 Convention), International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004, International Convention on Civil Liability for Bunker Oil Pollution Damage (BUNKERS 2001), International Convention on Civil Liability for Oil Pollution Damage (CLC 1969, Protocol 1992), International Convention on Establishment of an International Fund for Compensation of Oil Pollution Damage (FUND 1971 -Protocol 1992, Convention on Liability and Compensation for Damage in Connection with the Crriage of Hazardous and Noxious Substances by Sea (HNS 1996), Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matter (LDC 1972 - Protocol 1996), International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC 1990), International Convention for the Safety of Life at Sea (SOLAS 1974), Convention for the Protection of the Mediterannean Sea Against Pollution (Barcelona Convention 1995), EU Directive establishing a Community vessel traffic monitoring and information system (2002/59/EC), EU Directive on port reception facilities for ship-generated waste and cargo residues (2000/59/EC), MEPC Resolution 2(VI) - that contains recommendations on international effluent standards and guidelines for performance tests for sewage treatment plants etc. As for protection from marine pollution, this strategic document envisages a number of

_

¹⁶ Law on Yachts (Official Gazette of the Republic of Montenegro 46/2007, Official Gazette of Montenegro 73/2010 - other law, 40/2011 - other law, 42/2015 and 16/2016)

¹⁷ Law on Prevention of Pollution from Vessels (Official Gazette of Montenegro, 020/11 of 15 April 2011, 026/11 of 30 May 2011, 027/14 of 30 June 2014)

activities aimed at improving manipulation of ship-generated waste and cargo residues in Montenegrin ports and a more efficient supervision of administration over the implementation of the MARPOL Convention and other related regulations. In addition to this, the activities envisaged in this document imply incentives for development of new technologies and improving knowledge, rules and regulations with a view to preventing marine pollution that can be caused by shipping and port activities, operations of exploration and exploitation of hydrocarbons, and laying of underwater pipelines, cables and other installations. Procurement of equipment for rehabilitation of the consequences of marine pollution from vessels and other structures is also envisaged, as well as the procurement of a special ship for rehabilitating this type of marine polution.

B.3.8.6 Law on Maritime and Inland Navigation from 1998

The Law on Maritime and Inland Navigation 18 is a voluminous and complex piece of legislation harmonized with international legislation in this field in force at the time of adoption and amendments of the Law. The Law was adopted on 22 April 1977 (Official Gazette of SFRY 22/77) and it came into force on 1 January 1978. Maritime law was codified for the first time in former Yugoslavia in one piece of legislation and for the first time ever the law of inland navigation was regulated. This law was drafted in the spirit of some conventions that did not bind Yugoslavia at that time nor Montenegro today and it is still considered to be the highest quality national source of law in the maritime law matter. After Yugoslavia fell apart, in 1998 the new Law on Maritime and Inland Navigation was adopted with minor amendments in comparison to the Law from 1977. The changes were made only in the field of safety of navigation because certain changes that were adopted on the international level in the meantime had to be taken into account. Initially this law regulated property relations related to ships, as well as the role, rights and duties of shipowners, contract relations in maritime navigation, safety of maritime navigation, waterways, flagging, identification and registration of ships, navigation casualties, procedure of enforcement and securing of claims on ships, applicable law and jurisdiction of national courts for disputes with international features. Thus, this is a piece of legislation of substantive and procedural nature that is applied in civil procedures, enforcement procedures and non-contentious procedures. The Law on Maritime and Inland Navigation has 11 parts that are divided to a large number of chapters containing more than 1000 Articles. This shows how complex and voluminos is the matter that this law regulates. Since Montenegro decided to regulate maritime law matters in several laws, adoption of such laws gradually led to the derogation of the provisions of this Law, but it is still being applied particularly in relation to contract relations in maritime navigation, enforcement procedure and securing of claims on ships, applicable law and jurisditions of national courts for disputes with international characteristics, etc. It should be noted here that the European Commission Report for 2019 concludes that the law on inland navigation is not aligned with EU law. Therefore the activities envisaged in this strategic document will aim at higher quality regulation of this legal matter.

B.3.8.7 Law on Security Protection of Ships and Ports

Law on Security Protection of Ships and Ports¹⁹ defines the manner of security protection of ships and ports for mooring and anchoring of ships, procedures in case of events that jeopardize or could jeopardize security of ship and port and other matters of importance for security protection of ships and ports. On the day of coming of this Law into effect the Decree on Security Protection of Merchant Ships and Ports Open for International Transport in the State Union Serbia and Montenegro (Official Gazette of Serbia and Montenegroj 32/04) was repealed. This Law was adopted in 2015 and its primary aim was to align national legislation with the binding requirements of the Part A – ISPS Rulebook on Security Protection of Ships and Port Facilities and a large part of recommendations given in Part B in the same way in which it is regulated in all traditionally maritime countries.

One of activities for achieving the strategic, i.e. operational goals defined in this strategic document refers precisely to the consistent implementation of this legislation in all Montenegrin ports that it applies to.

B.3.8.8 Law on the Manner of Registration of Ships, Floating Objects and Installations for Hydrocarbons Production and In Rem Rights over Ships and Installations for Production of Hydrocarbons

This Law²⁰ came into force in 2019. It regulates the manner and procedure for registration of ships, floating objects and installations for production of hydrocarbons and in rem rights on ships and installations for production of

¹⁸ Official Gazette of FRY 12/98, 44/99, 74/99 and 73/2000

¹⁹ Law on Safety Protection of Ships and Ports (Official Gazette of the Republic of Montenegro 53/2016)

²⁰ The Law was published in the Official Gazette of Montenegro 34/2019.

hydrocarbons, as well as other issues of importance for registration. The Law starts from the principles contained in the Convention on the Law of the Sea from 1982 related to establishing the »genuine link« between the ship and flag state. According to that Convention every state has the right to define requirements for granting the state flag to ships and to stipualte in national legislation what constitutes the genuine link between the ship and the flag state. On the day when this Law came into force Articles 209 to 416 of the Law on Maritime and Inland Navigation (Official Gazette of FRY 12/98, 44/99, 74/99 and 73/00) and Articles 80, 81 and 82 of the Law on Safety of Maritime Navigation (Official Gazette of Montenegro 62/2013, 6/2014 - corrigendum, 47/2015, 71/2017 and 34/2019 - new law) were repealed. They used to regulate the matter of entering ships into appropriate registers. The Law was prepared in the spirit of the International Convention on Maritime Liens and Mortgages from 1993, although Montenegro has not acceded to this Convention yet. The Convention is an international instrument that some EU Member States acceded to. On the other side, many countries, like the Republic of Coratia for example, did not accede this Convention, but in their national legislation they took over all the important solutions and provisions of the Convention. The example of the Republic of Serbia is interesting. As one of the last countries that acceeded the Convention, Serbia regulated its national legislation in the spirit of the Convention regulating all property rights on the ship and keeping its right to define the conditions for flagging. The Law still retains the institute of mandatory registration of a ship that is fully owned by a legal entity with the registered office in Montenegro or by a citizen of Montenegro with a permanent residence in Montenegro. Instead of the obsolete term »lien law« that was used for maritime mortgages in the federal Law on Maritime and Inland Navigation and remained unclear to both banks and maritime law entities, this Law introduces a clear term »maritime mortgage or mortgage on a ship«. This issue has become particularly important because the latest Law on Property Relations of Montenegro allows regulation of mortgages on ships and aircrafts by a separate law. Mortgage on a ship, as defined in this law is actually Ship's Mortgage or Mortgage on a Ship. That is the institute that is manifested in relation to movable things in common law and USA law, with certain variations. Since it is the institue of one of the forms of lien on the ship i.e. the institute from the countries that do not have the institute of mortgage in terms of civil law, in practice the banks earlier had lost interest for borrowing to ships under the Montenegrin flag. This certainly created preconditions for strengthening the competitiveness of our flag. The Law does not envisage any establishment of an international registry of ships for those ships that enjoy certain privileges in terms of taxes for shipping activities (tonnage tax), nationality of the crew, etc.²¹, or stronger liberalization of requirements for being granted the Montenegrin flag related to the nationality of shipowners, which could certainly contribute to the development of the national fleet. This strategic document therefore envisages a number of activities aimed at increasing the gross tonnage of the Montenegrin merchant navy. In the years to come amendments to this Law are expected.

B.3.8.9 Law on Coastal Zone

Law on Coastal Zone²² governs coastal zone management, its use, upgrading and protection. Coastal zone, in terms of this law, is the sea shore, ports, breakwaters, slipways, drifts, sand-banks, swimming areas, cliffs, bayous, crags, submarine springs, springs and wells on the shore, river mouths flowing into sea, channels connected with sea, sea bed and underground as well as the internal sea waters and territorial waters, live and still resources in such waters, and live and still resources of the epi-continental zone. The Coastal Zone according to this Law includes shores of the river Bojana in the territory of the Republic of Montenegro. This law defines the notion of sea shore as the zone of mainland bordered with the line that the highest waves can reach during the strongest storms as well as the part of the mainland which according to its nature or purpose serves to use the sea for maritime

²¹ Possible establishment of an international registry does not envisage full liberalization of the requirements for being granted the state flag related to the nationality of shipowners (the genuine link defined in the Convention on the Law of the Sea, 1982), nor does it envisage registration of technically sub-standard ships. The reason for this is the fact that it is only the Recognized Organizations that can do technical supervision and statutory certification of the convention ships entered in Montenegrin registers, which is explicitly defined in the legislation in force and in the strategy. It should be underlined here that a stimulating tax policy, i.e. implementation of fiscal policy based on the single system for taxation of shipping activities in form of the tonnage tax, liberalization of the conditions for acquiring the state flag etc., does not imply necessarily the establishment of an international registry, nor would such an approach put the Montenegrin flag into the situation of flag of convenience in the negative sense. This is out-dated in the modern maritime industry, even if Montenegro decides to establish this dual, i.e. separate register to co-exist with the national one. Examples can be found in the Norwegian international register of ships, German international register of ships or Danish international register of ships. Furthermore, flags like Cyprus and Malta (by total gross tonnage the most represented European flags) are on the White List of the PARIS MOU and they provide certain conveniences to the shipowners in terms of tax reliefs and liberalization of the requirements for registration (nationality of the crew etc.). These flag states did not make any compromises about technical supervision or statutory certification of the ships. Only Recognized Organizations are accepted to do that and it ensures attractiveness and above all the rating of these flag states.

²² (Official Gazette of the Republic of Montenegro 14/92 of 3 April 1992, 59/92 of 22 December 1992, 27/94 of 29 July 1994 and Official Gazette of Montenegro 51/08 of 22 August 2008, 21/09 of 20 March 2009, 73/10 of 10 December 2010, 40/11 of 8 August 2011)

traffic and maritime fishing and for other purposes which are related to the use of sea, which is at least 6 meters wide starting from the line that highest waves reach during the time of strongest storm.

Shore of the river Bojana includes the area of mainland that is at least 6 meters wide starting from the line, which is horizontally distanced from the line of the medium water level in the last 20 years.

Coastal zone is managed by the Public Company for Coastal Zone Management. Right to use the coastal zone, or a part of it can be granted to a legal or a physical entity, domestic or foreign that can use it for economic or other permissible activity or for berthing vessels. The Government of Montenegro renders decision defining terms, period of use and the amount of the fee and that decision is the basis for the Public Company Coastal Zone Management to conclude a contract on the use of coastal zone with the beneficiary.²³ The fee for using the coastal zone belongs to the Public Company and has to be used for protection, development and upgrading of the coastal zone, as well as for the construction of infrastructure for the coastal zone.

B.3.8.10 Law on Air Protection

Law on Air Protection²⁴ governs the manner of air quality monitoring, assessment and improving air quality and planning and managing air quality. On the basis of Article 30 of this Law, *Decree on Ceiling Values for Polluting Matters in Liquid Fossil Fuels* was adopted and published in the Official Gazette of Montenegro 17/2017. This Decree stipulates the types of liquid fossil fuels, ceiling values for the contents of polluting matters, the contents of metal-based additives and other features related to the environment protection that the fuels have to meet to be placed on the market. The Decree also defines the use of fuels on vessels in ports, territorial water and exclusive economic zones and zones of control of sulphur oxide emissions, manner of establishing and monitoring fuel features, methods for reducing polluting matter emissions into the air and reporting on compliance with the ceiling value for polluting matters. According to Article 8 of this Decree, ship diesel fuel can be placed in the market if containing less than 15 g/kg of sulphur (1.5% m/m), while the ship gas oils can be marketed if the contents of sulphur do not exceed 1 g/kg (0.1% m/m).

B.3.9 IMO Conventions and Protocols

On 10 October 2006, Montenegro officially became 167th member of IMO (International Maritime Organization), accepting thus its conventions and protocols as well as the rights and duties of membership, primarily related to training of seafarers and other employees in this sector, safety at sea, protection from pollution, tonnage and load of ships, civil liability in case of oil spills or sea pollution, search and rescue at sea, etc.

Below is a list of all IMO Conventions binding for Montenegro²⁵.

- Convention on the International Maritime Organization, 1948;
- International Convention for the Safety of Life at Sea, 1974, (SOLAS 1974);
- Protocol of 1978 related to the International Convention for the Safety of Life at Sea, 1974, (SOLAS PROT 1978);
- Protocol of 1988 related to the International Convention for the Safety of Life at Sea, 1974, (SOLAS PROT 1988);
- International Convention on Load Lines, 1966. (LL 1966) and 1988 Protocol;
- International Convention on Tonnage Measurement of Ships, 1969, (TONNAGE 1969);
- Convention on the International Regulations for Preventing Collisions at Sea, 1972. (COLREG 1972);

_

²³ Using of coastal management law ceases by virtue of law:

Where the user of the coastal zone ceases to exist or deceases, unless within three months its legal successor requires transfer of licence:

²⁾ Where the case of operations related to the use of the coastal zone is deleted from the register;

³⁾ Where the user of the coastal zone withdraws;

⁴⁾ After the expiry of the time period set for using of the coastal zone;

⁵⁾ After completion of research or any other business defined in the decision on the use of the coastal zone;

⁶⁾ Unless the user concludes the contract on using the coastal zone.

²⁴ Official Gazette of Montenegro, 025/10, 040/11, 043/15, 73/2019)

²⁵ By 1 July 2019.

- Convention for Safe Containers, 1972. (CSC 1972);
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978. (STCW 1978);
- International Convention on Maritime Search and Rescue, 1979. (SAR 1979);
- IMSO Convention, 1976 and amendments from 2008.;
- FACILITATION Convention 65;
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto and amended by optional annexes I to V, (MARPOL 73/78);
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1997. (VI);
- London Convention, 1972.
- International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 (INTERVENTION 1969);
- Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973. (INTERVENTION PROT 1973):
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972. (LC 1972);
- International Convention on Civil Liability for Oil Pollution Damage, 1969(CLC 1969) with the 1992 Protocol;
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage and 1992 and 2003 Protocols
- Pal Protocol, 2002.
- Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988 with the 1988 Protocol (SUA);
- Convention on Salvage, 1989.;
- International Convention on Civil Liability for Bunker Oil Pollution Damage, BUNKERS 2001;
- Anti Fouling Convention, 2001.;
- International Convention for the Control and Management of Ships' Ballast Water and Sediments (BALLASTWATER), 2004.

B.3.10 Summary: Specific features of Montenegrin maritime legislative framework in comparison to EU acquis, IMO and other Conventions

If Montenegro has any specific features in regulating the maritime law field, they can be summed up as follows:

- a) Expert potential for development of maritime-law regulations is concentrated in administrative bodies and several eminent experts. This field is regulated on the basis of numerous IMO conventions and resolutions, other conventions and a large number of ILO conventions. Entire international community is involved in developing these conventions, and regardless of the scope of the legal matter the legislator has an abundance of reliable sources and role models with inventive and original approaches. Comparative role models in terms of regulating this field of law can be found in several traditional maritime countries. That gives us the possibility to take over some of the solutions from those legal systems;
- b) It was already noted that immediately after Montenegro restored its independence it became a full-fledged member of International Maritime Organization and accepted all the rights and obligations of membership.
 It can be said that Montenegro applies most of the international legal norms and recommendations that are related to the maritime administrative law;
- c) When it comes to regulation of contractual relations (obligations) Montenegro is blocked in a way. After

restoration of its statehood Montenegro did not join any international convention of the maritime private property law, except those that it joined in the process of succession and those few conventions are not subject to fast changes which is characteristic for IMO conventions. Therefore, there is a need to establish an operational team, i.e. working body to sign and follow international conventions, primarily in the field of maritime private property law that Montenegro should join to create a unified maritime-law framework that would certainly be a starting point for improving competitiveness of Montenegrin maritime economy. In the context of strategic planning, the capacities and human resources of maritime administration bodies should be strengthened because it is visible that these bodies do not employ a sufficient number of human resources with narrow specialization that would be able to deal with the challenges posed by this strategic document;

- In relation to this, it is noted that Article 3 of the Decision on Declaring Independence (Official Gazette of the Republic of Montenegro 36/2006) reads: «Republic of Montenegro shall apply and take over international treaties and agreements that were made and acceded to by the State Union Serbia and Montenegro and that relate to Montenegro and are in line with its legal order». It is undisputable that immediately after restoring its independence Montenegro started the process of consolidation, i.e. succession of international treaties concluded by former Yugoslavia and State Union Serbia and Montenegro. It was done on the basis of the rules of international law that apply to succession. The Law on concluding and enforcing international treaties was adopted (Official Gazette of Montenegro 77/2008). It stipulates that rules of international law apply to the succession of international treaties if such treaties are not contrary to the Constitution and legal order of Montenegro and that notification of succession will be done by the Ministry in charge of foreign affairs and that the list of treaties included in the succession process will be published in the Official Gazette of Montenegro - International Treaties. In this way Montenegro acceded to most of the international conventions in the field of maritime public law (law of the sea) and conventions in the field of maritime property law that used to bind former Yugoslavia and the State Union Serbia and Montenegro. In that context, Montenegro should take a strategic approach when it comes to undertaking to be bound by maritime conventions and protocols. Montenegro should accede only to those international treaties that are considered to be in line with its interest, always keeping in mind that it is in line with the spirit of European integration, which implies continuous alignment with the European Union acquis;
- e) Federal Law on Maritime and Inland Navigation from 1998 and earlier laws with the same name regulated this legal matter by taking over the solutions from some conventions that were not ratified through succession of states or the state did not accede to them. This should be taken into account in the process of improving the legislative framework in the future;
- f) Several conventions of recent date with the same name appeared. Montenegro has not developed any strategy about accepting them by taking over solutions without ratification or accession with international commitment and reservations, if allowed. Decisions on undertaking to be bound by a convention or protocol should not be taken hastily, but after a thorough expert discussion on whether such a decision would improve any segment of Montenegrin maritime sector. Therefore the entire process should be properly guided through the implementation of this strategic document. It is worth noting that the Chapter 3.2.1.3 of the Transport Development Strategy 2019-2035 recognizes the need to develop a separate strategic document related to implementation of international commitments and responsibility of Montenegro as a flag state, port state and coastal state. Such a strategic document should analyse the current state of affairs and plan additional implementation (if needed) of the provisions of the relevant international conventions, codes, protocols and resolutions;
- g) Except in the Official Gazette, no database has been established so far, i.e. there is no list or contents of all bilateral or multilateral international agreements that refer to the maritime-law matters that bind Montenegro. That is the practice, however, in all traditional maritime countries. The same can be said for the set of laws and secondary legislation pieces that have their sources in national legislation regulating maritime-law matters. Another important thing is that not all maritime-law legislation pieces are translated to English or to Montenegrin language and published as such in the official website of the Ministry of Transport and Maritime Affairs to be easily accessible to maritime economy entities, potential investors and shipowners that would register their vessels in Montenegro, which is definitely the practice of all maritime countries. Efforts will be made to overcome this deficiency in the organization of the state administration body through the implementation of the action plan that is a constituent part of this strategic

document, and primarily through the proposed strengthening of the capacities of human resources, either through training, or new employment and rationalization of civil servants and state employees that work in the maritime administration:

- h) As for the labour rights of seafarers, Montenegro acceded most of the conventions of the International Labour Organization, inter alia the umbrella Maritime Labour Convention from 2006. Montenegrin seafarers are now on the EU White List, since the programme of their training and certification of their qualifications are now fully in alignment with the relevant EU requirements. However, in spite of that, more has to be done so that Montenegrin seafarers, as our significant potential, can become competitive in the international labour market. Although Montenegro is on the EU White List, maritime administrations of some countries, through the agencies for mediation in employment, require bilateral agreements so that Montenegrin seafarers can be employed on the ships under their flag. Montenegro signed such agreements with St Vincent and Grenadines, Portugal, Antigua and Barbuda, Norway, Commonwealth of Bahamas, Japan, Hong Kong, Italy etc. Apart from this, one of the activities envisaged in this strategic document is development of a separate action plan to define activities aimed at improving labour-law status of Montenegrin seafarers that certainly constitute a significant potential for further development of Montenegrin maritime industry. That action plan will envisage the activities aimed at further improvement and updating of the information system for the maritime sector, i.e. electronic database on seafarers, issued maritime documents and certificates on qualifications and years of experience in navigation; revising the criteria and manner of control of education institutions dealing with education of seafarers, as well as the centres for training of seafarers; harmonization of competences between responsible ministries related to education, training, social and health care of seafarers; development of employment programme for maritime trainees on national and foreign ships; including seafarers in the national system of social and health care like in other maritime countries; analysing and amending (if needed) the tax policy related to salaries of seafarers; adoption of a branch collective agreement for seafarers employed in international and coastal navigation, etc.
- In 2007 Montenegro signed Stabilization and Association Agreement with European Union, obliging to align its legislation gradually with the European Union legislation. This includes legislation in the field of maritime law. In the Inter-Governmental Conference in Brussels in December 2015 Montenegro opened the negotiation chapter 14 that deals with transport policy. Thus Montenegro committed again to achieve alignment with the EU acquis in the field of road, railway, air and maritime transport and the transport in inland waterways. Bilateral screening that preceded opening of this chapter established the level of alignment of national legislation in this field with EU acquis. As for maritime transport, the estimates show that 70% of EU directives and pieces of legislation related to maritime sector are transposed in Montenegrin legislation. This is a significant result, although there is still a need for additional alignment. European Commission Report for 2019 noted that, inter alia, no progress was made in the field of port state control and membership in the Memorandum of Understanding on Port State Control from 1982 (Paris MoU). It is important to underline that in the period from 13 to 17 May 2019 52nd session of the Paris MoU Committee was held in St Petersburg. The session was attended by representatives of all EU countries, Canada and Russia in the capacity of full-fledged Paris MoU members, as well as a representative of Montenegro, which has the statute of an associated member – observer in Paris MoU. It is important to say that full-fledged membership of Montenegro in Paris MoU was a topic within the item 8 of the Agenda. Presentation of Montenegrin representative was based on the last control that was conducted – the audit by Paris MoU representatives who visited Montenegro in October 2018, where they identified gaps in Montenegrin legislation that lead to the fact that it is not aligned with Paris MoU procedures. They also noted that inspectors for safety of navigation were not adequately trained to act in line with the procedures that are clearly defined in the Manuals for Inspectors within Paris MoU. It was already said that this non-compliance was solved by the adoption of the Law on Amendments to the Law on Safety of Maritime Navigation from July 2020, while further activities of Montenegrin maritime administration aimed at achieving full-fledged membership in Paris MoU, include continuous training of safety of navigation inspectors and implementation of other activities envisaged in this strategic document.
- j) European Commission Report for 2019 noted that no progress was made in the implementation of the National Maritime Single Window, i.e. an integrated interface that will ensure that on the national level procedures can be done electronically when ships enter and/or depart from Montenegrin ports. This will be discussed in more details below. The Report noted also that the law of inland navigation is not aligned with the EU acquis. Within the preparations for development of legislation to regulate inland navigation in

Montenegro, a Study of Inland Navigation Waterways was done in June 2015. The development of the Study was financed by EU Delegation. The Study covered the current state of affairs in Montenegro in the field of inland navigation, development perspective in inland navigation in Montenegro, guidelines for implementation of EU legislation related to inland navigation, organizational structure of the inland navigation department, as well as terms of reference for the future technical cooperation.

As for implementation of EU directives in the legislative framework that would regulate inland navigation, the directives relevant for Montenegro, according to the conclusion of the Study are:

- Directive 2006/87/EC laying down technical requirements for inland navigation,
- Directive 96/50/EC, on harmonization of conditions for obtaining national boatmasters' certificates in inland navigation,
- Directive 2004/26/EC, stipulating measures against emission of gasses and pollutants from engines

Inland waterways navigation is mostly related to navigation in Skadar Lake. Montenegrin rivers are fast mountain rivers that flow through canyons and ravines and they are mostly shallow. They are ideal for rafting and can offer a unique experience for tourists. The field of rafting is regulated in the Law on Rafting that stipulates conditions and manner of providing rafting services as a tourism activity and rafting for personal needs or for recreation, in inland fast waters.

- k) Montenegro established successful cooperation with EMSA European Maritime Safety Agency that is manifested in EMSA providing technical assistance to Montenegro, exchanging data important for maritime safety and implementing various trainings for employees in the Ministry and administration bodies. All of these activities aim at achieving European standards and increasing the level of maritime safety and protection of the sea from pollution from vessels. Strategic goals and operational objectives defined in this document aim to strengthen and improve that cooperation further.
- It is important to say that, when it comes to implementation of IMO Code for Investigation of Marine Casualties and Incidents, according to which member states are obliged to establish an independent body for investigating marine casualties and incidents that will focus on implementation of safety investigations and prevention, implementing the clearly defined system of reporting to EMSA, Montenegro has met its obligations in the following way: in its session held on 11 December 2014 the Government of Montenegro rendered its Decision on establishing National Commission for Investigation of casualties and serious incidents of aircrafts, emergency events that jeopardize safety of railway transport and maritime casualties and incidents (Official Gazette of Montenegro 59/014). National Commission has the tasks defined in the Law on Air Transport; Law on Safety, Organization and Efficiency of Railway Transport and Law on Safety of Maritime Navigation. The Commission comprises chief investigator and two permanent members.

Chief investigator manages the work of the Commission. Decree on more detailed procedure and manner of implementation of investigations in case of maritime casualties and incidents (Official Gazette of Montenegro 52/2015) stipulates in more details the procedure and manner of conducting investigations in case of maritime casualties and incidents, more detailed authorities and conditions that chief investigator has to meet, the manner of notification, organization and work of independent experts. The Decree is applicable to marine casualties or incidents participated in by vessels under Montenegrin flag, or casualties and incidents that occur in the inland sea water and territorial sea of Montenegro and water that Montenegro has interest in. Investigation of maritime casualties or incidents is done to establish the cause of casualty or incident, with a view to preventing or reducing frequency of maritime casualties and incidents in the future, and to improving maritime safety and protection of area at the coast. Safety investigation includes collection and analysis of evidence, establishing the cause of casualty or incident, and issuing safety recommendations if needed.

B.4. Economic Bacground – Overview of Montenegrin economy

Since independence Montenegro went through intensive transition changes and strengthening of market economy. After initial years of growth and an increased volume of foreign direct investment in the period 2007-2008, global economic crisis started in 2009. It had a very negative effect on the open Montenegrin economy and showed the unsustainability of the economic growth based on external factors (primarily the inflow of foreign direct investment). In 2010 Montenegrin economy started recovering, while 2013 can be defined as the year after which the continuity of positive growth rates started. The exception is 2020 due to the COVID 19 pandemic and its consequences.

In the last couple of years macroeconomic situation in Montenegro is characterised by positive trends towards higher growth rates, whose key drivers were the intensified activities on the large infrastructural projects in construction and energy sector, growth of processing industry and a strong increase in the number of tourists. On the basis of MONSTAT data, in 2018 Montenegrin economy recorded a positive economic growth rate of 5.1%. Economic trends were followed by a continuous increase in the number of employed persons. In 2018 an average number of employed persons achieved the level of 190 thousand, while unemployment rate at the end of the year amounted to 17.8%.

In the period of the last ten years Montenegro recorded a budget deficit and a public debt growth. The estimated budget deficit at the end of 2018 was 159.2 million euro or 3.4% GDP and it was a consequence of significant execution of the capital budget, i.e. of implementation of infrastructural project. Budget deficit leads to the increases in public debt that at the end of 2018 amounted to 3.26 billion euro, or 70.1% of GDP. Public debt records a growth trend and therefore it has become increasingly difficult to find sources for its repayment. The implemented measures of fiscal consolidation can be assessed as positive.

Montenegro records a deficit in the current account of its balance of payment. In 2018 the deficit amounted to 793 million euro. The current account deficit is caused by foreign trade deficit in the exchange with foreign countries where there is an obviously high level of dependance on import. On the other side, there is a surplus on the account of services, where the most significant item is the revenue from travel - tourism.

Table 1 offers an overview of Montenegrin macro-economic indicators for the period 2009 - 2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP in current prices in million of euro	2,981	3,104	3,234	3,181	3,362	3,457	3,654	3,954	4,299	4,663
Real GDP growth %	-5.7	2.5	3.2	-2.5	3.5	1.8	3.4	2.9	4.7	5.1
GDP per capita (in €)	4,720	5,011	5,211	5,074	5,356	5,561	5,826	6,354	6,908	7,420
Average annual inflation (CPI), %	1.5	0.7	2.8	5.1	0.3	-0.3	1.4	0.9	1.9	1.6
Average number of employees	174,152	161,742	163,082	166,531	171,474	173,595	175,617	177,908	182,368	190,132
Unemployment rate, %	13.0	13.8	13.2	13.5	14.9	14.9	17.2	21.3	22.1	17.8
Public debt (million €)	1,140.2	1,270.7	1,487.2	1,699.5	1,933.0	2,071.7	2,418.8	2,546.1	2,758.8	3,268.6
Public debt, % of GDP	38.2	40.9	46.0	53.4	57.5	59.9	66.2	64.4	64.2	70.1
Budget deficit/surplus (million €)	-130.3	-112.2	-126.5	-174.7	-215.7	-103.0	-291.3	-135.0	-236.9	-159.2
Budget deficit/surpluss, % BDP	-4.37	-3.62	-3.91	-5.55	-6.48	-3.0	-8.0	-3.4	-5.6	-3.4
Current account (million €)	-830.3	-710.2	-573.4	-486.1	-383.0	-429.1	-401.7	-642.0	-691.2	-793.0
Balance of goods and services (million €)	-921.0	-793.8	-708.1	-771.4	-675.4	-686.1	-674.3	-888.6	-1,007.9	-1,113.8
Export of goods (million €)	296.3	356.6	476.5	391.9	402.9	357.5	330.3	350.8	382.4	435.9
Import of goods (million €)	1,617.9	1,623.8	1,782.8	1,781.1	1,733.0	1,733.9	1,794.1	2,008.5	2,242.5	2,485.8
Foreign trade balance (million €)	-1,321.6	-1,267.2	-1,306.2	-1,384.2	-1,328.6	-1,376.4	-1,463.7	-1,657.7	-1,860.1	-2,049.9
Exchange of services balance (million €)	400.6	806.0	903.8	612.8	653.2	688.9	788.2	769.1	852.2	936.1
Net FDI (million €)	1,066.5	552.1	389.1	461.6	323.9	353.9	619.3	371.6	484.3	327.6
Net FDI, % BDP	35.8	17.8	12.0	14.7	9.9	10.2	16.9	9.4	11.3	7.0

Source: MONSTAT, CBCG, Ministry of Finance

Table 1: Overview of macro-economic indicators for Montenegro (2009-2018)

According to the estimates of the Central Bank of Montenegro, tourism, energy sector and construction will be the key drivers of economic growth in the forthcoming period. Strong investment activities related to the continuation of highway construction, tourism facilities and facilities in the energy sector will boost further economic growth. Export of goods and services will grow as a consequence of higher consumption in tourism encouraged by the construction of new tourism development, stabilization and the announced investment in industry and agriculture. The expected growth of import is based on the investors' needs to import equipment and construction material and labour, particularly for the construction of highway and tourism facilities, while the expected growth of agriculture can contribute to a decrease in import.

Continued implementation of fiscal consolidation measures can lead to a decline in private and public consumption. Given all of the above, the key challenge of the fiscal policy in the forthcoming mid-term period will be to keep the balance between development and budget sustainability.

B.5. "BLUE ECONOMY" - Overview of the Existing Maritime Sector and Economic Setting

B.5.1 Montenegrin Maritime Cluster

It is globally accepted that maritime administrations (ministries that regulate maritime sector, keep national ship registers, propose maritime regulatory framework, adopt and conduct maritime policy etc.) set as their final goal to increase competitiveness and attractiveness of national ship registers, i.e. their flag and to improve legislative framework in the maritime sector. In addition to this, a generally accepted trend, taken by maritime countries as one of the economic pollicy instruments for achieving competitiveness, is development of national maritime cluster that includes all maritime anciliary activities.

Maritime clusters are defined as networks of interconnected economic entities, supplyers and other elements of the maritime sector that are located in the same geographic area and whose operations depend on the decisions and policies of same institutions. The distinctive feature that differs clusters from other types of networks lies in their mutual interconnections and interdependance. In the Part C that deals with the analysis of the external setting, we offer a comparative overview of the organization of maritime clusters in certain countries.

It is important to note that there are economic and social ties that connect members of clusters, while clusters are perceived as a tool to ensure improved efficiency and productiveness, making economic entities competitive on the national, regional and global level. Other socio-economic results, like employment and sustainability, occur through the cluster's positive influence and dynamics. There is certainly a wide range of approaches in the cluster concepts and methods to analyse clusters. On a general level, an economic cluster can be defined as a group of economic entities with stronger internal links than the links that the group has with external setting. Possibilities to develop clusters depend on the nature of those links, since different measures can influence different links, and the possibility of influencing the links is the key justification of the cluster approach to economy. Since economic entities and clusters in an economic area are interconnected, any positive development or investment in one sector can influence many others. However, not all influences are positive. It is therefore important to establish economic sectors and links the development of which will have the most positive influence on the entire economy.

Everyone agrees that it is exceptionally difficult to ensure proper functioning of a cluster only through the efforts of the public sector. Development of a maritime cluster is mostly self-regulatory, but it is undisputed that constituting a cluster has to be initiated, even if the initiative has to come from the public sector, as it is the case here.

Legal form of clusters depends on the purpose of cluster development, the vision of future development or financial reasons. There are many forms that a cluster can have: an association (NGO), a limited liability company, a cooperative, a partnership, etc. However, in Montenegro clusters are most frequently established as NGOs and as business organizations (companies).

One thing is clear – in Montenegro there is a strong institutional support for development of clusters. The Ministry of Economy developed the Strategy for Sustainable Economic Development of Montenegro through Introduction of Cluster, which is the umbrella document for cluster policy. Through implementation of the technical and financial support to cluster development efforts are made to initiate the process of cluster formation in Montenegro. Since 2012 the Ministry of Economy has been continuously working on the implementation of the cluster development policy in Montenegro through the programme of state aid aimed at providing financial support to more efficient functioning of clusters and their better promotion. The goal is to ensure better position of small and medium-size entreprises on the national and international market and their stronger competitiveness. The activities implemented so far in Montenegro have produced positive results, particuarly when it comes to sectoral clusters where economic entities recognized the importance of joining into clusters to overcome individual problems and limited capacities. In addition to this, development of clusters in Montenegro comes together with a significant role that international organizations have in formation of clusters and implementation of their activities.

Programme for improvement of competitiveness of economy for 2019 envisaged establishment of six Programme lines of financial support, one of them being dedicated to cluster development.

Development of clusters, as an instrument of economic policy, is the tool to attract new investment in the region, to generate new jobs, strengthen expert capacities, increase productiveness, enlarge export volumes and implement economies of scale, as well as to constitute Montenegrin maritime cluster, which is in this strategic document recognized as one of the key activities on the path of achieving the strategic goals.

Below is a brief overvies of the potentials of the identified blue economy sector, that are to make the basis of the future members of the Montenegrin maritime cluster.

B.5.1.1 State authorities (structure of Montenegrin maritime adminsitration)

Below is a brief overview of Montenegrin maritime administration, with elaboration of competences of each authority within the system.

Ministry of Transport and Maritime Affairs is the umbrella institution for drafting laws and secondary legislation, preparing system solutions, defining policy and implementing measures in the maritime sector. Rulebook on internal organization and systematization of the Ministry of Transport and Maritime Affairs defines two organizational units in the maritime sector: Directorate for Maritime Economy and Directorate for Maritime Transport and Inland Navigation.

Directorate for Maritime Economy is in charge of: conducting development policy in the field of maritime economy; establishing strategic plans, programmes and projects in the field of maritime economy; establishing, preparing and proposing system measures for implementation of the policy adopted in the field of maritime economy and analysing their influence on the economic positions and conditions of operation; maritime companies and maintenance of port infrastructure; undertaking activities and measures related to maritime economy and compiling information about state of affairs in this field; monitoring and analysing proposed measures and implementation of infrastructural projects; cooperation of the Ministry and international financial institutions; cooperation of the Ministry and companies in the field of maritime economy; compiling information and reports related to concluded financial arrangements; enforcement of conclusions of the Government and its working bodies; cooperation with other bodies in relation to achievement of goals envisaged in the field of maritime economy; monitoring processes of awarding contracts, payments, reporting and monitoring of contract implementation in line with the signed contract and other activities defined in legislation.

Directorate for Maritime Transport and Inland Navigation is in charge of: conducting development policy in the field of maritime transport related to safety of navigation, protection of the sea from polution from vessels and maritime structures, protection of life at sea, safety protection of vessels; adoption of strategic plans, programmes and projects in the field of maritime transport; legislative activity, drafting laws and secondary legislation; preparation of international treaties and agreements; adoption, development and proposal of system measures for implementation of the adopted policy in the field of maritime transport; keeping required records needed for monitoring and undertaking measures in the field of maritime transport; undertaking activities and measures related to maritime transport and compiling information in this field; implementing the Government Programme and enforcing the conclusions of the Government and its working bodies; cooperation with the minsitries and other bodies; preparing answers to MP questions in the field of maritime affairs; conducting inspection, administrative and expert tasks related to safety of navigation and other tasks defined in the laws regulating maritime transport, tender procedures, monitoring contracting processes, payments, reporting and monitoring of contract implmentation in line with signed agreements; preparing and providing information in the field of European integration and international cooperation; complying with the procedures defined in the management system policy positions defining activities in the field of inland navigation and drafting legislation to regulate this field in line with obligations towards EU; as well as other tasks defined in relevant legislation.

Following authorities function under the umbrella of the Directorate for Maritime Transport and Inland Navigation: Division for implementation of safety standards in maritime navigation, Division for implementation of standards for protection of the sea from pollution and inland navigation, Division for inspection supervision in maritime and inland traffic and 2 regional units – Harbour Master's Office Bar and Harbour Master's Office Kotor.

Regional units - Harbour Master's Office Bar and Harbour Master's Office Kotor are in charge of the following: drafting of plans, instructions and opinions related to inspection supervision of implementation of laws and other legislation in the maritime field and performing inspection supervision over maritime structures, ports, structures for safety of navigation and security protection of ports open for national and international traffic, as well as other activities of inspection supervision in line with legislation and international treaties in the maritime field; defining priorities in inspection supervision; entering/removing vessels into/from appropriate registers (registration of ships, boats, floating vessels, rafting boats and other maritime structures); enforcement of rulings of courts with jurisdiction related to registration into an appropriate ship register; issuing certificates on registration in appropriate registers (for ships, boats, floating vessels, rafting boats and other maritime structures); issuing approvals and consents that

fall within the competences of the Harbour Master's Offices, acquiring authorizations on qualifications (acquiring general authorizations, acquiring special authorizations, issuing general and special authorizations, renewing general and special authorizations, replacing general and special authorizations, revoking authorization, keeping appropriate register of authorization); reception and dispatch of ships (certifying ship documents, issuing licences for entering into and departing from a port, keeping records of arrival and departing of ships, collecting and processing statistics related to traffic of ships, cargo and passengers); embarkment and disembarkment of crew members (registration of medical certificates into Seaman's Book and embarkment permission, registration of authorization and diplomas into the Seaman's Book and embarkment permission): issuing vignettes to foreign yachts; issuing and replacing Seaman's Books and embarkment permissions; issuing certificates confirming years of experience in navigation; acquiring, issuing and extending IDs for pilots of maritime pilotage; acquiring, issuing and replacing certificates for boatmen; regular inspection of boats for personal use; issuing and replacing registration sheet and list of crew for boats; issuing, extending and replacing licence for navigation of boats; extending and replacing licence for navigation of rafting boats; inspection supervision of: foreign and national ships and other vessels in terms of their capacity to navigate, compliance of their engines and other installations, devices. instruments and equipment with the documents; members of crew of ships and other vessels or floating vessels in terms of their number, qualifications and authorizations for performing certain duties and activities in compliance with ship documents; navigation, entering into Monenegrin waters or performing research or other activities of foreign merchant, fishing, research, public or war ships, yachts or boats in terms of harmless pass and required approvals of competent ministries for entering Montenegrin waters or performing certain works in the territorial sea and internal sea waters; ports and piers open for international or national maritime transport in terms of their operational and other costs, breakwaters, required depths, devices, installations and other structures intended for berthing, mooring, anchoring or protection of ships, as well as for embarkment and disembarkment of passengers and/or cargo - by insight into the document on the largest permissible load of the constructed coast; waterways with international, inter-state or national regime of navigation in internal sea waters and territorial sea in terms of their depth, width, radius of curve and height of structures above such waterways, whether the works on development and maintenance of waterways are done in line with technical documentation; radio service on ships or other vessels or floating structures, and coastal radio station that serves for safety of navigation, its devices and equipment as well as maintaining the assets and operation of that service; construction of structures built in the internal marine waters and territorial sea or coasts, works on development i.e. construction of port or a pier in terms of technical qualifications and their influence on navigation safety; transport of persons and/or things in terms of protection of human lives and property within the limits of permissible tonnage and stability of the ship or any other vessel or floating vesses, as well as other requirements defined in the law and other legislation pieces (checking if the position of load line, i.e. the free side of the ship to the data presented in the documents etc.); foreign or national ships or other vessels or floating structures in terms of protection of the sea from pollution, condition of equipment for prevention of sea pollution against the documents and books of such structures; foreign or national ships or other vessels or floating structures in terms of meeting the standards related to the lowest age limit of crew members, health capacities of crew members, employment contracts, working hours and rest hours for the crew, equipment of the ship hospital, food, drinks, premises for storing and preparing food, maintaining ventilation, heating, lighting and water supply and sewage system etc.; foreign or national ships and ports open for international transport in terms of security protection of ships and port installations; foreign or national ships and/or ports that load or unload cargo in terms of possessing valid documents proving compliance of the ship or port devices for loading or unloading the cargo and if the condition of such devices is in line with the data from the documents: service for search and rescue in terms of exercises, responses and operation of the service in case of search and rescue of human lives at the sea in the zone of responsibility of Montenegro; service for cleaning sea from polution in terms of exercises, responses and operation of the service in case of sudden polluting discharge into the sea from ships or other vessels or floating structures and from the port or coastal installations, i.e. terminals; performing obligations of port or coastal pilotage in terms of education, qualifications, working hours and rest hours for pilots and other staff on the land and on vessels, etc.; of coastal management zone in terms of fences and equipment with tools for rescuing swimmers and the number of lifeguards in developed and constructed bathing sites; foreign vachts in terms of whether they have the appropriate vignette, vessels on the yacht - tender boats and book of yacht chartering; boats for rafting and rafts used in inland waters in Montenegro – rivers; inspectors for navigation safety investigate collisions of ships and other vessels or floating structures in internal marine waters and territorial sea of Montenegro to estabish misdemeanour or possibly criminal liability; enforcing "interim measures" of prohibition of disposing of the ship, preserving and stopping the ship to secure pecuniary claim of a proponent, as rendered by the court with jurisdiction.

Maritime Safety and Port Management Administration performs the activities related to: safety of navigation in the coastal sea of Motnenegro in terms of developing and maintaining marine waterways, installing structures for safety of navigation in waterways and ensuring their proper operation by performing the activities of radio service on waterways for the purposes of maritime transport, collecting hydrographic, oceanographic and meteorological data and their transmission through radio communication; establishing capacity for navigation for ships and other vessles and floating structures through: technical supervision, issuing ship documents, books and certificates, calcullating tonnage when calibrating vessels; performing technical expertise in case of maritime casualties; organizing and implementing actions of search and rescue at the sea; protection of sea from pollution from vessels and floating structures; entering yachts into the Yacht Register; application of international and European conventions, protocols and agreements from the scope of its competences; cooperation with authorized international organizations and authorized bodies from other states from within the scope of competences of the Administration; ports of national importance; care of construction, reconstruction, maintenance, management, protection and improvement of ports; supervision over use of ports, providing port services and performing other activities in ports; control of construction, reconstruction, maintenance and protection of port infrastructure and suprastructure; ensuring conditions for maritime transport and port services in ports and port anchorages; implementation of national legislation, international treaties and standards related to ports; preparation of development plans for ports adopted by the Government; ensuring operation of ports in line with market principles; preparation of criteria for establishing the amount of fee for using port infrastructure; preparation of concession enactments, participating in the procedure for awarding concessions and concluding concession agreements; approving the amount of fee for port services on the basis of a defined maxiumum amount for such a fee; control of implementation of concession contracts; regulation and coordination of relations and activities beteen concessionaires; keeping register of concessions; ensuring compliance with the requirements defined in international and national legislation regulating prevention of environment pollution from ships, protection of marine environment and coastal area and civil liability for damage caused by pollution; as well as other activities defined as falling under its competences.

In addition to Ministry of Transport and Maritime Affairs, there are other entities that have an impact on the development of the maritime sector in the context of blue economy development. They are:

- Ministry of Agriculture and Rural Development,
- Ministry of Sustainable Development and Tourism,
- Ministry of Economy,
- Hydrocarbon Administration and
- Public Company for Coastal Zone Management

Since its establishment in 1993 the Public Company for Coastal Zone Management of Montenegro managed all structures of maritime infrastructure (ports, piers, moorings, docks, small mole closed harbours etc.). In that period, on the basis of the laws on: state property, spatial planning and construction of structures, coastal zone, tourism and hospitality industry, and on the basis of the Decree on selling and leasing things owned by the state and other pieces of legislation, sustainable integrated management of coastal zone and structures of maritime infrastructure have been established through the operation of this company. Sustainability of the management system (protection, development and improvements) for coastal zone and structures of maritime infrastructure has been achieved through reinvesting of funds earned from ceding sites and structures into their development and construction.

B.5.1.2 Montenegrin register of vessels (ships, boats, yachts and other vessels)

Administrative procedures for registration of ships, boats and other floating vessels, including installations for production of hydrocarbons are conducted by the Harbour Master's Offices in Bar and in Kotor.

Exceptionally and in line with the provisions of the federal Law on Maritime and Inland Navigation that have been taken over into the Law on the manner of registration of ships, floating objects and instalations for hydrocarbons production and in rem rights over the ships instalations for hydrocarbons production, registration of of ships into ship registers is done on the basis of decision of a Harbour Master's Office and court with subject matter jurisdiction. The court renders decisions on the first registration of a ship, decisions on registration into the lists B and C of the main register of ships, and decisions on deleting a ship from the register. The court also renders the decisions on

transfering registration of a ship into another register kept in Montenegro, and according to this Law this jurisdiction of the court extends also to the registration of installations for production of hydrocarbons.

Provisions on registration of boats are contained in the Law on Safety of Maritime Navigaition, while registers of boats and other floating strucutes are kept by the Harbour Master's Offices in Bar and in Kotor.

As for yachts, the Law on Yachts adopted in 2007 constituted the Register of Yachts, i.e. the Division of the Register of Yachts within the Maritime Safety and Port Management Administration. It is most frequently the yachts for private use not longer than 24 meters (registered length) that are registered in Montenegrin Register of Yachts. On 30 June 2019, 259 yachts were registered into the Register of Yachts in Montenegro - 46 of them for commercial activities and the rest for private use.

According of the data in the possession of Harbour Master's Offices at the end of 2018 Montenegrin fleet comprised 108 ships, 103,501.26 BT, out of which 4 ships are active in international navigation²⁶.

In the Register of ships in the Harbour Master's Office in Kotor, at the end of 2018 there were 66 ships:

- For unrestricted navigation: 2 ships with the total gross tonnage of 44,912.00;
- Short sea navigation: 4 ships with the total gross tonnage of 254.24;
- Internal sea waters and territorial sea: 37 ships with the total gross tonnage of 4,108.96;
- Closed marine areas: 8 ships with the total gross tonnage of 1,186.11;
- Fishing boats: 15 with the total gross tonnage of 998.83.

In the Register of ships in the Harbour Master's Office in Bar, at the end of 2018 there were 42 ships:

- 1. In the Register of Merchant Ships:
 - For unlimited navigation: 2 ships with the total gross tonnage of 48,576;
 - Minor coastal navigation: 1 ship with the total gross tonnage of 144;
 - Coastal sea: (Internal marine waters and territorial sea): 14 ships with the total gross tonnage of 1,755.03;
 - Internal marine water: 2 ships, gross tonnage 123.24;
 - Adriatic Sea: 1 ship, gross tonnage 153;
 - Skadar Lake: 2 ships, with the total gross tonnage 245.
- 2. In the Register of fishing boats: 13 ships, with the total gross tonnage 917.33;
- 3. In the Register of ships for administrative purposes: 4 ships, with the total gross tonnage 136.52;
- 4. In the Register of ships for internal navigation: 2 ships.

In total, at the end of 2018 in the registers of boats kept by the Harbour Master's Offices in Bar i Kotor there were 5,667 boats registered for commercial and non-commercial pursposes. Out of the total number of registered boats, according to the available data, 425 boats were registered for commercial purposes, while 4,862 were registered for non-commercial purposes (personal and public use). At the end of 2018 the Register of rafting boats contains the total of 114 registered boats for tourism.

All registers are kept in written form (hard copy) and so far no electronic data base of the registered vessels has been established. Apart from that, so far the procedures for registration of vessels and issuing certificate on status in registers have not been digitalized.

-

²⁶ Report on work and condition in administrative areas of the Ministry of Transport and Maritime Affairs and bodies under tis umbrella for 2018.

As noted above threre are only four ships used in international navigation that are registered in Montenegrin ship registers. It is therefore one of the operational goals defined in this strategic document to increase the gross tonnage of Montenegrin merchant fleet and it will be achieved through the implementation of activities related to improvement of the organization structure and qualifications of human resources, i.e. through the strengthening of the capacities of maritime administration to ensure adequate flag state control over the ships under Montenegrin flag, i.e. control of work of recognized organizations performing the activities of technical supervision and statutory certifications of Montenegrin ships. Another activity is related to intensifying activities of transfer of authorities for technical supervision and statutory certification of ships to other Recognized ogranizations, i.e. classification societies. That will create preconditions for increasing the overall number of ships under Montenegrin flag. Introduction of a uniform system of taxation of shipping activities is also envisaged in the form of a tonnage tax. The goal is to attract as large number of shipowners as possible to register in Montenegro, to liberalize requirements for registration in Montenegrin register of maritime merchant ships in terms of nationality of shipowners, but also to digitalize Montenegrin ship registers. Analoguous activities are also envisaged for the Register of Yachts of Montenegro.

This strategic document envisages also a gradual enstablishment and updating of the existing electronic records (Maritime information system) of Montenegrin ship registers, registers of boats, yachts and other vessels; foreign vessels in the territorial sea of Montenegro; issued vignettes for private use and commercial activities; concluded contracts on mandatory insurance in transport and other mandatory insurances of vessels users, as well as gradual linking of these database with the existing information system and exchange of data between MSMPA, inspection authorities, Harbour Master's Offices, insurance companies, local self-government bodies, customs and other authorities. This will ensure that all relevant authorities have precise information in real time about every vessel, i.e. about whether the users of vessel in Montenegrin territorial sea have appropriate insurance contract for transport and if they lease the vessels in a legal manner, i.e. whether they comply with national legislation

B.5.1.3 Shipowners and operators

Montenegro has a rich and long maritime tradition. A more intensive development of maritime economy started when the Yugoslav Ocean Navigation was established in Kotor in 1954 and Trans-Ocean Navigation in Bar in 1961. Starting from 1992, Montenegrin maritime fleet of shipping companies owned by the state faced numerous challenges and the key reason for the loss of fleet was the war in former Yugoslavia and the period of international sanctions that were imposed on 30 May 1992 for the period of five years (1992-1997). The need to renew Montenegrin fleet has been put on the agenda in order to ensure: increase in the number of employees who lost their jobs as the old fleet fell apart, contribution to development of economy given the fact that the fleet had a significant share in the national economy, reactivating and rehabilitating national port facilities and preserving long maritime tradition.

As for public policies, the first significant attempt at revitalization of maritime economy in Montenegro was made in 2004 in the form of a joint investment project of the Government of Monntenegro and the consortium of Norwegian investors. The name of the project was "Kotor Shipping Co Ltd". The goal of the project was to start revitalization of Montenegrin maritime economy which, after international sanctions, was faced with unsolvable problems and was left without its fleet. Revitalization is to be effected through procurement and exploitation of the maritime merchant ships.

Establishment of the company "Kotor Shipping Co Ltd" was done on the basis of the Protocol on establishing a joint shipping company signed in February 2004. The key goal was to initiate investment sub-projects of procurement and exploitation of the maritime merchant ships. Feasibility study of the joint investment project envisaged the organization model where for every investment sub-project - a ship, a separate "single ship" company will be established. In each of such companies the company "Kotor Shipping Co Ltd" will have a 100% share. The idea was that the technical management and ensuring of the crew for the ships will be provided by the newly established company "NorMonte" d.o.o. with its registered office in Kotor and that the commercial management of the "single ship" companies will be done by one of the partners in the project, the company "Th. Jacobsen & Co As". The first ship bought through this project had the name of M/B "Kotor Bay". It had the DWT of 9,662 tons and it was built in 1987 in Japan. It was a two-deck multi-purpose ship for transport of bulk cargo and general cargo, containers and timber. It was bought for 6.76 milion USD. The second ship M/B "Ivo Visin" was built in Germany in 1984 and it had the DWT of 10,700 tonns. It was a one-deck multi-purpose ship, also for transport of bulk and general cargo, containers and timber. It was bought for 5.25 million USD.

The decisions aimed at revitalization of maritime sector in Montenegro can be considered justified from the perspective of our time, because it was the fact that before this investment project a large number of Montenegrin seafarers were left without any possibility to be employed on our ships and that this is the activity that Montenegro has a long tradition in. Additionally, the project undoubtedly produced a positive effect on education of our seafarers, because a large number of Montenegrin seafarers had the opportunity to specialize and improve the acquired theoretical knowledge through practical training and experience.

Frequent damages on the ship "Ivo Visin" that rapidly increased the costs of operations with an inevitable loss of the revenues from freights, continuously jeopardized investment programme and economic justification of further implemenation of this sub-project. Investment project ended without losses, which means that the funds from the sale of the "Kotor Bay" ship, where the Government of Montenegro had 33% of share or 1,070,085.00 USD were spent to end the project "Ivo Visin Shipping Ltd", i.e. keeping liquidity of that company and covering turnover capital by the time of collection of claims for suffered and liquidated damage for M/B "Ivo Visin". Both shipping companies were liquidated in 2009, immediately after liquidation of all averages and covering all the claims originating therefrom.

Other project of reviatization of Montenegrin maritime economy is related to the procurement of ships for the shipping companies "Montenegrin Navigation" (Crnogorska plovidba) AD Kotor and "Bar Navigation" (Barska plovidba) AD.

After the adoption of the Transport Development Strategy in 2008 that recognized revitalization of Montenegrin maritime fleet as one of strategic goals, Montenegro started creating conditions for implementation of the project. During the visit of Montenegrin delegation to the People's Republic of China in 2010 a Memorandum of Understanding was signed between Montenegro and Poly Technologies Inc. from Bejing that built merchant ships for Montenegrin fleet. First ships for transport of bulk cargo of the type "handy size" were procured for the shipping company AD "Crnogorska plovidba" Kotor that was established in 2004 within the project of revitalization of Montenegrin maritime fleet. For the purpose of building these ships a loan agreement was signed with "The Export-Import Bank of China" under the following conditions: grace period of 5 years, fixed interest rate of 3%, repayment period of 15 years, with the downpayment of the company in the amount of 15%. The price of the ships was 55,760,000 USD. Takeover of the first ship "Kotor" was conducted in the first half of 2012, and of the second ship "Dvadesetprvi maj" in the second half of 2012. From the moment of putting the ships to use untill the end of 2014 the amounts for the lease of ships ensured stable revenues and AD "Crnogorska plovidba" was in the position to cover its loan liabilities regularly until 2015 when the grace period expired.

AD "Barska plovidba" Bar is the second shipping company that in the second half of 2014 took over two cargo ships "BAR" and "BUDVA" within the project of revitalization of Montenegrin maritime fleet. The state of Montenegro has a majority package of shares in this company. These ships are intended for transport of bulk cargo. Its type is "handy size" bulk carrier, and its DWT is 36,000 tons. To secure the supply of these ships the company concluded a loan agreement with "The Export-Import Bank of China" with the following conditions: 5 years of grace period, fixed interest rate of 2%, repayment period of 20 years. The price of the ships amounted to 46,400,000 USD. This company regularly and independently serviced its due liabilities related to this loan by the beginning of 2018.

Since 2015 leases in the international freight market have been dropping significantly. It led to a drop in revenues of these two companies with all the ensuing consequences. In this respect the Government of Montenegro prepared an analysis of rationalization of operations of these companies through the adoption of an optimum model of operation. In the forthcoming period remedial measures will be implemented.

As for Montenegrin ships in international navigation, private sector gave a significant contribution to preserving maritime tradition in Montenegro.

In addition to the shipowners referred to above, there is a significant number of internal navigation shipowners in Montenegro that transport passengers or do some other commercial activities.

One of them is the shipping company "Pomorski saobraćaj" DOO that owns and manages the fleet of six ferry boats that connect two shores within the Boka-Kotor Bay in the area of the bay strait Verige. Regular transport is done in the settlement Kamenari, on the side of Herceg Novi and the settlement Lepetani on the side of Tivat. In order to modernize the fleet and improve the quality of its services, this company built in Slovenia and took over the ship "Grbalj" in 2014. It is the largest ship in the fleet of this shipowners. In 2011 this company took over the second largest ship in its fleet under the name "Teodo".

Strategy for Development of Maritime Economy envisages restructuring of shipping companies "Crnogorska plovidba" AD Kotor and "Barska plovidba" AD Bar in order to ensure their sustainability and financial stability, support for the procurement of a RO-RO passenger ship to do international maritime transport and smooth liner transport of cargo and passengers between Montenegro and other countries of the region by domestic shipowners and tax reliefs and other facilities to encourage development of internal maritime transport by using "eco-ships".

B.5.1.4 Maritime Insurance Companies and Maritime Insurance

In principle, according to the system Insurance Law²⁷, activities of insurance, co-insurance and reinsurance may be done by insurance companies or reinsurance companies with head offices in Montenegro licenced by the independent regulatory authority for insurance or reinsurance activities. These activities may also be conducted by a part of an insurance company – branch licenced by the regulatory authority for insurance or reinsurance activities in Montenegro.

According to insurance practice and current legislation, insurance of persons and property is voluntary and can be mandatory only in cases defined in the law. According to territorial principle, which is a constituent part of the Insurance Law, property and persons in Montenegro may be insured only with the insurance company established according to that law. As an exception to this rule, foreign insurance company may insure: 1) air and maritime transport above mandatory insurances in transport; 2) foreign physical persons who live and reside in Montenegro and property of such persons, except for mandatory insurance. The Government of Montenegro may stipulate other conditions under which the property and persons referred to in paragraph 1 of this Article may be insured with a foreign insurance company.

When it comes to maritime insurance, it can be noted that this matter is regulated in the federal Law on Maritime and Inland Navigation. The provisions of that law apply to:

- a. Insurance of ship, its engines, devices, equipment and supplies, as well as of goods and other things transported by the ship or being located on it;
- Insurance of freight, insurance costs, costs of equipping the ship, costs of joint average, renumeration for salvage, expected profit, comission, salaries of the crew, lien and other rights and material benefits that exist or can be justifiedly expected in relation to navigation or ship transport of goods and can be estimated in money;
- c. Insurance from liability for damage inflicted on third parties in relation to property rights or using the ship and other things listed in item 1 above owned by physical or legal entities.

Provisions of this law also apply: to insurance of ships that are being built and to things intended for building such ships, as well as to insurance of things that before or after being transported by the ship are located in storages, warehouses or other places, or are transported by any other means of transport; to reinsurance of the above items as well as to other insurances and reinsurances if concluded with the insurance policies or conditions common for navigation insurance. Provisions of this law apply also to mutual insurance from navigation risks, unless they are contrary to the nature of the relations of these insurances.

Insurance for a ship covers the ship's hull, its engines, devices and equipment, regular stocks of fuel, lubricants and other ship material, as well as the stocks of food and drink needed for the ship's crew. This type of insurance is called Hull and Machinery insurance. Market for this type of insurance is concentrated in London. This insurance is not mandatory, but the needs of navigation, requirements of the ordering entity for the ship or lesee of the ship actually impose it. Therefore it can be even said that without Hull and Machinery Insurance it is practically impossible to have commercial exploitation of a ship. Given the teritorial principle, national shipowners take this type of insurance through national insurance companies that most frequently act like "front" insurers. As for smaller vessels, majority of national insurance companies offer casco insurance of vessels. This type of insurance is mostly taken for boats, yachts and internal navigation ships and other vessels.

In the context of analysis of insurance from liability in maritime transport, it is worth mentioning the provisions on extra-contractual liability from the Law on Maritime and Inland Navigation. Extra contractual liability implies the liability for damage inflicted by the ship or any other vessel to persons and things outside of the ship and to the environement. When the damage occurs an extra-contractual relation is established in which one party is obliged

-

²⁷ Insurance Law (Official Gazette of the Republic of Montenegro 78/2006 and 19/2007 - corrigendum and Official Gazette of Montenegro 53/2009 – other law, 40/2011 – other law, 45/2012, 6/2013 and 55/2016)

to compensate for the damage it inflicted on the other party, while the other party is authorized to claim damages. These provisions do not apply to colision of ships and nuclear damage. Provisions on extra-contractual liability are applied to other vessels as well, regardless of their size, as well as on hydroplanes while they are on the water.

P&I insurance is related to liability of the shipowners towards third parties. It is provided by P&I clubs, and domestic shipowners take such insurance directly from the P&I club, which is in line with the territorial principle defined in the Insurance Law. Although without this insurance it is impossible to exploit a ship commercially, the law defines that it is mandatory for all ships of 300 GT and above. Article 33 of the Law on Safety of Maritime Navigation, Official Gazette of Montenegro 62/2013, 6/2014 - corrigendum, 47/2015, 71/2017 and 34/2019) stipulates that a Montenegrin ship of 300 GT and above, except for the war ships, anciliary war ships or public vessels owned by the state have to have a certificate of insurance from liability for maritime claims in line with the International Convention on Limitation of Liability for Maritime Claims from 1976 up to the amount of insurance defined in the Protocol 1996 to this Convention²⁸. This insurance can be with or without a franchise depending on the type of coverage of the members of the International group of P&I clubs or orher appropriate financial guarantee (guarantee of a bank or another similar financial institution). This type of insurance is mandatory also for all the ships of 300BT and above that enter territorial sea of Montenegro. Provisions of Article referred to above transpose EU Directive 2009/20/EC into Montenegrin legislation.

This Directive is at the same time an expression of the political will of Member Staates to acceede International Convention on Limitation of Liability for Maritime Claims as amended by the 1996 Protocol and to implement this Convention in national legislation. The Preamble of this Convention clearly underlines: "On 9 October 2008, the Member States adopted a statement in which they unanimously recognized the importance of the application of the 1996 Protocol." 29

Mandatory financial sureties, i.e. insurance for certain categories of ships are also envisaged in the Law on Protection of the Sea from Pollution of Vessels (Official Gazette of Montenegro 020/11 of 15/04/2011, 026/11 of 30/05/2011, 027/14 of 30/06/2014) which transposes into national legislation the provisions of International Convention on Civil Liability for Bunker Oil Polution Damage, BUNKER 2001.

The Law on Mandatory Insurance in Transport³⁰ regulates insurance of owners, i.e. users of vessels from liability for damage inflicted on third persons. Owner, i.e. authorized user of vessel that is entered according to legislation on registration of vessels into the register of vessels, is obliged to conclude a contract on insurance from liability for damage he inflicts using the vessel to third parties in form of bodily injuries, harms for health or death. Damage includes the damage inflicted on third persons due to a fall of things from the vessel or ejecting things our from the vessel. Thus, this insurance does not cover the damage that the vessel might inflict on the things outside of a ship and on the environment, or the damage stemming from collision of vessels. Owner, i.e. authorized user of a foreign vessel, before obtaining permission for navigating in the internal marine waters and territorial sea of Montenegro, i.e. that navigates in the internal marine waters and territorial sea of Montenegro, has to be insured from this liability unless some other security is provided for compensation of damage or unless international treaty requires otherwise.

This Law defines mandatory insurance of passengers in public transport from consequences of accidents. Owners, i.e. users renting or leasing a vessel that serve for transport of passengers in public transport are obliged to conclude a contract on insurance of passengers in public transport from consequences of accidents, and they are obliged to submit such contract to the relevant authority in the process of registration and extension of registration of a vessel used for commercial purposes, i.e. transport of passengers.

In the context of the above, when it comes to vessels whose gross tonnage is below 300, there is a deficiency in system solutions for mandatory insurance in maritime transport, which can constitute a barrier for further development of nautical tourism. This deficiency lies in the risks included in the analysis of the Law on Mandatory Insurance in Transport presented above. Since this is a very complex field, solving these issues will require an

²⁸ Montenegro has not yet acceded to this Convention, but it took over the Convention's solutions related to the minimum sums for mandatory insurance for the ships above 300 GT by transposing the relevant EU Directive into its national legislation. This was not the case with the provisions o limiting liability of shipowners from the Law on Maritime and Inland navigation. Those provisions are out-dated in all aspects and they do not provide an adequate encouragement for development of maritime economy. In the context of achieving strategic goals set in this document and in order to create preconditions for development of national fleet (increasing the number of ships under Montenegrin flag) the procedure for ratifying this international treaty will be started).

²⁹ Maja Radunović, Collection of Papers - Law 1/2020, ISSN 0350-6630, p. 230.

³⁰ Law on Compulsory Transportation Insurance (Official Gazette of Montenegro 44/2012).

inter-sectorial approach and engagement of appropriate experts and human resources potentials. Therefore the drafter of this strategic document envisaged a specific activity aimed at providing an overview and possible innovation of the legal solutions regulating this field.

Apart from this deficiency, further analysis shows that due to system failures there is still a large number of vessels participating in navigation that are duly registered but whose owners do not have an appropriate contract for mandatory insurance from liability or for insurance of passengers in public transport from consequences of accidents. According to current legislation, licence for using a boat for private purposes is issued for the period of five years, while for the boats for commercial activities it is issued for the period of one year. As for yachts, the period of validity of a cerrtificate of registration is three years, regardless of the purpose of the yacht. As for ships, they are most frequently registered for an unlimited period of time, i.e. by the time when conditions are met to make a change in the register or to delete a ship from the register. As an exception to this rule, ships may be registered for a limited period of time if a ship is registered on the basis of a lease agreement. In such a case the period of registration is limited to the period of validity of such a contract. For the sake of clarity we should make a difference here between a periodic technical control and period of validity of a permission for using a boat, i.e. certificate of registration. In addition to this, issuing a licence for navigation of a vessel and extension of the licence can be done only if a proof of concluded insurance contract required in the law is submmitted to the relevant authority. Owner of a vessel that is not subject to mandatory annual checks is obliged to conclude an insurance contract before obtaining a licence for navigation that lasts for more than a year and to renew the insurance during the period of validity of that licence. Practice has shown that this imperative legal provision is not enough because the owners, i.e. users of vessels conclude mandatory insurance contracts only for the first year of registration. That has a negative effect on safety of maritime navigation but also on revenues of national insurance companies. The same goes for foreign boats and yachts. Applying for vignettes they have to submit analogue policy of mandatory insurance that can expire even before the vignette expires. In that respect, implementation of the action plan that is a constituent part of this strategic document includes gradual establishment and updating of the existing electronic records (Maritime Information System) of Montenegrin registers of ships, boats, yachts and other vessels; foreign vessels in the territorial sea of Montenegro; issued vignettes for private use and commercial activities; concluded contracts on mandatory insurance in transport and other mandatory insurance of users of vessels as well as gradual connection of above database with the existing information system and their exchange between MSPMA, inspection bodies. Harbour Master's Offices, insurance companies, local self-government authorities, and customs authorities. This will ensure that all relevant authorities have precise information in real time about every vessel, i.e. about whether the users of vessels in Montenegrin territorial sea have appropriate insurance contract for transport and if they lease the vessels in a legal manner, i.e. whether they comply with national legislation.

Apart from the above, analysing the system of mandatory insurance, the drafters of this document established that the activities of nautical tourism ports are not covered by mandatory insurance and that this issue is topical also in other states in the region that have developed nautical tourism but want to improve it further. In that respect it is clear that mandatory insurance would raise the level of responsibility of port users, which would result in the reduction of the number of harmful events, through improved security and safety of Montenegrin nautical tourism ports, but vessels too. Finally, owner or user of a vessel will certainly prefer a nautical destination that has established an appropriate legal framework that provides a safe and secure environment for his vessel, but also a fast and efficient collection of claims for any possible damage that may occur during navigation in Montenegrin territorial sea and using the services of nautical tourism port. In principle, the issue of insurance from liability is connected to every economic activity, including the activity of nautical tourism ports. In case of the nautical tourism ports, we could conclude that their activities are risky, given the fact that such ports, on the basis of contracts with users of their berths, care for the assets of high value. The job of caring for assets of high value can by itself cause damage on the assets. That implies liability of the port and the need to have insurance from such liability. In that respect, this strategic document envisages implementation of a concrete activity that aims at making an analysis and possible innovation to the existing legislation that classify this type of insurance into voluntary insurance. This issue has an impact also on the nature and material elements of the contracts on berths, which as such is not directly recognized in the national legislation. In the comparative practice of other traditionally maritime countries it is not the case.

B.5.1.5 Financial Institutions in Maritime Sector

In Montenegro there is no specialized investment fund for financing procurement of ships and generally for financing broader maritime sector. Banking sector is rather passive when it comes to providing credit support to maritime economy operators. One of the credit institutions that can possibly ensure credit funds for procurement of ships under favourable conditions is the Investment Development Fund of Montenegro (IDF). This Fund was established by the Law on Investment-Development Fund of Montenegro A.D.³¹ The goal of establishing this credit institution is to encourage and acelerate economic development of Montenegro. Establishing the Investment-Development fund, the Government of Montenegro ensured an efficient mechanism for supporting the economic development. Activities of IDF include awarding loans and issuing guarantees, as well as performing other activities that ensure support to economic development.

Within the IDF credit facility intended for companies in the field of services there are credits that can be used for investing into fixed assets – tangible assets. IDF can directly finance up to 50% of the value of the overall investment.

Starting from the fact that the analysis of the current state of affairs recognized that Montenegrin banks are passive when it comes to awarding credit support to entities in maritime economy, this strategic document envisages the activity of encouraging financial sector to take part in the financing of investment projects for procuring ships. This activity is to be implemented, inter alia, by explaining to the banks that a ship can be an asset for collateral of a credit and that the banks can be additionally secured thorugh restriction on transferability of the Hull and Machine insurance policy. This is something that banks obviously have not yet recognized.

B.5.1.6 Designing Ships and Shipyards

In line with the Decisionon on classification of ports by purpose, shipyard ports are Shipyard port Bijela and Shipyard port Bonići — Tivat.³²

Shipyard Bijela used to operate under the name AD "Jadransko brodogradilište" Bijela. It was the largers shipyard for refurbisment of ships in Southern Adriatic. Development path of this shipyard started in 1927, when the workshop for construction of wooden ships and sailing boats was established. Development was stopped between 1979 and 1986 due to the 1979 devasting earthquake in Montenegro. The shipyard suffered a huge material damage, while more than 80% of the facilities structurally connected to the shipyard were demolished or sank into the sea. Reconstruction of the shipyard was fiished in 1985, but in 1992 the hardship started again due to the sanctions that UN Security Council imposed on Yugoslavia. After the sanctions were lifted in 1995 the shipyard started working, but under much harder conditions. Accummulated losses and difficult conditions of operations led to the bankruptcy of this company, and the bankruptcy procedure was initiated in June 2015. Property of AD "Jadransko brodogradilište" Bijela was mostly converted into money in the bankruptcy procedure, creditors were mostly settled, while the concession area that includes the shipyard port was taken over by a new concessionaire. On the basis of the Law on Concessions, in its session of 29 November 2018 the Government of Montenegro adopted the Decision on awarding concession for commercial use of the Shipyard port Bijela³³. The concession was awarded to the consortium Adriatic Marinas d.o.o. and B.V. Holding Maatschappij Damen for the period of 30 years. Concession contract for the port of Bijela was signed on 31 November 2018. In the mean time a joint company of these two bidders was established under the name of Montenegro Yacht Services (MYS). The focus of this company is on providing services of maintenance and refurbishment of (mega)yachts. Intention of this project is to contribute to further development of nautical tourism and abandoning seasonality. Implementation of the project assumes also creating conditions for employment in this new facility for refurbishment of super-yachts. This will lead to an increase in the number of yacts in Montenegrin marinas, because it is right to expect that the yacht owners, aware that their vessels can be maintained in Montenegro, will choose Montenegrin marinas as their home ports. This would have a positive impact on Montenegrin economy, particularly if Montenegro could become a hub for business activities related to mega-yacht management, which will be tackled below.

-

³¹Law on Investment Development Fund of Montenegro A.D. (Official Gazette of Montenegro 88, of 31 December 2009).

³² Decision on classification of ports by purpose (Official Gazette of Montenegro, 070/17 of 27 October 2017, 050/18 of 20 July 2018)

³³ Decision on awarding concession for commercial use of the Shipyard port Bijela (Official Gazette of Montenegro 077/18 of 30 November 2018)

Companies Damen and Adriatic Marinas, i.e. MYS have prepared a voluminous investment programme. It envisages the construction of a floating dock, area for yacht washing and solid platform, plant for painting yachts and equipment, modification and reconstruction of quays for servicing yachts.



Image 9: Graphic presentation of the new shipyard in Bijela - Quay, ship lift and new floating dock

Total investment in the period of the first three years amounts to 20 million euro:

- year 1: 2 million euro primarily for development of the existing site and infrastructure; (first year of the Investment period will start after remediation of soil is finished and after the certificate is issued confirming that the land is cleaned);
- year 2: 6 million euro primarily for investment into new infrastructure and suprastructure and
- year 3: 12 million euro primarily for invesment into new infrastructure and suprastructure.



Image 10: Graphic presentation of the new shipyard in Bijela - bird's eye view

It can certainly be said that this is the infrastructural project whose implementation can be expected to bring significant progress in development of maritime economy, because this shipyard will certainly generate new jobs, and it is expected that some domestic companies from a broader maritime sector will have direct or indirect benefits from the implementation of this investment project.



image. 11: Graphic presentation of the new shipyard in Bijela – bird's eye view34

As for the shipyard port Bonići-tivat, the activities of shipbuilding and repairs are done by the company "NAVAR Incorporated" from Tivat. "Navar Incorporated" built the area for refurbishment of yachts with two travel lifts (DWT of 200 and 60 tons). They have capacities for building and repairing smaller vessels, patrol boats, transport boats and yachts. There is also a project bureau within this shipyard and vessels are only custom made. It is important to note that very soon the concession status of this shipyard will be finalized, so the state can expect significant revenues from fixed and variable concession fees.



Image 12: Shipyard port Bonići

It is worth noting that these shipyards are primarily focused on vessels for sport and leisure and therefore there is a need to ensure conditions for regular and extraordinary refurbishment of the ships for maritime internal navigation

³⁴ Source for images 10, 11 and 12: Consortium Adriatic Marinas-Damen Strategy for Development of Maritime Economy 2020-2030

(ferries, tugboats, pusher boats, fishing boats, smaller passenger ships and boats for commercial activities and other vessels).

B.5.1.7 Information Technologies in Maritime Sector

Montenegro needs introduction of information technologies for all modes of transport in the context of alignment with the standards applied to the transport network of the European Union. Montenegro lacks experience and appropriate organization and institutional structures for coordination and management of the process of introduction of these technologies. Below is the list of IT systems used in Montenegro and related to maritime transport:

- VTMIS (Vessel Traffic Monitoring And Information System) is the system for supervision, control and information in maritime transport that comprises various sensors: radar, VHF radio, meteo station, AIS, radio goniometer, CCTV cameras and links. The system is intended for regulating maritime transport and for use in cases of search and rescue at the sea. Within the VTMIS the VTS service (Vessel Traffic Services) provides two types of service: Costal VTS and Port VTS. Montenegro introduced Coastal VTW that has been operational since 2015 and functions in line with the VTS Rulebook. Implementation of VTMIS also works on attempts to predict, prevent and mitigate with different measures high risks of marine pollution, In the first stage VTMIS was established as coastal system (Coastal VTS) that includes sensors (radar, VHF transreceivers, radio goniometer, AIS equipment, meteo stations, system for links and redundant links, diesel generators etc.) in the locations Mavrijan (Ulcinj), Crni rt (Bar) and Obosnik (Ulcinj);
- LRIT (Long Range Indentification and Tracking) is the system for tracking ships (Flag State), in line with the SOLAS Convention. Using this system ships send their positions to Data Centre every six hours. The system also ensures information about foreign ships that navigate towards Montenegrin ports and it is also used for search and rescue at the sea:
- CSN (CleanSeaNet) is the system for satelite detection of the potential oil spills, and it is provided by the
 European Maritime Safety Agency (EMSA) through the SEG portal (SafeSeaNet Ecosystem GUI). Radar
 installed on a satelite detects potential polution of the sea on the basis of the conditions. EMSA operational
 centre processes the information and sends it to the countries using the system so that they can have an
 insight and be able to perform checks. The response and check is required within one hour. Operators in the
 Maritime Operational Centre register the feedback into the SEG portal;
- **MARES** is the European system for exchange of AIS data (Automatic Indentification System)used by EU countries. Montengro exchanges AIS data with MARES system which is under the supervision of EMSA.
- SSN (SafeSeaNet) Montenegro currently exchanges data with EMSA (European Maritime Safety Agency), through VTMIS system and uses the latest version of SafeSeaNet V3 (version 3). For now the information go one way and the system includes two functionalities that SafeSeaNet offers:
 - sending AIS data to EMSA, through the MARES system that MSPMA is connected to since 2014, as the result of MEDESS4MS project;
 - sending PortPlus messages to EMSA, containing data about notifications of arrival/departure of ships to
 and from Montenegrin ports, which is very important for THETIS because in this way the system would
 get information through PortPlus messages, PSC would be automated and PSC officers would get
 notifications of what ships they should inspect through the system used by PSC inspectors;
- AIS (Automatic Identification System) is an automatic tracking system that uses transreceivers on ships. This system is used by Vessel Traffic Services (VTS). Where satelites are used to detect AIS signatures, the term that is used is Satelit-AIS (S-AIS). AIS information supplements marine radar that is still the primary method of collision avoidance in maritime transport. Information provided by AIS equipment, such as unique identification, position, course and speed, can be displayed on a screen or on an Electronic Chart Display and Information System (ECDIS). AIS is intended to assist vessel's watchstanding officers and allow maritime authorities to track and monitor vessel movement. AIS integrates a standardized VHF transreceiver with a positioning system such as a GPS receiver, with other electrionic navigation sensors, such as gyrocompass or rate turn indicator. The Ministry of Agriculture uses the Fisheries Information System FIS that operates within Automatic Identification System (AIS). Approach to this system is limited for registered users. Automatic Identification System (AIS) uses electronic base of data on yachts, boats and ships registered in Montenegrin registers;
- **SEG** SafeSeaNet Ecosystem GUI is a new platform that will provide information about maritime control of ships, maritime security and safety, tracking fishing ships, preventing marine pollution and preventing illegal border crossings by vessels. SEG interface can be followed via mobile applications on smart phones and

tablets. The integrated SED portal includes all services of CleanSeaNet, LRIT, THETIS etc. The system is very efficient in terms of detection of ships in the entire territory of European Union and it also ensures back-tracking of the ship movement history for a long period of time (historic track).

- Port Community System (PCS) is a centralized and automatized system for exchange of information and
 documents between organizations and maritime authorities. PCS is an electronic platform aimed at connecting
 various information systems of different organizations and entities in the port operations. "Luka Bar" AD started
 developing PCS in the period 2012-2014 within the strategic project ADB Multiplatform, financed from the EU
 South-East Europe cooperation programme (SEE programme). Given the scope and complexity, the testing
 of the developed system took the entire 2015 and from May 2016 the system is fully operational.
- CISE Common Information Sharing Environment is a network standard developed by EU for interoperability of services in charge of maritime security, defense, environment protection, state border surveillance, customs, fisheries and spatial planning.
- STM Sea Traffic Management is a complex system for managing sea traffic that is currently being developed and is analogous to the air traffic management system. The aim of this system is to improve safety at the sea and reduce risks of possible collisions and stranding. STM provides possibilities for: preparing and sending the route to be checked by coordination centres on the shore; creating an optimum route that ensures minimum waiting time and fuel consumption; exchaning the route with other ships, sending navigation warnings to the ships in the vicinity, better cooperation with SAR units and sending areas for search on the electronic vessel map etc.

In order to make maritime transport easier and to reduce administrative costs, Montenegro should simplify and additionally modernize the formalities for notification of arrival and acceptance of ships, declaring cargo, i.e. providing free traffic in Montenegrin ports through implementation of the Maritime National Single Window (MNSW). In that way Montenegro would align these procedures with the relevant EU Directive 2010/65/EU, which is in line with the European Commission recommendations. PCS can be a starting point for development of the Maritime National Single Window, depending on the results of the study related to MNSW implementation.

It is worth noting that within the second stage of IPA II, using the EU pre-accession funds, Montenegro has already allocated funds for implementation of "MNSW", project that primarily envisages development of a study and then the implementation of the system.

This measure will be implemented by the Ministry of Transport and Maritime Affairs and Maritime Safety and Port Management Administration with other state authorities that have competences in granting approvals for free traffic of ships.

In that respect the Action Plan envisages adoption of secondary legislation after development of a study that will provide a detailed plan for implementation of this measure. It is realistic to expect that the end of implementation of this complex IT project, including the training of users and release of the system will happen by the end of 2023. MNSW will shorten the waiting time for getting approvals for ships to enter/depart from Montenegrin ports and that will improve competitiveness of our ports. The practice that has been used so far to exchange documents after a ship enters our port will be replaced by an electronic procedure. That will shorten the time that the ship spends in the port and reduce administrative costs related to entering and departing of ships. This will reduce the costs for shipowners, which will also have a positive effect on the comeptitiveness of our ports.

Reporting arrival of a ship is now done in the manner defined in Article 46 of the Law on Safety of Maritime Navigation and in paralel through the PCS system. Not all the state authorities, i.e. port operators and maritime agents are connected to this system.

B.5.1.8 Maritime Education and Training of Seafarers

Education in maritime sector is organized in Montenegro on the secondary school level and on the level of higher education.

Secondary School Education is implemented in the Public Institution Vocational Secondary School in Bar and Public Institution Secondary Maritime School in Kotor. They offer education profiles of nautical cadet and marine

engineering cadet. Secondary schools offer programme of adult education which includes taking exams for requalification to these profiles.

Higher Education in Montenegro, within two universities, in addition to the study programmes for educating future deck and engine officers, offers education programmes for the profiles related to maritime management, port management and nautical tourism.

Maritime Faculty Kotor of the University of Montenegro is the oldest institution in Montenegro dealing with higher education in maritime sector. It was established in 1959 as the High Maritime School and in 1982 it grew into the Maritime Faculty. Since 2004, on the basis of Higher Education Law, teaching process in this Faculty is implemented in line with the Bologna Declaration principles on all three levels of studies: Bachelor, Master and PhD studies.

According to the latest accrediation from 2017 the Maritime Faculty in Kotor accredited the Bachelor study programmes: Nautics and Maritime Transport; Marine Engineering, Maritime Electrical Engineering and Maritime Management and Logistics. In addition to being accredited within state University, all the technical study programmes for education of the future officers are certified also by international classification societies as they meet the requirements of the IMO STCW Convention.

Current study programmes within the Faculty are organized according to the model 3+2+3. From the academic year 2020/2021 the Faculty will thus get the first generation of Master students according to the newly accredited system of studies. Within the Master and PhD studies, the students can choose among the following courses: Maritime Science, Maritime Management and Logistics³⁵.

University Adriatik is a private University established in 2017 by fusion of the faculty units from Bar (established in 2012), Tivat (established in 2009) and Ulcinj. In addition to higher education in the field of nautics and marine engineering, this University offers courses in port management and nautical tourism on the level of Bachelor, Specialist and Master studies. Within this University there are three faculties for maritime education:

- Maritime Faculty Bar has three study programmes: Nautics, Marine Engineering and Port Management.
 First year of Bachelor Studies is organized together for all study programmes, while they have one elective subject. In the second year the students choose their profile and course;
- Faculty for Mediterannean Business Studies Tivat on the Bchelor level offers academic studies in the
 following courses: Management and Security of Marinas and Yachts (Bsc/Ba), Management in Customs,
 Forwarding and Agency Business (Bsc/Ba), management in Nautic Tourism, Sport and Recreation
 (Bsc/Ba). On the level of specialist academic studies the courses offered by this university are: Nautical
 Tourism and Managing Marinas, and on the level of academic master studies the course Nautical Tourism
 (MSc/MA).
- Faculty for Mediterannean Business Studies on the Bachelor level offers academic studies in the following courses: Management and Security of Marinas and Yachts (Bsc/Ba), Management in Customs, Forwarding and Agency Business (Bsc/Ba), management in Nautical Tourism, Sport and Recreation (Bsc/Ba)³⁶.

In addition to the institutios of formal education, Montenegrin and other seafarers can use training centres that offer training and required licences for career development and promotion. Licenced training centres in the maritime sector in Montenegro are:

- Bar: BMV Shipping Services Centre for training of seafarers and Training centre of the Maritime Faculty
- Tivat: Centre for training seafarers Faculty for Mediterannean Business Studies,
- Kotor: Maritime Faculty;
- Kotor: Secondary Maritime School;
- Herceg Novi: Azalea Maritime Bijela.

-

³⁵ http://www.pfkotor.ucg.ac.me/

³⁶ http://www.univerzitetadriatik.com/

B.5.1.9 Institutions for Research, Innovation and Development in the Maritime Sector

Research and development field is regulated in the Law on Science and Research Activities³⁷ which stipulates in details organization, conditions, financing of science and research activities and other issues of importance for this field. In line with this law the Ministry of Science issues licences for science and research activities. Key research institutions in the maritime sector in the University of Montenegro are the Marine Biology Institute in Kotor and Maritime Faculty in Kotor.

As already noted above, the key goal of this faculty is to prepare highly educated human resources in the maritime sector, but also to ensure development of maritime research and science. Maritime Faculty in Kotor has laboratories for demonstrations: engine laboratory, fuel laboratory, laboratory for protection of marine environment and laboratory for ship electrotechnics. The laboratories have the state-of-art equipment for measuring techniques produced by leading manufacturers. Within its science and research work the Maritime Faculty implements the following projects:

- Tempus project "Modernizing and harmonizing maritime education in Montenegro and Albania MArED". As a project coordinator the Faculty successfully cooperates with the total number of 16 partner institutions that include partners from academic community, partners from economy, including small and medium size companies, partners from NGO sector and representatives of state institutions. Key goals of the project are as follows: harmonization of the existing and development of new academic study programmes and IMO model courses for training of seafarers in the maritime education institutions in Montenegro and Albania; improving infrastructural and human potentials, creating preconditions for developent of mobility schemes for students and faculty between partner institutions and improvement of the existing conditions for cooperation with the maritime economic operators;
- Tempus project "Development of Sustainable Interrelations between Education, Research and Innovation at WBC Universities in Nanotechnologies and Advanced Materials where Innovation Means Business. The goal is to establish the state of affairs in WB countries in nanotechnology and advanced materials in relation to: their application in medicine and clinical practice and industrial engineering, establishing a platform for connecting research with education and innovation and accelerate development of industry/clinics, equipping university units in nanotechnology and advanced materials in three WB countries (Montenegro, Serbia and Bosnia and Herzegovina) and transfer of knowledge in this field;
- IPA project Human Resources Development for 2012-2013: 'Knowledge transfer for increased maritime
 competences in Montenegro" whose goal is to improve cooperation between the representatives of public
 and private sector in maritime economy, transfer of knowledge and experience between the
 representatives of academy and industry, strengthening capacities and development of potentials;
- INTERREG IPA CBC Programme: "PORTS" includes implementation of various activities in the Puglia region in Italy and in the entire territory of Albania and Montenegro. Specific objectives of the projets are: strengthening maritime connections and introducing inter-modality in the form of sustainable development, increase business cooperation through promotion and territorial marketing, improving coordination among relevant stakeholders with a view to promoting sustainable transport and development of new and global visions for cross-border presence in the aim of promoting economic competitiveness of the region.

Marine Biology Institute was established in 1961. It is an organizational unit of the University of Montenegro and the only scientific research institution in the country that deals with protection and study of the Adriatic Sea. Its structure includes a total of five laboratories: Laboratory for Marine Chemistry and Oceanography, Laboratory for Ichthyology and Marine Fisheries, Laboratory for Plankton and Quality of Marine Waters, Laboratory for Benthos and Marine Protection, Laboratory for Development Research and Mariculture. Within the science-research activities the Institute implements numerous projects: Studying, protecting and potentially growing the Mediterranean noble pen shell (Pinna nobilis) in the Boka-Kotor Bay; National programme of collecting data in marine fisheries, Monitoring and bio-monitoring of water quality for mariculture and assessment of natural resources of shells in Boka-Kotor Bay, Improving protection of the sea in European seas and seas in the vicinity. Potential use of shells of mussels and oysters as bio sorbents for removing heavy metals, marine and freshwater microalgae as an alternative source of protein in animal feed, Improvement of protection of the sea in European seas and seas in the vicinity, etc.

_

³⁷ Law on Science and Research Activities (Official Gazette of Montenegro 080/10 of 31 December 2010, 040/11 of 8 August 2011, 057/14 of 26 December 2014)

In addition to the above, important licenced science-research institutions in the maritime field include:

- Centre for Eco-Toxicological Research (CETR);
- Agency for Protection of Environment;
- Institute for Transport;
- Private institution Institute for Science Research and Development Ulcinj and
- University "Adriatik" Maritime Faculty Bar.

It should be noted here that MSPMA is recognized as the institution that in European context can give a contribution to research activities. As such it participated in Montenegro in two EU projects within the Research and Development Programme, Horizon 2020:

- COMPASS2020 is the project that will introduce revolutionary changes in supervision of maritime transport
 in Europe, using the perfect integration of unmanned means (aircrafts and vessels) with other means into
 an integrated operative system. This innovative approach will be the first step that will lead to changes in
 operational procedures where maritime authorities will be using unmanned means in operations.
- ANDROMEDA is an international research project with the full name "Enhanced Common Information Sharing Environment for Border Command, Control and Coordination Systems" coordinated by the Greek Ministry of Maritime Affairs and Insular Policy. Implementation of ANDROMEDA will result in the use of full potentials of the concept of CISE - Common Information Sharing Environment, through validation of the systems for command, control, and coordination compatible with CISE, in a loger period by several coastal and border agencies.

B.5.1.10 Ship Classification Societies

The ships that are hired in international navigation have to comply with international safety and security standards as well as standards for environment protection contained in the IMO instruments. Implementation and enforcement of this legislation is within the competences of every flag state that can delegate all or a part of its authorities in terms of statutory certification of ships and technical supervision to societies for classification. As the ships grow bigger and more complex, only classification societies like IACS members have the required technical and expert capacities to control them and inspect them wherever possible through their highly developed international network of inspectors.

According to the Law on Safety of Maritime Navigation, technical supervision for the purposes of establishing capacity of ship for navigation and issuing appropriate ship documents and books can be done also by an organization authorized by the Government and recognized by the European Commission for performing technical supervision and statutory certification of ships.

Agreement on regulating mutual rights and obligations with such a recognized organization is concluded by the Maritime Safety and Port Management Administration.

Liability of Montenegro as a flag state cannot be transferred to the recognized organization by an agreement. The same goes for the issuance of the following ship documents:

- Certificate of Registry;
- Permanent records of the ship;
- Certificate on the minimum number of crew members:
- Licences for ship radio station;
- Declarations that seafarers meeti requirements for work
- Documents defiend in international treaties as non-transferable to the recognized organization.

According to Decree on organization and the manner of work of state administration, Maritime Safety and Port Management Administration, inter alia, does the activities related to establishing capacity of vessels for navigation: performing technical supervision, issuing ship documents, books and certificates, adopting technical rules and calculating tonnage when calibrating vessels. International Convention for the Safety of Life at Sea (SOLAS). International Convention for the Prevention of Pollution from Ships (MARPOL) and other international regulations envisage that the relevant authority may entrust the activities of inspection of vessels to authorized inspectors or Recognized Organizations. Since these administrations are responsible for ensuring that ships under their flags meet certain provisions of international conventions for secure and safe navigation, Montenegro uses international practice in terms of transfer of authorities to Recognized Organizations that are to act on behalf of the responsible administration body, i.e. flag state. IMO Committee for Safety of Navigation adopted the Model Agreement for Transfer of Authorities to Recognized Organizations that act on behalf of the Responsible Administration. Since in spite of transferring authorities to Recognized Organizations, it is the state that always has final responsibility, IMO resolutions define models of control and supervision of the work of organizations, societies and institutes. Transfer of authorities is envisaged in the IMO Resolutions A, 739 (18), A, 789 (19), with annexes. Since shipowner has the right to choose a Recognized Organization, the Government of Montenegro signed agreements with Bureau Veritas (BV), Croatian Ship Registry (HRB) and Russian Maritime Registry (RS), and relatively recently also with the Italian classification society RINA. With a view to strengthening competitiveness of Montenegrin flag, this strategic document envisages establishment of contractual relations on transfer of authorities for statutory certification and technical supervision also with other Recognized Organizations, so that conditions can be created to increase the number of ships under Montenegrin flag.

B.5.1.11 Maritime Agents and Brokers

Activity of maritime agencies in Montenegro has not been regulated in any law so far, except for the part related to relations of obligations between maritime agents and their clients. In the intention to regulate the activities of maritime agencies, respecting the initiatives of the industry, the Ministry of Transport and Maritime Affairs developed a Proposal Law on Maritime Agency activities. After adopting the Proposal in December 2019 the Government of Montenegro sent it to the Parliament of Montenegro so that it can be adopted in the parliamentary procedure.

Activities of maritime agencies include the work done by maritime agents and maritime brokers. They are related to navigation, ships and their exploitation, reception and dispatch of ships, care about passengers and crew, mediation in concluding contracts on exploiting ships, purchase and sale, building, conversion, ship repair, ship insurance, liability of shipowners and operators and providing supplies for ships. Maritime agent is a legal entity that does administrative and commercial activities and other formalities in the procedure of reception and dispatch of ships as well as common activities of representing ship owner and operator on the basis of a power of attorney. Maritime broker is a legal entity that mediates in the process of concluding contracts for exploitation of ships, purchase and sale, building and conversion of ships, ship repair and contracts on navigation insurance, on the basis of a power of attorney. Maritime agency activity can be done by the agent as a line agent, agent in free navigation, agent for purchase and sale of ships and insurance agent.

Activities of maritime agencies, although strongly present in Montenegro, have so far not been adequatly regulated. Therefore the conditions for raising this entire field on a higher level did not exist and the state did not have any benefit from these activities, which it justifiably should have. This piece of legislation also supports establishment of new economic entities in the market and boosts market competition.

This Proposal Law for the first time defines the manner of entering maritime agents and brokers into the appropriate registers, proofs to be submitted with their request for registration, minimum technical requirements for premises that the work of maritime agency will be done in. It is particularly important that the licences for maritime agents and for maritime brokers have been introduced. They are issued after the candidate successfully passes the professional examination before a commission established by the Minisitry.

In Montenegro services of agents and brokers are provided by companies that have such activities registered within their activities. For now their interests are represented through two associations that currently have 25 members.

The largest number of maritime agents and maritime brokers are members of these associations. However, it is rather certain that other maritime agents who are not members of these associations are active in Montenegro.

B.5.1.12 Ship Chandlers

Supplying ships is done by companies that provide a wide range of services to ships and their crews. Such services include supply of food, oil, water, spare parts for engines or other ship parts, motor oil or crude oil and everything that a ship might need.

Advantage of cooperation with ship chandlers is manifested in the fact that ship can get all the required supplies directly from one entity and rationalise the time and efforts for getting each service and product individually.

Supplying ships is among the port services that, according to the Law on Ports, can be subject to concession for the period of ten years.

This activity is closely linked to customs regulations. According to Article 2 of the Rulebook on special measures of customs supervision and customs procedure for the goods that are used for supplying means of transport in international traffic, vessels can be supplied by technical goods only at piers and in ports from which they are to leave the customs area.

On the basis of Article 4 of this Rulebook, foreign goods for supplying foreign ships, yachts and boats for sport and recreation can be sent through a legal entity registered for supplying vessels from the customs storage located on the pier, i.e. in the port open for international transport on the basis of an invoice and dispatch note. Customs authority at the pier, i.e. in the port, certifies all copies of invoices and dispatch notes. Customs storage, legal entity and customs authority keep one copy each, while other copies travel with the goods and are delivered to the commander of the vessel, i.e. authorized crew member, who certifies one copy of invoice and one copy of dispatch note by a ship seal or his signature in the presence of customs officer, confirming thus the receipt of the goods. Legal entity is obliged to submit to the customs authority a declaratio for re-export of foreign goods at latest by 10th of the month for the goods sold in the previous month. Customs declaration for re-export is submitted together with the specification of the sold goods compiled on the basis of certified invoices, i.e. dispatch notes, and a xerox copy of certified invoices of the legal entity. The goods that are not sold within international lines are returned, with the declaration for being placed into a customs storage. It is done within 24 hours or such goods are kept on the ship, if the ship is under customs supervision or will continue navigating on the international line.

There is no company in Montenegro that deals only with the services of supplying ships. These services are mostly provided by companies that provide other services too (port agents, insurance companies, forwarding agents etc.).

Establishing of the Montenegrin maritime cluster and implementing other activities defined in this strategic document, which can include awarding of concessions for performing this activity, are aimed at improving this field by ensuring that the companies that are now active in this field align their operations with the Customs Law. In the end, this will contribute to competitiveness of Montenegrin ports (including the ports of nautical tourism) because ship supplies will be charged for, delivered and calcllated with zero VAT as envisaged in customs and tax legislation.

B.5.1.13 UPSTREAM Industry - Exploration and Production of Hydrocarbons

Key Montenegrin laws of importance for exploration and production of hydrocarbons are³⁸:

- Law on Exploration and Production of Hydrocarbons (Official Gazette of Montenegro 41/2010, 40/11, 62/13), which is in full compliance with EU Directive (94/22/EK). Adoption of this Law ensured that the future production of hydrocarbons can be implemented in a transparent way and in line with the best international practices;
- Law on Hydrocarbons Tax (Official Gazette of Montenegro 31/14 and 52/16) adopted in Montenegrin Parliament on 16 July 2014. This Law introduced new tax and created policy for taxation of profit from production of oil and gas and profit from construction and use of installations and equipment for production, delivery and transport of oil and gas. The key features of this Law include level of tax rate of 54% and the fact that revenues coming from this tax are shared between the budget of the state and the future oil fund in the proportion 15:85.

Law on Exploration and Production of Hydrocarbons created conditions for large investment and preconditions for development and competitive conditions in research and production of hydrocarbons. A particular focus was put on optimisation in exploiting hydrocarbon resources, respecting in it the principles of national interests of Montenegro in the field of natural resources and ensuring that investors have security and stability in implementing their activities. In the process of drafting these pieces of legislation the team took into account a long global practice

accepted in numerous countries that are successful in hydrocarbons production, as well as relevant EU Directive in this field (EU Directive 94/22/EC).

On the basis of the Law on Exploration and Production of Hydrocarbons a set of secondary legislation pieces was adopted. They, inter alia, regulate the following: relinquishment of blocks and access of third parties to upstream facilities, the manner of calculating and paying fees for the surface and for production of oil and gas, dealienation of blocks for awardig contracts for concessions for production of hydrocarbons in Montenegrin offshore, conditions for drilling and construction of facilities for exploration and production of hydrocarbons, development and production of hydrocarbons, etc.

Ministry of Economy worked intensively in the past on development of Law on Safety Measures in Offsore Exploration ad Production of Hydrocarbons, transposing into national legislation solutions from EU Directive 2013/30/EU on safety of offshore oil and gas operations.

On the basis of Article 60 of the Law on Exploration and Production of Hydrocarbons, the Ministry of Sustainable Development and Tourism adopted a Rulebook on requirements for protection of environment during hydrocarbons operations (Official Gazette of Montenegro 60/12). This Rulebook defines measures to be undertaken during the activites of exploration and production of hydroarbons to ensure protection of the environment.

After the tender procedure was conducted, in September 2016 the Government of Montenegro signed a contract on awarding a concession for offshore production of hydrocarbons in Montenegro with the companies ENI and Novatek, that were awarded blocks 4118-4, 4118-5, 4118-9 and 4118-10. After several months, in March 2017, the Government of Montenegro awarded the second concession contract for offshore production of hydrocarbons in Montenegro for the blocks 4218-30 and 4219-26 to the company Energean Oil & Gas. At the end of 2018, and beginning of 2019 both concessionaires conducted the project of acquisition of 3D seismic data in the blocks awarded in their Contracts for concessions for production of hydrocarbons. After the collected 3D seismic data were processed, they started the process of their interpretation. It is expected that the first exploration drills within the concessions for offshore production of hydrocarbons with the companies ENI and Novatek will be completed in the second half of 2020, which is in line with the mandatory programme of work defined in the awarded concession contracts. The goal is to prove that hydrocarbons exist in the identified prospects.

Gassification of Montenegro (Midstream)

In the context of development of gas industry, taking into acount the set strategic goals defined in the Energy Development Strategy, gas infrastructure is to be built. This primarily refers to gassification of the country and the project of Ionian-Adriatic Pipeline. Project desing for this pipeline that will go through Montenegro is in the stage of development and should be finalized within reasonable time. The plan for this pipeline is that it should connect the Albanian city of Fir with Split in Croatia, ensuring source of natural gas supply for Albania, Montenegro, South of Bosnia and Herzegovina and Croatia. IAP is a branch, i.e. it relies on the Trans-Adriatic Pipeline (TAP), which is a continuation of the Trans-Anatolian Pipeline (TANAP). The plan is to transport gas from Caspian Sea (Azarbaijan) through Turkey, Grece and Albania to Italy. Trans-Anatolian Pipeline started operating in 2019. After the project design was developed and appropriate procedures conducted, the process of looking for funding for this very important infrastructural project will start.

Port Facilities, Anciliary Facilities and Other Services in the Context of Industry of Exploration and Production of Hydrocarbons

It goes without saying that industry of oil and gas in Montenegro can be a significant driver for development of maritime economy. This primarily refers to construction of the anciliary port infrastructure and other land installations for processing and storing hydrocarbons. During the stage of exploration, concessionaires that got the exclusive rights to do offshore upstream activities in Montenegro need port services (storing of equipment and material etc.) and all other services from the broader range of the maritime sector (maritime agents and brokers, customs representation, supporting vessels for offshore exploration of hydrocarbons, supplying facilities for exploration and production of hydrocarbons, ensuring qualified crew and labour, etc.).

In that context, this strategic document defines activities that are to be undertaken so that the local maritime economy entities, joined in the maritime cluster, can recognize the potentials of oil and gas industry. This primarily refers to acquisition of new knowledge and skills through specialization, procurement of special equipment and

ships to support hydrocarbons industry and interaction with concessionaires that represent the side of demand for the services of this type.

Besides, this strategic document envisages activities related to strengthening of maritime-administrative capacities, encouraging development of new technologies and continuous monitoring and improvement of knowledge, rules and regulations aimed at prevention of marine environment pollution by shipping and port activities, operations of exploration and exploitation of hydrocarbons, laying of underwater pipelines, cables and other installations.

B.5.1.14 Dredging

Excavating and deepening of the sea bed is the activity done to remove unnecessary sediments from waterways and if needed for construction of new structures on the water, ports, marinas and shipyards. However, although this activity helps better functioning and development of maritime transport, it has its disadvantages too. Dredging is a great danger for marine environment and it has to be done carefuly with adequate equipment and dredgers. Almost all types of dredgers cause turbidity during excavations. However, the activities that include dredging are sometimes necessary, just like it was the case in the following sites:

- In Kotor, using the system of dredging of the sea bed by water and air underwater pumps the terrain of the surface of about 2000 m² was dredged. On that occasion the rocks were removed to create conditions for the largest world cruisers to enter the Kotor port³⁹;
- In Kumbor, for the needs of development of «Portonovi» project, Agency for Environment Protection issued its consent for the Environment Impact Asessment Study for the works on dredging and disposal of the excavated material in the zone of the nautical toruism port (marina) in Kumbor;
- In Ada Bojana delta, there were some works on removing the surpluss material and dredging the bottom of the Bojana river delta. The works were done in line with the Project for maintaining the free flow of the right branch of river Bojana in the zone of its delta. This project had been prepared by the Water Management Administration;
- In the area Bjelila in Tivat the works were done on removing the sludge and other waste, and on dredging of the sea bed. The initial works were done by the Municipality of Tivat, through the local company «Komunalno» d.o.o., while the Public Company Coastal Zone Management of Montenegro, using the funds for 2018 allocated the amount of 20,000.00 euro for further rehabilitation and overall development of utilities.40

In the context of modernization and construction of port infrastructure envisaged in this strategic document, it is very important that Montenegro has specialized companies for doing the activities of dredging the sea bed. It is envisaged that such companies, as participants in maritime economy, will be members of the Montenegrin maritime cluster and in such a way be at the source of information related to future projects of investing in port infrastructure. In this way these companies will be in the position to render timely the investment decisions related to modernization of machinery and adoption of new technologies in the production process.

B.5.1.15 Ports and Terminals (Cargo, Passengers, "Green" Ports) – Historical Data

Adoption of the Law on Ports marked the beginning of the reform of port activities dividing the ports based on their importance to the ports of national importance and the ports of local importance. Government decision on classification of the ports based on their importance⁴¹, did the following classification:

- Ports of national importance: Commercial port of Bar, Nautical tourism port marina Bar, Commercial port of Kotor and Shipyard port of Bijela.
- Ports of local importance: Port of Budva, Shipyard port of Bonići –Tivat, Port of Tivat–Porto Montenegro, Port of Tivat - Kalimani, Nautical-tourism center - Kotor, Port of Risan, Port of Zelenika, Port of Herceg Novi – city port Škver, Luštica Bay, Port of Kumbor –Portonovi).

³⁹ http://www.aquanaut.co.me/projekat-02.html

⁴⁰ http://www.morskodobro.com/index.php/home/vijesti/1679-sacuvacemo-bjelila-kao-ambijentalnu-cjelinu

⁴¹ Decision on classification of ports by importance (Official Gazette of Montenegro 020/11 of 15 April 2011, 041/12 of 30 July 2012, 014/14 of 22 March 2014, 070/18 of 31 October 2018)

In addition to this classification based on their importance, the Law on Ports also classifies the ports based on the type of maritime transport and based on their purpose. Based on the type of maritime transport they are classified into: ports open for international and internal transport and ports open only for internal transport. Government Decision on classification of ports according to the types of maritime transport⁴² does the following classification:

- Ports for international maritime transport: Bar, Budva, Kotor, Port of Kumbor Portonovi, Tivat (Pier I and Pier II) and Zelenika;
- Ports for internal maritime transport: Bar, Budva, Kotor, Port of Kumbor —Portonovi, Luštica Bay, Tivat
 (Pier I and Pier II), Bonići Tivat and Zelenika.

Decision on classification of ports based on their purpose⁴³ classifies the ports into following categories:

- Commercial ports: Commercial port of Bar and Commercial port of Kotor.,
- Nautical tourism ports marinas: Port of Budva, Luštica Bay, Port of Tivat Porto Montenegro, port of nautical tourism –marina Bar and Port of Kumbor –Portonovi and
- Shipyard ports: Shipyard port Bijela and Shipyard port Bonići Tivat.

The key function of the ports is transport through transhipment of cargo and transport of passengers and the link between maritime and land transport. According to the available data in the period 2010-2017, Montenegrin ports recorded the growth in transhipment and turnover of goods in ports, while in 2018 a slight decline was recorded in trans-shipment and turnover. As for the transport of passengers, data show a decline in the number of passengers by 2016 when the maritime line Bar-Bari was closed after the classification society Bureau Veritas suspended the classification of Sveti Stefan II as a passenger ship because it ceased to meet the technical requirements.

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Turnover of passengers in maritime transport	68,856	69,436	53,259	43,097	42,489	39,198	35,925	-	-
Turnover of goods in maritime transport (t)	441,424	280,190	108,642	51,059	54,640	52,441	41,668	-	-
Turnover of goods in ports (t)	1,758,692	1,749,982	1,227,877	1,295,366	1,241,431	1,488,399	1,645,797	2,096,122	1,963,204
Transhipped tons in ports	1,834,804	1,487,738	1,229,763	1,764,247	1,787,101	1,650,776	1,617,518	2,324,336	1,989,023
Manipulated tons in ports	3,718,000	3,368,937	2,702,515	2,713,047	2,760,042	3,369,942	3,696,210	3,673,312	3,293,338

Table 2: Turnover of passengers and goods in maritime transport

Source: MONSTAT

Port of Bar covers the entire territory of 130 ha of infrastrucrually developed port area. In the port area of the port of Bar there are two terminal operators: "Luka Bar "AD and "Port of Adria" AD Bar.

"Luka Bar" AD has a terminal for cereals of the capacity of 30,000 tons and closed conveyor belt of 250 m that goes in parallel with the railway and which is intended for loading/unloading of cereals into/from the silos; terminal for dry bulk cargo with the operational shore of 554 m and the depth of the relevant aquatorium of 14 m, equipped for transhipment and storage of various types of dry bulk cargo; terminal for liquid cargo; terminal for general cargo, roar cargo and containers with open and closed storages and freezers, passenger terminal with five berths for passenger ships and ferryboats:

_

⁴² Decision on classification of ports by type of maritime transport (Official Gazette of Montenegro 070/17 of 27 October 2017, 050/18 of 20 July 2018, 046/19 of 07 August 2019)

⁴³ Decision on classification of ports by purpose (Official Gazette of Montenegro 070/17 of 27 October 2017, 050/18 of 20 July 2018, 046/19 of 7 August 2019)

 "Port of Adria" AD is located next to the "Luka Bar" AD. It has a container terminal with 330 m of operational shore and depth of 12 m, as well as a state-of-art container lift (40t) and open storage area of the capacity of 2500 TEU and 180 refrigerated containers. It also has two quays for general cargo equipped with port lifts and closed storage area of 7.6 ha and open storage are of 5.86 ha



Image 13: Port of Bar

Structures of hydrotechnical infrastructure (operational shore, quays, breakwaters and other basic infrastructure) are functional, but some parts of infrastructure require priority interventions (transport, electrical, water suppy and sewage infrastructure).

The level of utilization of the capacities of the Port of Bar is significantly below possible, due to numerous factors like: insufficient number of regular ship lines; negligible level of transit; limitations related to the quality of infrastructural connections of the port with the gravitating area etc.

There is a plan to extend the shore in the passenger terminal in the port of Bar and, if that plan is implemented, the existing limitations connected to the small depth of water next to the existing operational berths would be overcome (maximum depth of water next to the berth 54 is currently 5.9 m).

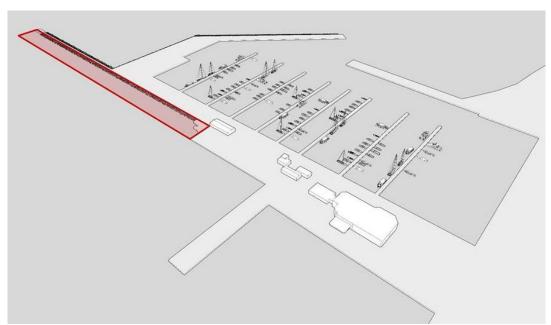


Image 14: Graphic presentation of the project of extension of the operational shore in the passenger terminal of the Port of Bar (Quay V)

Implementation of the above mentioned project would ensure acceptance of medium and large passenger (or combined passenger and cargo) ships and cruisers.

Presentation of the planned extension of the operational shore⁴⁴

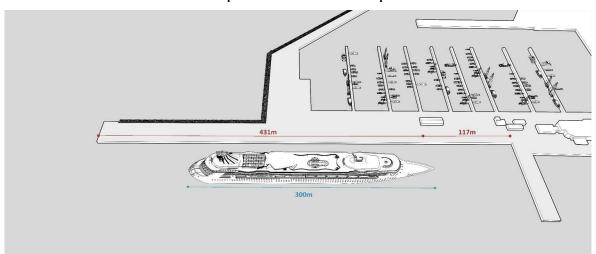


Image 15: Graphic presentation of the project of extension of the operational shore in the passenger terminal of the Port of Bar (Quay V)



Image 16: Graphic presentation of the project of extension of the operational shore in the passenger terminal of the Port of Bar (Quay V)

The extension of the operational shore by 166 m is planned also in the terminal for dry bulk cargo in the Port of Bar. Graphic desing of this project is given below.

⁴⁴ Source for Images 15, 16, 17, 18 and 19: AD "Luka Bar" Strategy for Development of Maritime Economy 2020-2030

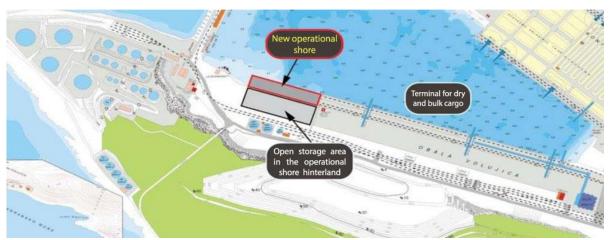


Image 17: Graphic presentation of the project of extension of the operational shore in the terminal for dry bulk cargo

Permanent rehabilitation of the Northern slope of the hill Volujica is also planned in the port of Bar. The goal is to protect infrastructural and suprastructural facilities located at the bottom of the hill and to obtain a new zone of the surface of 7.8 ha for transshipment and storage of dry bulk cargo.

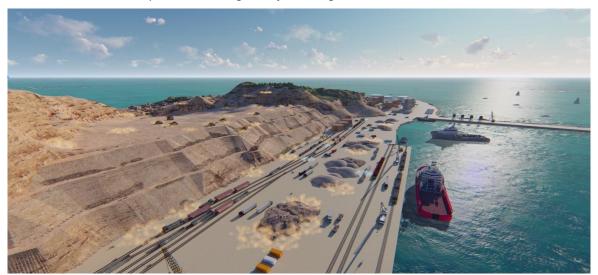


Image 18: Graphic presentation of the project of permanent rehabilitation of the Northern slope of the hill Volujica

— Port of Bar

Port of Kotor is divided into two key parts: port and marina. Operational zone of the aquatorium of the port of Kotor of the total surface of cca 52,000 m2. Operational shore intended for berthing of ships and mega yachts consists of berths I and II. Bert III on the Northern side of the operational shore (of the length of 76 m) is used for berthing smaller vessels – ships of the maximum draft of 4.00 m and mega-yachts in the period of free traffic and ferries on the aft mooring. Operational shore offers high quality conditions for acceptance of ships of around 250 m, depending on the draft of the ship. For the ships that are not longer than 300 m, there is a project of installing an appropriate pylon at the distance of 80 m from the end of Luža. Planning documentation for this project is prepared.

Importance of implementing the project of the pylon and buoys for berthing is contained in the elements that characterize important infrastructural and suprastructural projects that ensure secure and safe berthing for ships::

- Important improvement of safety and security for large ships on berths particularly in difficult weather conditions.
- Creating conditions of no limit berthing for ships in the port of Kotor in terms of the length and draught of the ships,
- Reducing emmissions of damaging particles from the following gasses CO₂, NO_x, SO_x,
- Increasing the capacity of the port without constructing operational shore,
- Ensuring extension of the season in winter months, by securing safe berths for cruisers,

- Increasing availability of operational shore in the zone outside of the border crossing towards the marina part for the needs of mega yachts and providing logistic services for urban logistics
- Economic and financial improvement of operations.

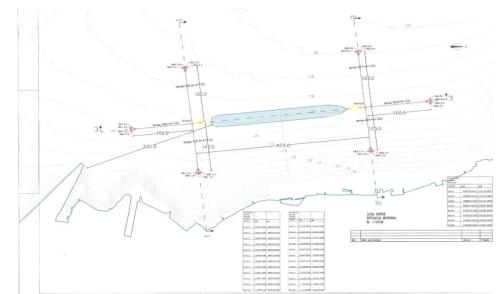


Image 19: Presentation of the solution for the berth of cruiser on the mooring buoys - Port of Kotor

Source: Business plan AD "Luka Kotor"

Keeping the pace with the trends in the cruise industry, i.e. the need for the berths for vessels of up to 350 m, and ensuring a higher level of berth safety, Montenegro plans to establish a system for berthing of cruise ships on mooring buoys. The system consists of mooring buoys of the diameter of 6m, distance between them being \approx 420m, and them being connected by chain elements for the anchoring system in the shape of anchoring blocks.

Importance of implementation of the project of mooring buoys lies in the elements that characterize significant suprastructural projects ensuring secure and safe mooring of ships:

- Important improvement of safety and security of ships on berth, particularly in difficult weather conditions,
- Creating conditions for no limit mooring of ships in the Port of Kotor in terms of lenth and draught of ships,
- Reducing emissions of harmful particles from CO2, NOX, SOX,
- Ensuring extension of the season to winter months, ensuring safe berth for cruise ships,
- Eliminating the phenomenon of «dragging anchor», which would increase the level of environment protection.

For a large number of years the operator in the port of Kotor is "Luka Kotor" AD which is in majority ownerhsip of the Municipality of Kotor. Its key activity is transport of passengers from cruise ships. Port infrastructure is functional and it is regularly used for accepting and supplying vessels.

For the port of Kotor there are plans for adaptation, reconstruction, construction and equipping of the port for performing activities of a commercial port open for international transport with an emphasis on the tourism and passengers. The plan is also to increase capacity for accepting ships on the berth in the port of Kotor and securing cruise ships on anchorages, by installing temporary buoys for morring ships.

System upgrading of the marina implies improvement of anchoring, mooring, electrical and water supply systems as well as access bridges that have incorporated system of control of access. This type of upgrading of the marine infrastructure will ensure improvement of the system for collection, development of the cadastre of berths, and booking of berths. The user of services of the marina part of "Luka Kotor" AD will be in the position to settle all the liabilities in an accessible collection point that will work of 24 hours a day.

All pontoon elements are modular. In practice this means that, depending on the future plans and the projection of occupancy of berths, it will be possible to extend the capacities.

It is worth noting here that in the implementation of stage I three out of the planned four wave breaker elements of the dimensions $20 \times 3.3 \times 1.4$ m were procured and put to use. Through the assembly of the fourt wave breaker element the capacity of the newly constructed quays would be increased to reach the level planned in the project

since the internal quays are «protected» by the wave breaker quay and their dimensions may not be longer than the «line of protection» that is formed by installing the wave breakers.

Framework value of the above mentioned investment project is 500,000.00 €.



Image 20: Presentation of the project of modernization of the berths in the marina part of the port

Source: Business plan AD "Luka Kotor"

The possibility and the need to valorize in an appropriate way the neglected or insufficiently used port infrastructure was recognized during the process of development of this strategic document. In that sense the ports of Risan and Zelenika should be mentioned as potentials that are to be used for development of the overall maritime economy.

The Port of Risan has 75 m of operational shore, with the depth of about 5m and the mooring facility of 75.5 m that used to be in the function of local maritime transport. The surface of its open operational shore is 1,330m² and it has 4 bollards for mooring. There is a capacity for mooring of nautical vessels of up to 17 m in length, i.e. about 5 vessels of the average size in parallel to the shore.

Public Company for Coastal Zone Management published a public call for development of a feasibility study on the construction condition of the Port of Risan and the required investment for infrastructural equipping and maintenance of the port for the sake of developing economic-financial analysis and the concession enactment.

Feasibility study should include bill of quantities and financial estimate for works: on maintenance of the structure and possible rehabilitation for the period of 20 – 30 years, equipping the marina with pontoons for berthing nautical vessels (yachts). The document should also contain a necessary infrastructural equipment for the marina, installation of the pontoon wave breaker, pre-built and/or built as a solid structure of 150 m², device for discharge and tank sanitary and bilge water from yachts, development of the system for receiving and discharging waste water into the sewage system and recapitulation of bill of quantities and financial estimate for works.

Detailed Location Study Sector 10 – Risan for the coastal zone, plans Port of Risan as a city port and a nautical tourism port. The plan for concessions for ports of local importance adopted by the Government of Montenegro in 2016 envisaged concession for the port of Risan. The Government decision on classification of ports based on their importance, classifies the Port of Risan as a port of local importance.

The plan is to use the model of concession to ensure infrastructural equipping, modernization, maintenance (of investment) and use of the port – provision of port services. The capacity of the marina will be maximum 150 berths, while a part of the port is defined as a communal mooring with 30 communal berths.



Image 21: Port of Risan

Source: Public Company for Coastal Zone Management

Port of Zelenika has the function of a commercial port open for international maritime transport and accordingly it has the function of a border crossing where foreign nautical vessels (pleasure crafts) do the required procedures when entering territorial waters of Montenegro.

Great depths at the entrance into the port and in the port aquatorium and lack of obstacles for navigation ensure smooth and safe navigation into the port. Depths at quays are considerable: at NW quay the minimum depth next to the shore is 6.6 meters, while at SW quay the minimum depth next to the shore is 7.7 meters. It is important to know that berths in the port are exposed to S and SW winds and waves that these winds create.

Border crosing uses NW quay which is 134 m long and which is physically separated from the rest of the port by a fence. At the quay of the border crossing there are eight bollards for mooring of vessels, two electricity connections, two connections for loading fuel and water hydrants.

The port uses SW quay which is 130 m long. It has nine bollards for mooring of the ships, two electricity connections and water hydrants.

Port of Zelenika still does not meet all the standards envisaged in the law and secondary legislation as required for passenger transport, but there is certainly a significant room for adequate valorization of this port and its opening for accepting ships as an alternative to Kotor.



Image 22: Port of Zelenika

Source: Public Company for Coastal Zone Management

The project of revitalization of the port Virpazar is certainly exceptionally important in this context, particularly the potentials that will be valorized through the waterway Virpazar-Ckla. There are plans also for the construction of a joint border crossing for lake and road transport at this location. This will create appropriate precoditions for development of multi-modal transport in inland waters, as well as for further international navigation towards mooring facilities and ports of the Republic of Albania.

The Port of Virpazar, which is connected by railway and road infrastructure that connects the central and Northern region of Montenegro with the South of the country will be the key connection point between internal waterways in the country and international waterways that will connect this port with the Joint border crossing Ckla and the port of Skadar in the Republic of Albania.



Image 23: Port of Virpazar

Funds for rehabilitation and revitalization of the port of Virpazar are ensured through the project ALMONIT – MTC in the amount of 2.44 million euro, out of which 85% will be co-financed through IPA II project, while 15% of funds will be in the form of a contribution from the state budget.

On the basis of the existing Master Project for the port of Virpazar, the Ministry of Transport and Maritime Affairs submitted a request and was issued the zoning and technical requirements for the first stage of rehabilitation and revitalization of the port of Virpazar.

B.5.1.16 Nautical Tourism Ports - Yachts - Servicing Yachts

According to the Law on Ports (Article 4), a nautical tourism port – marina - is a port intended for berthing, acceptance, storing, protection, maintenance, repair, equipping and anchoring of yachts, boats and other vessels. According to the Law, the Government Decision on classification of ports based on their purpose envisages as one category the ports of nautical tourism – marinas.

Rulebook on the types of nautical tourism structures, minimum technical requirements and their categorization⁴⁵ classifies the acceptance nautical tourism structures into the following: marinas, ports and harbours, piers, mooring facilities (small mole closed harbours) and anchorages.

Marina is a nautical tourism structure next to naturally or artificially protected water surfaces (seas, lakes and rivers) specialized for providing services of berthing, supplying, watching, maintening and servicing of vessels, providing hospitality services, services of chartering vessels, as well as other services in line with the requests and specific needs of nautical tourists.

٠

⁴⁵ Rulebook on types of nautical tourism structures, minimum technical requirements and their categorization (Official Gazette of the Republic of Montenegro 009/03 of 18 February 2003)

Marinas, as nautical tourism structures are specialized tourism ports whose aquatorium is naturally or artificially protected. They are qualified for acceptance of vessels, bringing supplies to crew and tourists, maintenance and equipping of nautical toruism vessels with a direct pedestrian access to each vessel on berth and possibility of using it at any moment.

The government Decision on classification of ports based on their purpose⁴⁶ classifies the following ports as nautical tourism ports – marinas: Port of Budva, Luštica Bay, Port of Tivat – Porto Montenegro, Nautical Tourism Port – Marina Bar and Port of Kumbor – Portonovi.

As for the minimum technical requirements, every marina has to meet the requirements defined in the Rulebook on the types of nautical tourism structures, minimum technical requirements and their categorization.

Marinas are subject to categorization, depending on the level of nautical infrastructure they have and on the type, scope and quality of services they provide. The network of marinas comprises:

• Large service marinas: Marina Bar and Port of Tivat-Porto Montenegro and Port of Kumbor – Portonovi



Image 24: Marina Bar

-

⁴⁶ Decision on classification of ports by purpose (Official Gazette of Montenegro 070/17 of 27 October 2017, 050/18 of 20 July 2018, 046/19 of 7 August 2019)



Image 25: Port of Tivat – Porto Montenegro

Standard marinas: Port of Budva and Luštica Bay.



Image 26: Port of Budva



Image 27: Luštica Bay

In addition to these marinas, there are berths in the ports of Kotor, Zelenika and Herceg Novi that have parts intended and built for that purpose. Within the Portonovi resort in Kumbor marina Portonovi (Port of Kumbor – Portonovi) started operating in August 2019. Port of Kumbor – Portonovi has 238 berths for vessels from 7 to 70m, and during the summer season even for the largest vessels of 120 m.



Image 28: Port of Kumbor – Portonovi

This modern marina, hidden at the entrance to the Boko-Kotor bay offers to its clients also a recently opened border crossing and gas station. Opening of the Portonovi Resort with 214 residences located on 26 ha is expected during 2020.

In addition to the marina in Kotor, in 2019 the construction works were finished on the port infrastructure for the nautical tourism in port Lazure within the development Lazure Marina & Hotel in Meljine. This marina has 156 berths and offers other amenities (hotel, restaurants, spa and fitness centres).



Image 29: Marina Lazure

The Table below presents the condition of port infrastructure and suprastructure in Montenegrin marinas.

Marina Bar	Dukley Marina	Marina Kotor	Port of Tivat – Porto Montenegro	Luštica Bay	Port of Kumbor – Portonovi	Lazure
148,000 m ²	62,000 m ²	4,000 m ²	193,327 m ²			
3,703 m	4,000 m	Shore near the market – 141.4 m, near the theathre – 86.8 m, Šuranj – 123.5 m, from the pontoon to MPGP – 120 m	-			
1 - 9 m	2-5 m	3-12,8 m	-15 m	4-5 m		
900 berths in the sea and 250 on the land	600 berths	150 berths	850 berths			
674 berths – 550 in the sea and - 100 dry berths	300 commercial berths	65 berths	450 berths (127 for super-yachts)	176 berths	238 berths	156 berths
Up to 35 m	Up to 70 m	Up to 25 m	12 -250 m	from 8 to 35 m	7 to 70 m, during the season even up to 120m	Up to 30 m
- quays: 8 - breakwaters (main and secondary) - shore walls - ferry terminal	- sections: 17 - 34 water connections - 68 telephone-telegraph and electric connections	- waterfront :5 infrastructural corridors for water and electricity, - floating barrier (110 m), - 31 bollards, - breakwaters, - lay up berths, - pontoons of S	- quays 5, - breakwaters, -dock for taking fuel, - Transformation station - floating pontoons, - working pontoon	- quays	- quays	- quays Breakwate
	148,000 m² 3,703 m 1 - 9 m 900 berths in the sea and 250 on the land 674 berths - 550 in the sea and -100 dry berths Up to 35 m - quays: 8 - breakwaters (main and secondary) - shore walls	148,000 m² 3,703 m 4,000 m 1 - 9 m 900 berths in the sea and 250 on the land 674 berths – 550 in the sea and - 100 dry berths Up to 35 m Up to 70 m - quays: 8 - breakwaters (main and secondary) - shore walls for where itel for the residual selectric	148,000 m²	148,000 m² 62,000 m² 4,000 m Shore near the market – 141.4 m, near the theathre – 86.8 m, Šuranj – 123.5 m, from the pontoon to MPGP – 120 m 1 - 9 m 2.5 m 3-12.8 m -15 m 900 berths in the sea and 250 on the land 674 berths – 550 in the sea and - 100 dry berths Up to 35 m Up to 70 m Up to 25 m 12 -250 m - quays: 8 - breakwaters (main and secondary) - shore walls - ferry terminal - ferry terminal - ferry terminal Montenegro 4,000 m² 193,327 m²	148,000 m² 62,000 m² 4,000 m² 193,327 m²	148,000 m² 62,000 m² 4,000 m² 193,327 m²

Elements	Marina Bar	Dukley Marina	Marina Kotor	Port of Tivat – Porto Montenegro	Luštica Bay	Port of Kumbor – Portonovi	Lazure
Suprastructui	re - business premises (reception), - customs, - heating plant building,	- customs, - reception, - administration office, - petrol station,	- business building, - building of the port terminal; - customs, - pilot and	- customs, - customs storage, - marine office, - petrol station, - shipyard,	- Local facilities for repair and servicing - single phase and three	- customs -customs storage, - marine office, - petrol	- Petrol station, -lavatories - parking, - restaurant
Elements	- petrol station, - service hangar, - parking area for 300 vehicles, -electrical installations, - devices for waste reception, - repair area, - 30t lift, - mobile 150t lift, - lavatories, - post office, - rent-a- car, - Marina restaurant, - beach bar, - traffic roads	-parking, - nautical equipment store, - electrical installations, - lift (SWL 5t), - water taxi, - lavatories, - restaurant, - Dukley Hotel & Resort, - Dukley Beach Lounge, - Dukley Beach Club, - Dukley Gardens (apartments)	specialized boats, - yachting club "Nautica", - lavatories - internet caffee bar	- changing room, lavatories, - parking, - lift, - fire-fighter vessel, - facilities for supply of equipment and local repairs/maintenance, - Regent hotel, - Yachting club, - sports club, - club for the crew, - restaurants, - pools, - night clubs, - pharmacy, grocery store - International school	phase sockets - Waste water disposal - Yachting club and facilities for the crew - parking	station, - lavatories, - parking, - Beach bar - Wellness spa - One&Only hotel	- bar - hotel - spa and fitness centre - beach

Table br. 3: Condition of infrastructure and suprastructure in Montenegrin marinas

In addition to the above, during the summer season a large number of foreign vessels arrive to the nautical tourism ports in Montenegro and that number is growing. Only in the last ten years the number of arrivals of foreign vessels increased by 67.8%. There is a trend of an increasing number of arrival of larger vessels.

Type of vessel	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Motor yachts	1185	1317	1459	1430	1993	1922	2381	2142	1878	1552
Sailing yachts	1107	1127	1090	1053	1079	1312	1198	1639	1994	1761
Other	515	434	415	504	714	727	439	603	726	1397
Total	2807	2878	2964	2987	3786	3961	4018	4384	4598	4710

Table 4: Arrivals of foreign vessels to nautical tourism ports by type of vessel

Source: MONSTAT

Law on Tourism⁴⁷ governs provision of services in nautical tourism. Tourism services include: leasing of vessels with or without crew, with or without accommodation service; services of supply (water, fuel, groceries, spare parts, equipment); services of managing vessels; providing various information; transport of tourists in public transport in vessels registered for passenger transport and other services needed for nautical tourism. Tourism services in nautical toruism can be provided by a company, other legal entity or entrepreneur entered into the Central Tourism Register.

B.5.1.17 Maritime and Nautical Tourism – Services of Recreation

Coastal tourism includes beach tourism and recreation (swimming, surfing, etc.) and other recreation activities in the coastal area, while nautical tourism includes activities on the water (e.g. navigation, sailing, cruising, nautical sports) and includes operations of land facilities (charter, manufaturing of equipment and services).

According to statistics, 85% of arrivals and 95% of total overnights in Montenegro are recorded in coastal area. The key indicators of coastal tourism expressed through the number of arrivals and number of overnights have been recording a continuous growth. However, the coastal faces numerous challenges that impact further development. They include seasonality which can be seen in the values of seasonality index. Most of the potential economic benefits are concetrated in summer months. Demand for coastal and maritime tourism records an increase in the number of tourists, but also shorter stays.

In addition to this, there are numerous other products like business tourism, nautics (Bar and Tivat), health tourism (Herceg Novi), cruise-ships (kotor), cultural tourism (Kotor, Budva, Bar), but none of them have important shares in the overall structure. Mass tourism as a business model limits the potential for generating added value and, in addition to this, it creates great burden on the environment, like: great demand for water, traffic congestions during the seasons, nature preservation, problems in solid waste and water waste management.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Coastal places - arrivals	1,081,805	1,130,832	1,245,340	1,301,396	1,348,394	1,369,775	1,529,073	1,602,602	1,716,451	1,873,764
Share in the total number of arrivals	90%	90%	91%	90%	90%	90%	89%	88%	86%	85%
Coastal places - overnights	7,244,830	7,643,320	8,493,955	8,858,226	9,128,809	9,258,017	10,687,914	10,827,495	11,347,174	12,269,115
Share in the total number of overnights	96%	96%	97%	97%	97%	97%	97%	96%	95%	95%
Average number of overnights	6.7	6.8	6.8	6.8	6.8	6.8	7.0	6.8	6.6	6.5
Seasonality indicator	79%	80%	81%	80%	79%	80%	80%	79%	64%	62%

Table 5: Arrivals and Overnights - Coastal Towns and Settlements

Source: MONSTAT

The notion "nautical tourism" includes all recreation travels for leasure happening at the sea, on large cruise-ships or motor or sailing yacths, if they have bedrooms.

Data about the number of cruises of foreign ships that arrive to the ports in Montenegrin territorial sea and the number of passengers on those ships show that the numbers are growing and that Montenegro is developing as a destination for cruise-ships. Except for 2018 where a smaller number of arrivals and a smaller number of passengers were recorded, in the last nine years Montenegro has been recording a significant growth in this segment.

⁴⁷ Law on Tourism (Official Gazette of Montenegro 2/2018, 4/2018 - corrigendum, 13/2018 and 25/2019) Strategy for Development of Maritime Economy 2020-2030

Acceptance of cruise-ships is done in two ports in Montenegro: Port of Kotor and Port of Adria Bar.

The most important port for accepting cruise-ships is the Port of Kotor with more than 95% of share in this segment.



Image 30: Port of Kotor

Since 2006 "Luka Kotor" AD is focused on cruise-ship tourism and enjoys a reputation of one of the most visited destinations in the Meditarannean, thanks to the status of Kotor as a UNESCO protected site. The attractive position of the port in Boka-Kotor Bay offers possibilities to develop cruise-ship tourism.

Since 2016, in addition to its primary activities characterized by cargo transshipment, AD "Port of Adria" developed an additional activity of accepting cruise-ships using the available infrastructure for promoting Bar as a destination for cruise-ship tourism.

Cruise-ship tourism, as a part of the maritime sector, can be economically important for the port and the region, although the cruising organizers try to take as large share of passenger spending as possible. In this respect, precondition for producing economic benefits on the local level is to create an offer and provoke the need for the tourists to spend.

From the point of view of sustainable development, we should have in mind that acceptance of a too large number of vessels in the Boka-Kotor Bay may have negative effects on environmental parameters, primarily on the marine biodiversity. Due to these reasons it is necessary to define the acceptance capacity of the bay and set the dynamics of arrival and regime in the ports in this area reducing thus the impact of maritime transport on the environment by defining clear measures for mitigating such effects. This is tackled in the activities defined in this strategic document.

As for possible alternative solutions in the Boka-Kotor Bay for accepting and dispatching of cruise-ships, they were already discussed by the Ministry of Transport and Maritime Affairs. In that respect the Ministry discussed the project that recognizes the need to construct the port infrastructure outside of the Port of Kotor to improve safety of maritime navigation in this environmentally sensitive area, bringing relief to the local roads in the Municiality of Kotor and improving security protection of ships and port facilities in line with internationally accepted obligations and national legislation. Every project of the kind would have to be implemented with a minimum impact on the environment, and absolutelly fitting of the physical appearance of the port infrastructure and suprastrucrture into the natural landscape of the Boko-Kotor Bay.

It is important to emphasize that the Draft of the Spatial Plan for Kotor from 2019 gives the predisposition of a "home port" to Lipci, which is convenient for berthing of larger ships. According to the Spatial Plan, the Port of Kotor will remain the primary port, but only smaller cruisers will be allowed to enter. The Spatial Plan for Special Purpose Coastal Zone recognizes the site of Lipci as a home port for cruisers.

Fragmentation and the lack of cooperation between the sectors of cruise-ship tourism and coastal tourism are visible in many cases. This leads to limited economic effects. Cruise-ship tourism sector is mostly interested in

limited and controlled visits, most frequently in port cities, while broader coastal region does not necessarily benefit from cruise-ship industry.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Travels	268	313	319	348	409	350	411	480	430	424
Passengers	70,749	142,259	187,171	244,084	314,961	306,397	441,513	532,337	540,445	506,198

Tabl 6: Cruises of foreign ships

Source: MONSTAT

Development of nautical tourism offer is visible in the modernization of the existing and construction of new marinas. Potential for development of nautical tourism is reflected in the continuous growth of the number of foreign vessels arriving to nautical tourism ports in Montenegro. In the last ten years the number of arrivals of foreign vessels increased by 67.8%. As for the structure of vessels, there is a trend of larger vessels arriving to Montenegro. Data about the arrivals of ships show that the largest number of them are from USA (20.2%), Croatia (11.3%), United Kingdom (10.2), France (7.1%) and Italy (5.8%).

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Up to 6 m	327	304	305	339	404	449	277	425	502	540
6 – 8 m	194	195	184	191	249	274	198	220	252	362
8 – 10 m	300	289	278	245	319	299	220	276	275	408
10 – 12 m	517	549	563	518	693	552	455	504	614	770
12 – 15 m	694	686	680	719	734	751	647	981	984	1.170
15 – 20 m	281	268	348	324	464	561	850	929	848	655
Over 20 m	494	587	606	651	923	1075	1371	1049	1123	805
Total	2,807	2,878	2,964	2,987	3,786	3,961	4,018	4,384	4,598	4,710

Table 7: Arrivals of foreign vessels to nautical tourism ports

Source: MONSTAT

Given the importance and potenitials for development of nautical tourism, Ministry of Sustainable Development and Tourism recognized the need to develop a programme for sustainable development of nautical tourism to define network of nautical tourism ports and propose treatment of certain amenities in such ports and designate zones for cruisers and mega-yachts in the area of Boka Bay. Such a programme should include the following:

- Definition of network of nautical tourism ports and their classification as structures of national interest;
- Definition of the optimum network of anchorages for cruise-ships and mega-yachts in line with the capacities (tourism capacities, spatial capacities, etc.) of certain area;
- Designation of areas (position, type, largest capacity and size) and development of guidelines for defining separate construction areas: nautical tourism ports and anchorages for cruise-ships/mega-yachts;
- Definition of special standards for environment protection in nautical tourism ports, depending on the level of protection of certain aquatorium and other issues of importance for development of nautical tourism.

B.5.1.18 Blue Biotech Companies

Marine (blue) biotechnology is of key importance for using the potentials of the marine bio-resources. These are the potentials that have been mostly unused in Montenegro. Blue biotechnology is focused on preservation of various marine species, use of marine species for development of new medicines, genetic studies of plants so that they can become resilient to extreme conditions in the environment. Unique definition for marine biotechnology, in line with the regulations of the Organization for Economic Cooperation and Development (OECD) reads as follows:

"The application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services."48

However, during these processes it is important to care for protection of the environment by applying marine-derived antifouling strategies, marine habitat restoration, bioremediation of marine ecosystem and use of high-resolution biosensing techniques to monitor the sea bed.⁴⁹

Blue biotechnology is not developed in Montenegro. In order to improve blue technologies in the region macroregional research and development should be worked on, as well as the platforms for innovations in the field like green marine mobility, deep sea resources, bio-safety and bio-technology.⁵⁰

B.5.1.19 Fisheries and Mariculture

Marine fisheries sector is generally insufficiently developed and coastal. In most of the cases, fisheries activities depend on weather conditions at the sea, primarily due to the fact that the fleet is unsafe and outdated. Key activities in Montenegrin fisheries are fishing with nets, bottom trawl fishing and small coastal fishing. In 2017 in marine fisheries the annual catch was 932 t of fish (blue fish 659 t, white fish 185 t, other fish 20 t, molluscs 33 t and crustaceans 35 t). Catch of marine fish, particularly the blue fish is below possible, without causing consequences of harvesting.

Fishing fleet comprises 161 vessel. More than two thirds of the existing Montenegrin fleet uses tools of small coastal fishing (shore or ship seines, passive tools, hooks and lines) and vessels smaller than 12 m of LOA. Largest portion of the fleet (84.5%) are vessels smaller than 12 meters, while only 3.13% of fleet is larger than 24 meters. Key characteristic of the fleet is that it is old and not modernized and that the most active are vessels in small commercial fishing. Potentially important economic segments like purse seine fihishing and bottom trawl fishing are mostly inactive today because they are not safe or they are outdated.

LENGTH (meters)		Total	Bottom trawls	Purse seine	Other seines	Vessels that fish with set nets	Vessels that fish with trawl lines	Multi-purpose/ Polivalent vessels
Up to	Number	136	4	11	17	51	1	52
12	Gross tonnage	296.8	43.9	30.9	18.2	90.6	6.3	106.9
	Power in kW	4,243.0	607.0	441.3	71.5	1,078.8	298.0	1,746.4
12 - 18	Number	14	10	3		1		
	Gross tonnage	199.7	144.3	45.5		10.0		
	Power in kW	2,588.4	2,067.2	438.2		83.0		
18 - 24	Number	6	5	1				
	Gross tonnage	307.7	232.7	75.0				
	Power in kW	1,904.0	1,322.0	582.0				
24 - 30	Number	3	2	1				
	Gross tonnage	313.8	171.4	142.4				
	Power in kW	1,147.0	742.0	405.0				
	Number	2	1	1				

⁴⁸ OECD, (2017), "MARINE BIOTECHNOLOGY DEFINITIONS, INFRASTRUCTURES AND DIRECTIONS FOR INNOVATION" OECD SCIENCE, TECHNOLOGY AND INNOVATION POLICY PAPERS No43.

-

⁴⁹ https://explorebiotech.com/blue-biotechnology-introduction-and-applications/

⁵⁰ European Commission, For a prosperous and integrated Adriatic and Ionian region, 2014

30 - 36	Gross tonnage	333.0	203.0	130.0				
	Power in kW	1,680.0	885.0	795.0				
Total	Number	161	22	17	17	52	1	52
	Gross tonnage	1,451.1	751	393	18	101	6	107
	Power in kW	11,562.4	5,016	2,220	71	1,162	298	1,746

Table 8: Number of fishing vessels by type and power, 2017

Source: MONSTAT

Develop of fisheries requires logistics on the shore, which means establishing infrastructure for fisheries on the land, i.e. establishing the place of first landing, place of first sale, place for berthing fishing boats in ports and places for refurbishing fishing boats and the so called fishing huts.

Mariculture is on a low level, with small yields and effects, particularly in the context of the great potentials. Research of the Marine Biology Institute from Kotor show that Aquatorium, particularly Boka, have excellent natural advantages for natural development and artificial growth of maricultures.

White fish farming implies closed farming cycle in floating cages in the sea. In 2017 the total of 116 t fish was produced in three white fish farms located in the area of Boka-Kotor Bay. Entire production is marketed in the national market that has been showing an increasingly strong interest for these products.

Farming of shellfish (mussels and oysters) is also on a low level, given the natural potentials. In 17 farms located in the area of Boka-Kotor Bay, the current annual production of mussels in 2017 amounted to 197 t, while the production of oysters is still negligible – around 17 t.

Analysis of the situation shows that there is not enough acceptance capacities for the fishing fleet in Montenegrin coast. Therefore this strategic document envisages the activity aimed at looking for adequate solutions in order to ensure logistic support on the coast, which means establishing infrastructure for fisheries on the land, i.e. establishing the place of first landing, place of first sale, place for berthing fishing boats in ports and places for refurbishing fishing boats and the so called fishing huts.

B.5.1.20 Services of Environment Protection in Maritime Sector (Waste Disposal, Marine Waste Landfill Sites, Oil Pollution)

Sea is a very important tourism, economic and biological resourse. It is therefore exceptionally important to preserve marine ecosystem from polution and extinction of the species living there. In the report of the Environment Protection Agency it is noted that population migrates to this region and that the region is not infrastructurally equipped for the existing number of residents. Therefore this ecosystem suffers an increasing pressure which then requires more attention for monitoring of this segment of the environment.

Sea pollution can be: physical pollution, chemical pollution and biological pollution. Physical pollution occurs due to discharge of water of high temperature from ship engines. Heated water increases temperature of the sea, which then leads to acceleration of bio-chemical reactions with an increased oxygen consumption. This oxygen deficit and the amount of matter generated from the reaction distrurb metabolism and physiological balance of water organisms, creating also conditions for development of micro-organisms and viruses. Chemical pollution occurs due to discharge of oil, oily waste, harmful liquid substances, feaces and medical waste from ships. Biological pollution occurs due to the spread of bacteria, viruses and insects from ships and they are very frequently agents causing infectious hydric diseases, even epidemics.

As a candidate for EU membership, Montenegro has the duty to establish a functional integrated waste management system and, according to the opinion of the European Commission, that goal is considered one of the priorities on the accession path. To establish such a system, Montenegro adopted the basic Waste Management Law (Official Gazette of Montenegro 64/2011) and a set of relevant secondary legislation pieces, establishing a solid legal framework for national waste management system. This set of regulations is expected to be

supplemented by the pieces of legislation that are currently non-existant, and in time legislatios will be aligned with all the changes happening on the EU level⁵¹.

Montenegro joined CSN (CleanSeaNet), i.e. the system for satelite detection of potential oil spills that is ensured by EMSA through SEG portal (SafeSeaNet Ecosystem GUI). Radar that is installed on the satelite detects potential pollution on the basis of the condition of the sea. EMSA operational centre processes that and sends to the countries. In this way more than 3000 satelite images are generated per year and results are visible because year after year the number of oil spills decreases. One of the positive results of the project is a significant improvement of the existing legislation in member states.

As for protection of the sea from pollution, this strategic document envisages a number of activities aimed at improving manipulation of ship-generated waste and cargo residues in Montenegrin ports and more efficient supervision of administration over the implementation of MARPOL convention and other related regulations. In addition to this, the activities envisaged in this document imply encouragement for development of new technologies and improvement of knowledge, rules and regulations with a view to preventing marine environment pollution that can be caused by shipping or port activities, operations of exploration and exploitation of hydrocarbons, laying of underwater pipelines, cables and other installations. Procurement of equipment for rehabilitation of consequences of sea pollution from vessels and other structures is also envisaged, as well as the procurement of a special ship for rehabilitation of consequences of the pollution caused in that way.

B.5.1.21 Seafarer Employment Agencies

Agencies mediating in employment of seafarers are one of important factors of maritime economy. Their activities are regulated according to the MLC Convention 2006 and provisions of the Law on Safety of Maritime Navigation and the Rulebook on detailed requirements, manner and procedure for issuing licences for mediation in employment of seafarers. This Rulebook defines detailed requirements for premises and equipment, manner and procedure for issuing licences to legal entities for performing the activities of mediation in employment of seafarers on ships under Montenegrin or a foreign country flag. Mediation in employment of seafarers, in terms of this rulebook includes the activities and measures conducted with a view to providing expert support in connecting seafarers seeking employment and employers to ensure signing of employment contract. These agencies should not be perceived only as legal entities registered for doing this activity, but also as one of the drivers of our key potentials in the maritime sector – the qualified human resources that represent us in the global maritime market and bring exceptionally significant funds to Montenegro.

According to this Rulebook, licence is issued to the legal entity that meets the requirements in terms of quality defined in ISO standards for mediation in employment of seafarers and the requirements related to premises and equipment. Ministry of Transport and Maritime Affairs has so far issued 6 Decisions licencing the activity of mediation in employment of seafarers.

Still, in spite of this fact, the impression is that in the past these agencies were not given sufficient attention and that the influence they have in the market was not properly recognized. That resulted in proactive appraoch of the agencies and in December 2019 they established the Association of agencies dealing in mediation in employment of seafarers.

They jointly recognized the need for the maritime administration to provide more determined support to the Association and to define in cooperation with the Association the activities that will improve the position and conditions of work for our seafarers and also raise to a higher level the standards of operation of the agencies. As the final result, strengthening of this sector is expected, particularly through the national maritime cluster that this Association should definitely be a member of so that it can guide and reinforce their demands as much as possible and achieve concrete and measurable results in cooperation with the line Ministry.

B.5.2 INFLUENCE OF BLUE ECONOMY/ MARITIME SECTOR ON MONTENEGIRN ECONOMY

Blue Economy means a sustainable use of ocean resources for economic growth, improved livelihoods and jobs, while preserving marine ecosystem.⁵² Blue growth is a long-term strategy for support to sustainable development in marine and maritime sector. Seas and oceans are drivers of economy and they have a huge potential for innovations and development. Development of blue economy includes sectors like: aquaculture, coastal tourism, sea biotechnology, ocean energy, and sea bed extractive activities.

The field of blue economy defined in this way is not a single sector, but a combination of several activities within different sectors. Major part of this field includes maritime sector that is presented statistically through the sector of transport and storage, in line with the classification of business activities 2010 (KD 2010). However, this sector includes also other activities related to road and railway transport.

B.5.2.1 Statistics in the Existing Framework for Sector H - Transport and Storage

According to the data of the Statistics Administration, sector of transport and storage made 4.2% of the total national product of Montenegro in 2018. The total value of the gross added value in this sector has been recording a continuous increase, however at a slower rate than the total growth of Montenegrin economy. In the end it resulted in a lower share in BDP than in 2009 when this sector made 4.5% of the GDP. According to the administrative data, sector of transport and storage employed in 2018 on average 11,530 persons, i.e. 6.1% of the total number of employees, which is the largest number of employees in the last ten years.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross Added Value (in mil. EUR)	134,487	144,221	151,056	130,650	126,511	124,383	133,973	158,330	175,662	194,450
Share in GDP (%)	4.5	4.6	4.6	4.1	3.8	3.6	3.7	4.0	4.1	4.2
Employees	-	9,315	9,188	9,384	9,935	9,789	9,970	10,405	10,795	11,530
Share in the total number of employees (%)	-	5.8	5.6	5.6	5.8	5.6	5.7	5.8	5.9	6.1

Table 9: Gross added value and employment in the sector of transport and storage

Source: MONSTAT

B.5.2.2 Estimates of contribution of blue economy/maritime sector

Given the fact that "blue economy" does not exist as a sector that is followed within official statistics, but is a combination of several activities from various sectors, to make an estimate we used the data on the lowest level i.e. groups (marked by four-digit numbers) in line with Classification of activities from 2010. In addition to this, given the fact that certain activities do not necessarily have to be connected with "blue economy" the data were used for business entities whose registered office is in one of the coastal municipalities. The intention was to get to the most reliable estimate in a given moment with certain constraints.

19 activities were ideintified in the field of blue economy: marine fishing, marine aquaculture, extraction of crude oil, extraction of natural gas, services related to extraction of oil and natural gas, processing and canning of fish, shellfish and moluscs, building of ships and vessels, building of sport and leisure boats, repair and maintenance of ships and boats, production of gas, maritime and coastal transport of passengers, maritime and coastal transport of cargo, transport of passengers in internal waterways, transport of cargo in internal waterways, storage services, services in water transport, manipulation of cargo, research and experimental development in biology, renting and leasing of equipment for water transport.

According to the collected data there were 488 active registered business entities in the field of blue economy in 2018. The increasing number of business entities shows an increasing interest in blue economy. On the other side, according to the estimates, the field of blue economy made 0.6% of the gross domestic product in Montenegro which is the lowest level in the last five years. This clearly shows that there are problems in this field. In addition to

_

⁵² https://www.worldbank.org/en/search?q=blue+economy

this, the average number of employees amounted to 1,502 persons or 0.8% of employed persons in Montenegro. These trends came as a result of operations of larger companies in this field.

	2014	2015	2016	2017	2018
Business entities ⁵³	336	379	390	417	488
- Legal entities	229	255	270	287	329
- Entrepreneurs	107	124	120	130	159
Gross added value (in mil. EUR)54	29.5	27.9	26.8	30.2	27.2
Share in GDP (%)	0.9	0,8	0.7	0.7	0.6
Average number of employees ⁵⁵	1,971	1,778	1,592	1,481	1,582
Share in the total number of employees (%)	1.1	1.0	0.9	0.8	0.8

Table 10: Economic contribution of blue economy

Source: Authors' estimate

In the field of trade in goods with foreign countries, that includes trade in vessels and floating structures, there is an obvious dependance on import. The total value of imported goods in 2018 amounted to 3.5 million euro, while export of goods amounted to 1.8 million euro. The only deviation was recorded in 2017 when the surplus of 10.4 million euro was made in the exchange of goods with foreing countries. That was a consequence of the sale of docks in the Shipyard Bijela. The structure of import is dominated by yachts and other sports and leisure vessels.

Account of services in maritime transport recorded surplus. In 2018 the surplus for these services amounted to 40.5 million. The recorded surplus is the result of the positive balance of services in the category of other maritime transport which has the largest share in the trade in services of maritime transport. Accounts of passenger and cargo maritime transport recorded deficit. Total revenues from maritime transport services amounted 60.1 million euro, while expenditures amounted to 19.6 million euro. In the total revenues of the maritime transport, other transport makes 88.4% of revenues, cargo transport makes 11.5%, while incomes from passenger transport are negligible – only 0.1%. On the other side, in the structure of expenditures of the maritime transport, other transport had the largest share – 52.8%, followed by cargo transport 46.1%, while expenditures for passenger transport amounted to 1.1%.

	2014	2015	2016	2017	2018
Import of goods, in thousands of euro	1,993.1	3,303.3	13,276.9	3,316.0	3,530.6
Export of goods, in thousands of euro	657.1	500.4	432.5	13,782.5	1,817.6
Foreign trade balance in thousands of euro	-1,336.0	-2,802.9	-12,844.4	10,466.5	-1,713.0
Inflow services, in thousands of euro	52,797.1	64,951.4	51,973.1	57,576.1	60,152.9
Outflow services, in thousands of euro	13,101.7	15,966.7	13,237.7	15,341.8	19,623.2
Balance services, in thousands of euro	39,695.4	48,984.7	38,735.4	42,234.3	40,529.7

Table 11: Foreign trade in goods and services of maritime transport

Source: Monstat and CBMN

⁵³ Legal and physical entities with active registration in the Central Register of Taxpayers and Insured Persons (CROO), Tax Administration

⁵⁴ Estimate of the authors is based on prior access to available financial reports

⁵⁵ Average number of employees in the observed years – on the basis of templates for STR (Single Tax Return), Tax Administration Strategy for Development of Maritime Economy 2020-2030 Page | 97

PART C: EXTERNAL ENVIRONMENT – TRENDS AND COMPETITION

C.1. Analysis of External Environment

C.1.1 Overview of utilization of selected ports in the Adriatic-Ionian region and their connections with transport corridors

With a view to ensuring a comprehensive analysis of the external environment, we offer an analysis of the level of utilizionat of selected ports in Adriatic-Ionian region and their infrastructural connections to other countries in the EU and beyond. The analysis is based on the data from the base of European Sea Ports Organisation - ESPO 2018 and it presents potentials and level of utilization of key ports in Adriatic-Ionian region (turnover If liquid, dry bulk cargo, Ro-Ro cargo, general cargo and containers).

		Liquid bulk traffic for selected			Dry bulk traffic for selected			Roro traffic for selected			General non-containerised cargo traffic for selected			Container traffic for selected European							
		European ports (1000 tonnes)			European ports (1000 tonnes)			Europe an ports			European ports			ports (in TEU)							
		2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Croatia	Bakar	1.966	2.010	2.208	2.251	1.156	1.143	427	669												
	Omisalj	3.394	4.665	6.689	7.980																ı
	Ploce	282	459	554	811	1.747	1.697	1.627	1.886					372	308	267	239				1
	Split	407	408	342	437	1.475	1.602	1.263	1.537	480	325	389	115								1
	Rasa					405	n.a.	n.a.	n.a.					155	-	n.a.	n.a.				1
Italy	Barletta	328	384	442	566	515	697	502	577					163	57	40	157				ı
	Brindisi	2.992	1.787	1.826	2.070	3.734	4.912	3.158	3.854	719	2.862	3.028	2.604	702	499	576	414				l
	Falconara Marittima	4.894	5.045	5.444	4.944																l
	Gioia Tauro	651	970	911	972					146	116	25	100	389	0	72	141				1
	Ortona	777	614	449	287	245	446	551	619					109	112	127	69				1
	Ravenna	4.992	5.417	5.712	6.907	9.179	11.748	13.881	15.692	2.284	1.691	3.395	2.807	5.635	4.304	1.950	1.097	222.548	244.813	221.878	234.177
	Taranto	4.145	4.152	4.056	4.504	10.787	10.023	11.992	12.227	3.740	3.364	3.989	3.280	3.455	1.355	946	137				1
	Trieste	33.669	34.532	37.892	42.090	699	582	905	2.437	5.628	4.887	4.109	1.815	1.853	2.940	1.852	2.817	506.007	501.268	579.084	652.735
	Venezia	6.367	8.691	7.698	8.142	6.788	8.619	8.555	9.502	1.059	1.006	1.496	1.380	2.400	1.974	3.029	1.300	456.068	560.301	393.703	508.486
	Bari					1.921	2.215	2.110	1.778	1.374	1.612	1.790	2.192	78	23	25	57				
	Ancona					637	502	423	602	1.993	2.188	2.237	2.336	49	279	135	213				
Slovenia	Koper	3.009	3.287	3.416	3.833	6.582	7.080	7.295	7.345	789	915	1.159	1.155	1.621	1.431	1.583	1.490				
Greece	Thessaloniki	5.742	7.481	6.729	7.445	4.279	3.712	2.909	3.112					662	419	518	573	349.990	351.407	598.206	650.024
	Igoumenitsa					96	75	89	77	2.641	2.877	3.008	3.082								1

Table 12: Turnover of cargo in selected ports in Adriatic-Ionian region

Source: Data processed by the research team (database of the European Sea Ports Organisation - ESPO 2018)

Given the fact that competitiveness of a port depends to a large extent on its connection to the transport corridors, i.e. hinterland, the research team presents here the long-term strategy of the EU for connectivity between Southern and Northern parts of the European continent. This part of the analysis is based on the "Elaborated analysis of ports and shipping activities" which is a constituent part of the "Elaborated EU plan of implementation for Blue Highways" and Transport Development Strategy 2020-2035.

In June 2019, upon a proposal of the Ministry of Transport and Maritime Affairs, the Govenrment of Montenegro adopted the Transport Development Strategy 2019-2035, with the appertaining Action Plan 2019-2020. That Strategy, inter alia, had the goal to align strategic documentations in the transport sector with EU policies, and particularly with TEN-T guidelines and standards. One of the priorities of the Transport Development Strategy is related precisely to better connectivity of the port of Bar that will contribute to an increase in cargo flows and improve competitiveness of this port.

The New Core TEN-T network of roads, railways, airports and ports with the time horizon by 2030 is based on nine axes: two corridors North-South, three corridors East-West and four diagonal corridors. These are: Baltic-Adriatic Corridor, North Sea – Baltic Corridor, Mediterranean Corridor, Middle East – East Mediterranean Corridor, Scandinavian-Mediterranean Corridor, Rhine – Alpine Corridor (Image 29). Each of these corridors has to include three modes of transport and go through three Member States and two border crossings.

⁵⁶ Move/B1/2015-2018 Study on the TEN-t motorways of the sea horizontal priority of the European Commission directorate general for mobility and transport directorate B - European mobility network, April 2018

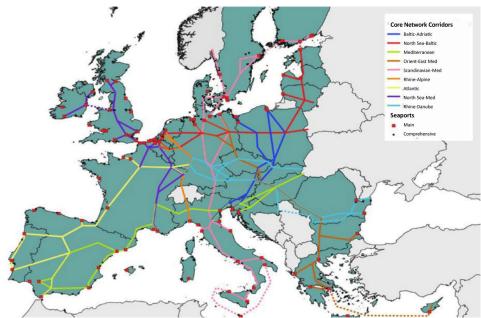
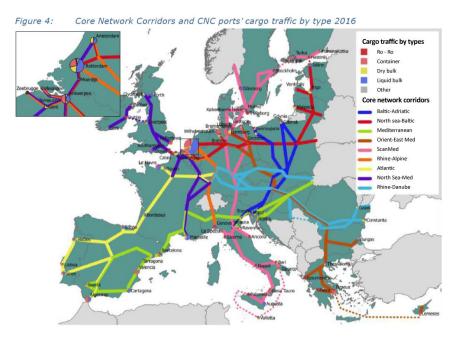


Image 31: TEN-T corridors of the Core network and their connections with European ports (ISL, Eurostat 2018)



Source: ISL (cargo traffic based on Eurostat)

Image 32: Presentation of cargo flows by type through the Core Trans-European Transport Netork and European ports (ISL, 2016)

Comprehensive TEN-T network is the extended TEN-T network that includes entire existing and planned infrastructure that meets the set requirements and should be established at latest by 31 December 2050.

In the process of defining the Core Transport Network, Western Balkan countries use the guidelines and methodology for establishing the Core Network in a territory (Core Trans-European Transport Network TEN-T), with its demanding technical standards. The principles that were used were to connect EU capitals, key economic centres and large companies, while the time horizon is 2030.

Core Transport Network in the Western Balkans region is currently included in the indicative extension of three Trans-European Transport corridors to the Westen Balkans region:

- Mediterranean Corridor,
- Orient (Midllee East) East Mediterranean Corridor, and
- Rhine Danube Corridor.

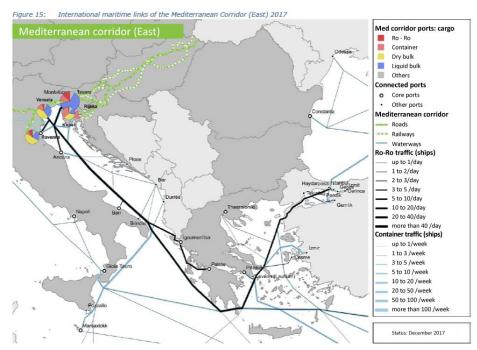


Image 33: Mediterranean Corridor (East) and cargo flows by type

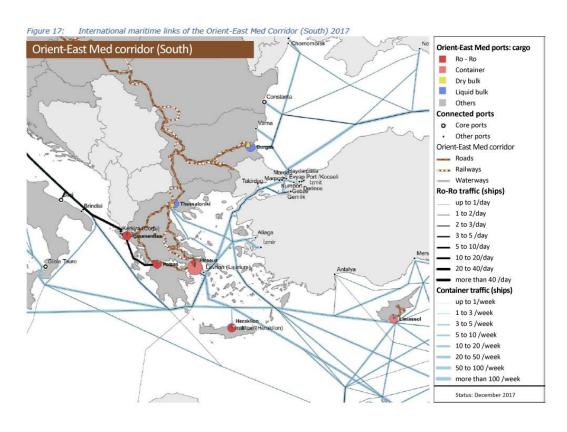


Image 34: Corridor Orient (Middle East) - East Mediterranean and cargo flows by type

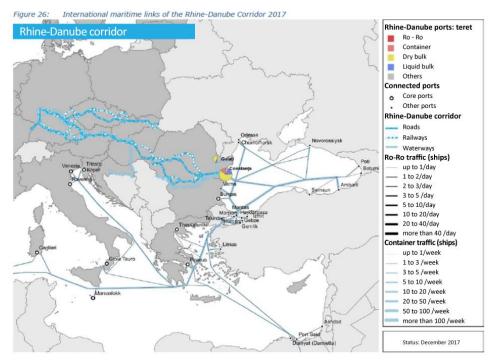


Image 35: Rhine - Danube Corridor and cargo flows by type

Indicative extension of the Core and Comprehensive TEN-T network to the Western Balkans region, i.e. indicative extension to the territory of Montenegro, includes:

- Indicative extension of the Core TEN-T network: SEETO road route 4: highway Bar-Boljare (border with Republic of Serbia)/Orient (Middle East) East Mediterranean corridor;
- SEETO route 1: Adriatic-Ionian corridor (maritime route, route of the fast road along Montenegrin coast)/Mediterranean corridor, i.e. connection with Republic of Croatia and Republic of Albania;
- SEETO railway route 4: railway Bar-Vrbnica (border with Republic of Serbia)/ Orient (Middle East) East Mediterranean corridor;
- SEETO railway route 2: railway Podgorica-Tirana (connection with Republic of Albania)/ Mediterranean corridor and port of Bar and airport of Podgorica.
- SEETO road route 2b: trunk road Podgorica-Šćepan polje (border with Bosnia and Herzegovina, and on to Sarajevo);
- SEETO road route 6: new road Kolašin border with Republic of Kosovo (via Peć to Priština);
- SEETO railway route 4: railway Bar-Vrbnica (border with Republic of Serbia);
- SEETO railway route 2: railway Podgorica-Tirana (connection with Republic of Albania).



Image 36: Indicative extension towards neighbouring countries - comprehensive network

The defined extensions of the Core and Comprehensive Networks connect Montenegro in the best possible way with neighbouring countries that are its key trade parnters. Corridors of the Core Network, highway Bar-Boljare and railway Bar-Vrbnica, connect Montenegro with Serbia, Adiratic-Ionian corridor with Croatia and Albania and part of Bosnia and Herzegovina and the railway Podgorica-Tirana with Albania. Routes on the Comprehensive Network Podgorica-Šćepan Polje and Kolašin – border with Kosovo connect Montenegro with Bosnia and Herzegovina and Kosovo.

Implementation of the Adriatic-Ionian corridor is also exceptionally important because this corridor will go through a certain number of EU countries and countries of the region and will connect Montenegro with Central and Western Europea. It will also ensure better development of ports in several countries. This corridor should contribute to much better integration of Montenegrin space and connection into regional and European road network.

Corridor of the highway Bar-Boljare is the key link on the route North-South. It ensures appropriate connections to Serbia, Bosnia and Herzegovina and Albania through the system of existing road network. Connection of Bar with TEN-T corridor X (going through Republic of Serbia), i.e. highway Bar-Boljare, is not only a strategic orientation of Montenegro because it ensures connection to Central Europe, but is also a route that is particularly important for the Port of Bar and the overall economic development of Montenegro. Construction of the new and rehabilitation and modernization of the existing road and raiway infrastructure connecting the port with the hinterland, are key preconditions for development and valorization of the potentials that Port of Bar has. Only in this way the Port of Bar can significantly improve its business operations and become competitive with other ports in Adriatic-Ionian region. Therefore, with a view to strengthening market position of the Port of Bar, implementation of key infrastructural projects has to continue. However, new projects should be initiated too, because that will create preconditions for the maximum utilization of the Port of Bar, and in that also preconditions for development of maritime economy.

Of course, a whole range of other factors have to be met to ensure development of the Port of Bar. They are connected with intensity of economic activities in Montenegro and in the region, volume of trade via sea, level of coordination of the transport system entities and existence of various administrative barriers. However, it can be said that it is more than obvious that the market position of the Port of Bar to the largest extent depends precisely on its connections with the logistic cenres in the region. It can be said that the most significant competitive advantage of the ports that are competitors to the Port of Bar lies in their good connections. That is something that the Port of Bar will also have after the construction and modernization of the road and railway infrastructure.

Equally important group of preconditions for the Port of Bar to achieve its projected capacities includes: improvement of the current condition of the port and development of port infrastructure and suprastructure, upgrade of technical equipment in the port, upgrade of the information system, optimization of the system for health and safety at work, protection of the environment, valorization of the potentials of the Free Zone Port of Par, etc.

The fact is that limited connectivity influences development of ports, economic development and economic integration. The projects listed below certainly contribute to connectivity but most of them are in an early stage, which warns us of the potential risk that the current condition and the planned development of the concerned area might turn not to be compatible.

Project code Country		Project name	Project status		
PRJ-MNE-TRA-001 Montenegro		Entire network (road R2b): Reconstruction of Šćepan Polje (border B&H) – trunk road Plužine - (border of B&H to Sarajevo)	Preparation		
PRJ-MNE-TRA-003 Montenegro		Mediterranean coridor: Montenegro - Croatia - Albania R1 road connectivity, bypass Budva	Preparation		
PRJ-MNE-TRA-004	Montenegro	Corridor Orient / East-Med: Montenegro - Serbia R4 railway connection, Bar - section Vrbnica	Implementation		
PRJ-MNE-TRA-005	Montenegro	Construction of highway Bar - Boljare, II stage: section Mateševo – Andrijevica	Preparation		
PRJ-MNE-TRA-006	Montenegro	Construction of highway Bar - Boljare, II stage: bypass Podgorica (Smokovac - Tološi - Farmaci)	Preparation		
PRJ-MNE-TRA-011	Montenegro	Corridor Orient / East-Med (road R4): Construction of highway Bar - Boljare	Preparation		
PRJ-MNE-TRA-023	Montenegro	Mediterranean corridor: Railway connection Montenegro - Albania R2, Podgorica – part of the border between two countries	Preparation		
PRJ-MULTI-TRA-001	Albania, Bosnia and Herzegovina, Kosovo, North Macedonija, Montenegro, Serbia	Updated Regional Transport Study (REBIS)	Completed		
PRJ-MULTI-TRA-002 Albania Montenegro		Mediterranean corridor (road R1, R2): Construction of the Adriatic-Ionian highway in Albania and Montenegro	Preparation		
PRJ-MULTI-TRA-003	Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro, Serbia	Analysis of differences in regional connectivity networks	Implementation		

Table 13: List of projects contributing to better connectivity of Montenegrin ports with the hinterland

C.1.2 Competition in the Mediterranean Sea

Mediterranean Sea provides almost unlimited development opportunities for the countries that have access to it and for the countries connected to this area. Almost 27% of the overal line transport of containers and 20% of maritime transport take place in the Mediterranean Sea.

Apart from this, the region is characterized by important investment in port infrastructure, storing capacities, logistic centres and other anciliary services in maritime transport. As for container transport there are three dominant alliances. One of the most dominant in this region is Ocean Alliance comprising CMA-CGM, Cosco Shipping, OOCL and Evergreen. These four line transporters, i.e. shipping companies divided their capacities and in such a way they ensured higher frequencu of navigation, covering most of waterways with a bit more than 350 ships of the total capacity of 3.5 million TEU.

This alliance, particularly its member Cosco Shipping, has an important role in the region of Eastern Mediterranean and Adriatic in the field of container transport and managing container terminals. It is certainly the Port of Piraeus that strengthened its strategic position on the global merchang map precisely after Cosco Shipping took over the management of the Piraeus container terminal (quays II and III) and turned this Greek port into a hub on the crossroad of Asia, Europe and Africa. This does not mean that there is no room for other ports in the region of Adriatic, particularly since the volume of trade in goods is continuously increasing. However, in spite of visible potentials, we could say that Piraeus, as the leading port that continuously modernizes port infrastructure and suprastructure, limits the market share of ports in the South-West of Balkans (Montenegrin and Albanian). Primary reasons for this lie in the inadequate port infrastructure for acommondation of larger container ships and insufficient infrastructural connection of these ports with Central-European market. We have to note here that Republic of Albania timely recognized the need to improve port infrastructure and to ensure better connection with hinterland. That resulted in strengthening of competitiveness of the Albanian port of Durress that increased the volumes of passenger transport and cargo transshipment.

Complementary role of the Western Balkans ports could lie in development of free zones in the existing ports to attract foreign direct investments, which Montenegro did in 2005.

The aim of establishing free zones is to encourage production and processing activities which will lead to increase of export, decrease of unemployment and boost to economic development. Within port areas and in the contemporary settings, the free zones operate as transport, logistic and merchant platforms using their geographic position, privileged customs treatment for goods, appropriate tax policy and simplified administrative procedures as their comparative advantages.

In the Figure below, green squares represent potentials for establishing free zones in the Mediterranean, while red dots represent ports-hubs in the same region.

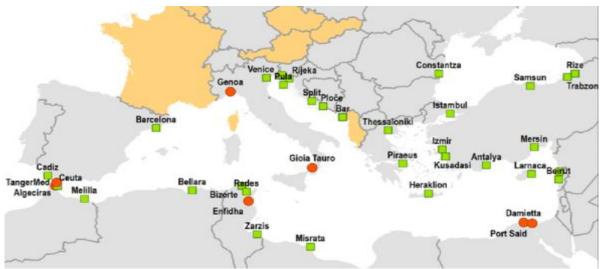


Image 37: Potential for establishment of free zones in the Mediterranean

As international trade liberalized, Export processing zones – EPZ, as a type of free zone, became key factors for deepening the global value chain (GVC) and drivers of economic activities that contribute to economic growth. There are numerous examples of the countries that achieved significant results after they implemented this economic policy instrument.

Almost entire territory of the Port of Bar, except for the Quay V (Passenger terminal) and a part of the Quay III, are in the Free zone regime. Status of Free zone user is acquired by signing of a contract on operating in the Free zone with "Luka Bar" AD as an authorized operator of the Zone. This is done based on the Law on Free Zones and internal legislation (General rules on operations in the Free zone). However, it could be said that the potentials of the Free zone Port of Bar have not yet been adequatly used due to numerous limitations: from 2010 to 2018 (when the Spatial Plan for Special Purpose Coastal Zone came into force); Free zone area was not covered by the spatial plan, while in the territory planned for development of the Free zone many resitution procedures are still pending. It is also important to mention the lack of real incentives for users of Free zone. This strategic document recognizes the Free zone of the Port of Bar as untapped development potential that can be valorized through development of manufacturing and trade activities that can contribute to higher volume of transshipment with all ensuing positive effects for the business of the company "Luka Bar" AD and Montenegrin economy. According to data from April 2019, "Luka Bar" AD, as the operator of the Free zone had the total of 65 active contracts for performing business activities in the Free zones. These were mostly for transshipment, storing and purchase and sale of goods.

C.1.3 Effects of Competition on the Global Level – Opportunities and Risks of the OBOR Initiative (Initiative "One belt – one road")

The initiative "One Belt, One Road" – OBOR or "Belt and Road", which was started in 2013 by the President of the People's Republic of China Xsii Jinping, has become the only international initiative with a global horizon, aimed at constructing trade and infrastructural network to connect Asia with Europe and Africa. In its early stage this initiative had a goal to strengthen Chinese ties with central Asia and Europe through development of infrastructure, primarily railways. For less than four years the Initiative got much broader dimensions. It now covers most of the countries of Euro-Asian continent and all sectors of economy, from trade to financing. This is illustrated by new financial institutions like Asian Infrastructure Investment Bank and Silk Road Fund.

Figures below show the important role of different regions in the chain of values according to this project, both on the land and at sea.

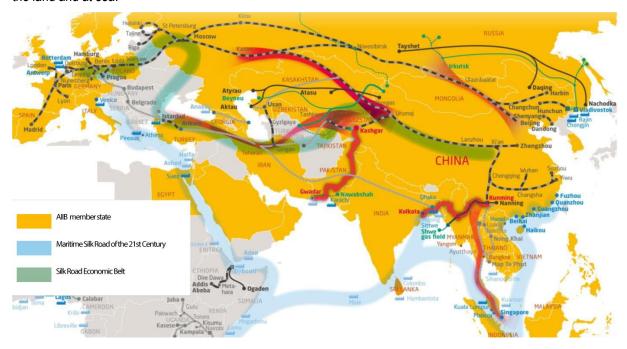


Image 38: Infrastructural projects within the initiative "OBOR" - Source Merics, 2017



Image 39: Silk Road Economic Belt



Image 40: Silk Water Ways

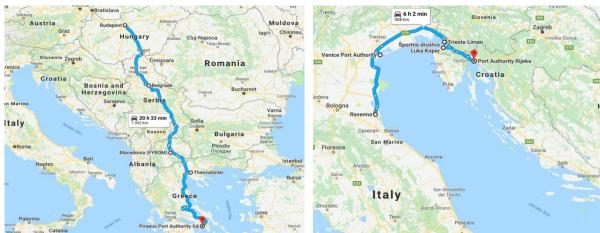


Image 41: Express Land-Sea Express Route, Railway connecting the Port of Piraeus with Western Balkans and Central Europe

Image 42: Highway connecting ports of Northern Adriatic

Development of new connections between Asia and Europe will ensure that Asian products can come to Europe faster and at smaller costs, which will give to Asian manufacturers an advantage in comparison with their European

competitors. At the same time in some specific industries lower transport costs can help many European participants to raise their market share in the Asian markets.

C.1.4 Role of NAPA (North Adriatic Ports Association)

NAPA is the association of the North Adriatic ports comprising port of Koper, Rijeka, Trieste, Venice and Ravenna. The goal of this Association is to promote the ports of Northern Adriatic as the closest European sites for unloading cargo transported on board of ships from the Far East to Europe. Although NAPA today does not face significant competition of the Port of Piraeus, the situation can be drastically changed if the Port of Piraeus were completely connected with a speed railway with Budapest. In that respect ports of Venice and Trieste are developing their new business strategies to gain good market positions in the long run. Port of Venice invests into its port infrastructure to be able to accept "mega" container ships of the capacity of 18,000 TEU. On the other side, the port of Trieste invests into new acceptance capacities for container ships and has the plan to connect with the rest of Europe by modern railway, which would strengthen its competitivenes in comparison with other Mediterranean ports. Joint strategy for development of ports that are NAPA members aims at ensuring comparative advantages for these ports over the Port of Piraeus and the ports of Northern Europe through improvement of port capacities, better connectivity and introduction of information technologies.

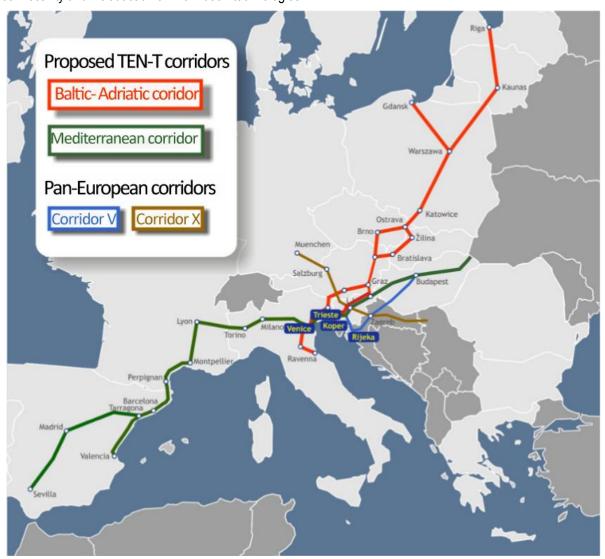


Image 43: Potentials of the ports that are NAPA members

C.1.5 Brief Overview of Competitors' Ship Registers

Flag of the ship or its national affiliation is a measure of identification and individualisation of a ship, and it is reflected in the legal, genuine and mutual link between the ship and the state ("genuine link"). Ships belong to the

state whose flag they have a duty and obligation to hoist. Historically speaking, in the first UN conference on the law of the sea that took place in Geneva in 1958, several conventions on the law of the sea were accepted. They, however, left open the question of what was to be considered a "genuine link" for acquiring a national affiliation for a ship, i.e. the flag. Naturally, this was followed by a broad range of different interpretations of this notion. This resulted in the expansion of registration of ships under the flags of convenience, with a minimum link of the ship and the flag state - in some countries only through the appointment of a "residential agent", an institute very similar to the institute of "agent for acceptance of service". Offering registration of ships under the conditions convenient for ship owners, most frequently in the form of weaker supervision of ship management, more flexible regulatory framework, etc. in the 20th century these flag states ensured to many shipowners more competitive position in the international maritime market because such a link between the ship and the state significantly reduced costs of shipping activities. The vagueness of the concept of genuine link in the international maritime law was reflected in the harm for safety of maritime navigation, a large number of so-called technical substandard ships, a large number of maritime casualties and incidents, abuse of labour law rights of seafarers etc.

UN Convention on the Law of the Sea from 1982 did not define what was to be considered a »genuine link« between a ship and its flag state. Each country bound by the Convention got the right to stipulate requirements for acquiring national flag through national legislation. With great ambitions to fully regulate registration of ships on the international level and to regulate other issues related to administrative, technical, economic and social issues, on 7 February 1986 UN prepared the Convention on Conditions for Registration of Ships. The Convention will probalby not come into effect, regardless of the fact that it gave freedom to the states to define the »genuine link« between ship and state, but it introduced a new concept too – »strengthening the genuine link« between ship and state. Given the above, there was no legal obstacle for the states with open registers to become flags of convenience, providing shipowners with the possibility to avoid obligations they would have in their domicile countries. Port state Control is an attempt to remove deficiencies of the system of flags of convenience in modern maritime sector (Paris MoU, Tokyo MoU, USCG). In that respect, according to European legislation, European flags become competitive because they provide certain conveniences. Prior consent of European Commission has to be obtained though and such conveniences may not be brought into connection with technically substandard ships. This is a way to protect competitiveness of European shipping and prevent outflow of tonnage into the registers of other maritime countries.

If a flag state, implementing its maritime policy, is trying to strengthen the position of its register in comparison with other registers, it has to explore all the factors that make a register competitive. Below is the analysis of the basic data of the selected registers for 2018 that were taken over from the database "Clarksons Research". This database is the most reliable international source of statistics. What follows is an overview of processed data on ships, gross tonnage, average age, shipowners, DWT of ships, etc. All flag states that are analysed below are on the Paris MoU White Lis for 2018.

Cyprus flag (3 rd in EU)							
Purpose of the ship:	Number	Medium average tonnage (BT)	Medium average age				
For transport of dry bulk cargo	307	40,750	10				
For transport of chemicals	51	11,000	13				
For transport of general cargo	51	9,407	20				
For transport of LNG/LPG	8	94,885	10				
For passenger transport	40	12,527	27				
For transport of oil products	18	32,520	20				
Tankers	19	58,339	12				
Line ships	325	15,705	13				
Other	118	4,513	18				
Tugboat	38	352	19				
MSV-PSV	42	5,013	8				
Total:	1.017						

Malta flag (1st in EU)							
Purpose of the ship:	Number	Medium average tonnage (BT)	Medium average age				
For transport of dry bulk cargo	607	41,303	9				
For transport of chemicals	391	13,050	11				
For transport of general cargo	165	9,045	15				
For transport of LNG/LPG	87	35,316	8				
For passenger transport	79	37,422	24				
For transport of oil products	95	33,050	14				
Tankers	158	83,778	11				
Line ships	474	38,364	12				
Tugboat	70	381	13				
MSV-PSV	18	6,672	10				
Other	68	12,188	19				
Total:	2.212						

Liberia flag (2 nd in the world)			
Purpose of the ship:	Number	Medium average tonnage (BT)	Medium average age
For transport of dry bulk cargo	1,053	46,483	8
For transport of chemicals	322	21,013	11
For transport of general cargo	70	15,498	14
For transport of LNG/LPG	140	29,644	12
For passenger transport	5	14,034	29
For transport of oil products	190	37,762	12
Tankers	328	85,760	12
Line ships	1,058	41,397	10
Other	89	8,216	19
Tugboat	17	261	27
MSV-PSV	65	44,126	17
Total:	3,337		

Panama flag (1st in the world)			
Purpose of the ship:	Number	Medium average tonnage (BT)	Medium average age
For transport of dry bulk cargo	2,412	42,342	10
For transport of chemicals	642	11,874	10
For transport of general cargo	1,157	8,141	23
For transport of LNG/LPG	250	35,453	15
Cruisers	36	84,281	18
For passenger transport	101	4,343	41
For transport of oil products	352	15,146	24
Tankers	237	114,357	15
Line ships	1,320	36,808	15
Other	570	2,353	23
Tugboat	528	318	26
MSV-PSV	158	32,245	22
Total:	7,763		

Greek flag (2 nd in EU)				
Purpose of the ship:	Number	Medium average tonnage (GT)	Medium average age	
For transport of dry bulk cargo	198	58,487	11	
For transport of chemicals	68	19,325	17	
For transport of general cargo	68	917	55	
For transport of LNG/LPG	40	74,521	7	
For passenger transport	407	2,713	31	
For transport of oil products	129	20,837	32	
Tankers	217	95,700	10	
Line ships	16	37,302	21	
Tugboat	145	247	39	
For oil supply	10	2,441	25	
Other	42	n/a	42	
Total:	1,340			

Marshal Islands flag				
Purpose of the ship:	Number	Medium average tonnage (GT)	Medium average age	
For transport of dry bulk cargo	1,372	42,842	8	
For transport of chemicals	644	21,225	8	
For transport of general cargo	115	20,129	8	
For transport of LNG/LPG	166	74,257	10	
For passenger transport	3	4,418	14	
Cruisers	8	39,216	12	
For transport of oil products	218	45,706	8	
Tankers	280	103,537	10	
Line ships	354	47,099	9	
Other	135	2,547	12	
Tugboat	42	283	5	
MSV-PSV	115	51,133	10	
Total:	3,452			

Source: "Clarksons Research"

Table 14: Basic data from the selected registers for 2018

In order to explore which flag states are preferred by 50 largest shipowners in the selected countries (Greece, Malta, Cyprus, Germany, USA, Hong Kong, Sigapore), the research team conducted a quantitative and qualitative analysis and the results presented below show the Registers, i.e. the flag states chosen by the most competitive shipowners in the selected countries.

Analysis (end of 2016): 50 largest shipowners in Greece			
Flag	Number of ships	DWT	Average age
The Bahamas	275	18,939.153	8.8
Liberia	482	43,746.067	7.0
Malta	513	53,127.266	7.4
Marshal Islands	538	50,643.054	6.5
Panama	288	26,429.120	10.1

Analysis (end	Analysis (end of 2016): 50 largest shipowners in Cyprus		
Flag	Number of ships	DWT	Average age
The Bahamas	33	1,547.085	22.6
Liberia	83	3,935.965	11.8
Malta	88	1,997.178	12.6
Marshal Islands	148	11,429.872	10.1
Panama	144	7,914.707	18.5

Analysis (end of 2016): 50 largest shipowners in Singapore

Analysis (end of 2016): 50 largest shipowners in Germany			
Flag	Number of ships	DWT	Average age
The Bahamas	32	1,085.526	14.8
Liberia	734	50,069.001	8.2
Malta	262	12,857.889	7.8
Marshal Islands	302	20,510.302	8.0
Panama	158	8,659.195	13.1

Flag	Number of ships	DWT	Average age
The Bahamas	177	17,649.090	9.0
Liberia	267	21,771.012	9.6
Malta	103	5,967.883	5.9
Marshal Islands	361	42,692.050	5.4
Panama	419	39,817.242	8.1
Analysis (end	Analysis (end of 2016): 50 largest shipowners in USA		
Пон	Number	DWT	Average

Analysis (end of 2016): 50 largest shipowners in Hong Kong			
Flag	Number of ships	DWT	Average age
The Bahamas	29	1,941.181	8.7
Liberia	111	11,293.454	7.5
Malta	56	3,131.740	6.4
Marshal Islands	249	19,590.979	4.2
Panama	308	21,421.633	11.2

Alialysis (elic	USA		
Flag	Number of ships	DWT	Average age
The Bahamas	216	14,837.713	14.4
Liberia	179	15,230.978	10.8
Malta	89	3,491.472	11.0
Marshal Islands	380	33,432.353	9.0
Panama	189	8,649.152	10.0

Table 15: Flag states chosen by the most competitive shipowners in selected countries

Source: "Clarksons Research"

On the basis of the qualitative analysis the research team recognized the following factors that influence decisions of shipers which flag, i.e. which Register to chose:

Factors influencing shipowners not to choose certain register:

- Bureaucracy and complex administrative procedures;
- High operational costs;
- Inflexible taxation;
- Minimum number of crew members (inflexibility);
- Compulsory social insurance of the ship crew;
- Instability related to legislative framework;
- Lack of services:
- Poor flag rating;
- Inefficiency of technical supervision and statutory certification.

Factors influencing shipowners to choose certain register:

- Liberal conditions in terms of nationality of shipowners;
- Unified regulatory framework and legal certainty;
- Tonnage tax or other form of single taxation;
- White list (Port state Control Paris MoU, Tokyo MoU, USCG);
- High level of use of information technologies and interactivity;
- Efficient maritime administration and permanent availability of services;
- Efficiency of technical supervision and statutory certification.

Procedures of ship registration	Taxation	Labour	Safety
Duration of the registration procedure (in days); Total cost of registration; Nationality of the owner in terms of conditions for registration of the ship; Information technologies (eregister); Costs and speed of issuing ship documents.	Taxation of shipping activities by tonnage tax; Taxation of shipping activities by standard corporate tax; Taxation of dividend; Subsidies; Taxation of seafarers' salaries; Bilateral agreements on double taxation etc.	Requirements in terms of nationality of the crew; Minimum number of crew members; Special requirements in terms of labour law status of seafarers.	Flag state control; Status of international conventions; Flag rating (Port state Control - Paris MoU, Tokyo MoU, USCG); Regular and extraordinary controls etc.

Table 16: Segmentation of criteria for rendering decision on chosing certain register

Project team identified competitive advantages of the Maltese register - one of the leading registers that keeps growing. It combines a competitive regulatory framework with the advantages of European flag.

Competitive advantages of the Maltese Ship register:

Shipowners registering their vessels under the flag of Malta may benefit from the following advantages:

- Efficient procedure for the registration of ownerhsip rights and liens and deleting ships from the register;
- Automatic exemption from turnover tax for registered ships over 1000 net tons;
- Exemption from turnover tax for registered ships over 1000 net tons and from tax on transfer of shares or stock in shipping companies owning such vessels;
- Registration of vessels not strictly considered ships in legal terms, such as oil platforms and other installations for exploration and production of hydrocarbons;
- Registration of vessels under construction and mortgages on such vessels;
- No restrictions on the nationality of master, officers and crew serving on Maltese vessel;
- No restrictions on the nationality of shareholders and directors of Maltese shipping companies;
- Uncomplicated and affordable procedure for incorporation of shipping companies and transfer of shares or stocks in such companies;
- Easy access to decision-makers, i.e. maritime administration and technical inspectorates of the flag state.

Table 17: Competitive advantages of the Maltese Ship register

C.2. Development of the "Blue Growth" Initiative

Blue growth⁵⁷ is the EU long term strategy for supporting sustainable growth in the entire maritime sector⁵⁸. Seas and oceans are considered significant drivers for European economy and have great potential for innovation and growth. They give significant contribution to achieving the goals of Europe 2020 strategy for smart, sustainable and inclusive growth⁵⁹.

In the broader maritime economy, the Commission's logic since 2013 has been to:

- Push for sustainable growth in the maritime economy, with a particular focus on five sectors: energy, aquaculture, tourism, biotechnology and marine mineral resources;
- Underpin growth by working on key "enablers" such as data and information, research, spatial planning, skills, environmental protection and maritime surveillance. These "enablers" are common prerequisits for the maritime economy to thrive;
- Tackle market failures and bottlenecks that require public intervention, to create better conditions for innovation and allow maritime economy to develop;
- Mobilize EU funding instrument to support development of Blue Growth;
- Encourage and promote partnerships in regions, between Member States and non-EU countries, public authorities and economic players;
- Explore market opportunities worldwide for the international dimension of blue economy.



Image 44: Graphic presentation of maritime economy in the context of Blue Economy

C.2.1 Blue Growth Strategy

Blue Growth Strategy consists of three components:

- A. <u>Develop sectors that have a high potential for sustainable jobs and growth, such as:</u>
- Aquaculture: Focus is put on cooperation with state administrations with a view to reducing administrative costs and promoting the values, quality and sustainability of EU products.
- Coastal and nautical tourism: The goal is to support regionaal cooperation and upgrade nautical or culture-historical routes and generate new jobs without negative impact on maritime environment. Work of the Commission on the coastal and nautical tourism focuses on tangible results that include the following:

⁵⁷ Commission Staff Working Document "European Economic Forecast – Autumn 2012." ISBN 978-92-79- 22855-1

⁵⁸ "Innovation in the Blue Economy: realising the potential of our seas and oceans for jobs and growth ", COM (2014) 0254 6 Annual Economic Report on European Union Fishing Fleet: revenue in 2014.: 7,3 billion euro; net profit in 2014: 770 million euro

⁵⁹ https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/body/limassol_en.pdf

- **Nautical tourism:** Marinas are present in numerous operational programmes of the European Regional Development Fund, while in 2016 European Maritime and Fisheries Fund was opened and public call for proposals for establishing new transnational nautical routes published.
- Cruise-ship toruism: After Caribbean, Europe is the second most important world destiantion for cruise-ship toruism. Number of passenger visits increased by 22% in the period 2009-2014, from 23.76 million to 28.96 million.
- Underwater cultural heritage shipwrecks or human settlements endangered by intensified human activities on the coast. They are not only irreplacable traces of European history and ancient history, but also a precious attraction for tourists that the Commission works on together with UNESCO.
- **Fisheries-related tourism:** this is the key area for Fisheries Local Action Group-FLAG that helped local fishermen to make necessary investment in order to bring tourists on their ships.
- **Promotion of domestic fish catch in restaurants and hotels:** Ensures that local fishermen can make a larger income from the catch and reduces the need to catch larger quantities.
- **Innovative individual projects:** Project of recreational fishing "Throw and catch" in Jutland (Denmark) offers a simple way for the family and friends to practice fishing in safe and welcomming environment where catch is guaranteed.
- Blue biotechnology: For blue biotechnology, a sector of high risk and high rewards is based on
 investment led by research based on high technologies. Primary focus was on using EU programmes for
 supporting research and development and creating incentives for trial ventures that are closer to the
 market.
- Blue energy (energy of wind at the sea and ocean energy): Research programmes and EU structural
 funds supported fundamental research in the market. The Commission started a joint private-public
 process Ocean Energy Forum to analyse market deficiencies. Working in partnership, maritime industry
 and public bodies developed the Ocean Energy Strategic Plan focused for the first time on support to
 investment, risk management, standards and risk-based processes of public authorities.
- Seabed mineral resources: Several challenges have been solved in parallel: develop a coherent and
 compatibile strategy for EU resources with a view to ensuring circular economy; improve research and
 technological development for extracting mineral raw materials from the sea; and protecting sea from
 pollution.

B. Key components for providing knowledge, legal preciseness and certainty in blue economy:

Maritime data and knowledge for better access to information about the sea: Better availability of these
data to users can improve the work of public and private sector, researchers and civil society.

Three key EU initiatives for achieving this goal are:

- Copernicus Marine Environment Monitoring Service that provides data from universe and oceanographic forecasts,
- Base for collection of data, 60 supporting collection and processing of data about fisheries and aquaculture.
- European Marine Observation and Data Network (EMODnet) collects, processes and distributes all data about the sea and data about other marine products.
- Maritime Spatial Planning: Spatial planning has a leading role in improving sea water management in EU countries. After it was proven that spatial planning increases efficiency of licencing coastal activities and

_

⁶⁰ Council Regulation (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy

protects the coast, the Directive 2014/89/EU was adopted, establishing the framework for maritime spatial planning.

- Integrated maritime surveillance: Adopted in 2014, Action plan of the Maritime Security Strategy of the European Union was revised in 2018. This ensured that the policy response remains fit for current and future challenges, in line with political priorities in the rapidly changing security environment, taking into consideration legislation, policies and other EU initiatives.
- Development of skills: Initiative for shipbuilding from 2013 "Leadership 2020" underlined the need for
 mutual recognition of qualifications, transfer of competences between generations and convincing young
 people that this industry has future. Industry-led initiatives will result in strategies for dealing with skill gaps
 in the selected sectors.
- Maritime sector and maritime research: Current EU research programme ("Horizon 2020") supports the activities of research, industry leadership and social challenges.

C. Offshore strategies aimed at ensuring adapted measures and cherishing cooperation between countries

Baltic, Adriatic, Ionian, Black and Mediterranean Sea, as well as the Northern and Atlantic Ocean are unique marine regions and they deserve adapted strategy that uses advantages like Atlantic renewable energy potential and dealing with weaknesses like pollution in the Baltic Sea or maritime security in the Mediterranean.

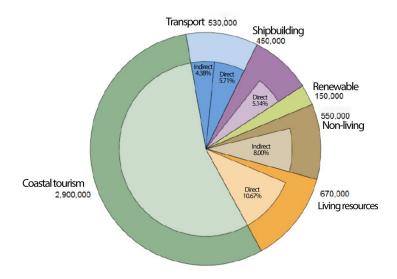
- Adriatic and Ionian Sea: In 2014 the Commission initiated EU Strategy for Adriatic Ionian Region (EUSAIR). EUSAIR started from the maritime strategy for Adriatic and Ionian seas adopted in 2012, which is a part of macro-regional strategy. It deals with the opportunities in maritime economy like blue growth, land transport, energy connectivity, protection of marine environment and sustainable tourism sectors that would have the key role in generating new jobs and strengthening economic growth in these regions.
- Atlantic Ocean: Atlantic Strategy for 2011 and Action Plan for 2013 had five high level goals: implementation of the ecosystem approach, reduction of carbon footprint, sustainable exploration of marine resources, response to threats and emergencies and promotion of inclusive growth.
- Baltic Sea: "sustainable Blue Growth Agenda for the Baltic Sea Region", adopted in 2014, helps in the
 analysis of economic opportunities. The goal of this proactive process is to encourage inter-regional, multisectoral and inter-cluster cooperation and to promote a number of projects for innovation and
 sustainability.
- Black Sea: Since the adoption of the Black Sea Synergy initiative in 2007 the Commission has been
 working on improving the knowledge on the Black Sea. Within these efforts the areas were identified where
 intensified cooperation in blue economy is needed as well as research into the potential maritime clusters.
- Meditarranean Sea: Ministerial Declaration on Blue Economy of the Union for the Mediterranean (UfM) envisages achievement of tangible results in regional maritime management, research, innovation and skills. UfM also supports the idea of establishing an annual UfM forum on blue economy in order to establish cooperation between active initiatives, give contribution to future actions and possible approaches to the sea basin and maritime strategy without overlapping with the existing initiatives.
- Western basin of the Mediterranean Sea is a recently developed initiative for sustainable development
 of blue economy in cooperation with the Western Mediterranean countries and Secretariat of the Union
 for Mediterranean. It aims at encouraging blue growth and jobs, improving security and protecting and
 preserving ecosystems and biological diversity in the region. The initiative is a result of the Trade
 Ministerial conference of the Union for the Mediterranean on blue economy from 2015.
- Northern Sea: Region of the Northern Sea where some of the key European ports are located, is one of
 the most exploited marine areas with a growing economic activity. In 2013 European Parliament proposed
 and approved the "preparatory action" for regional strategy in the Northern Sea region, through workships
 of project financing, managing space and resources, problems of the environment and innovations.

C.2.2 Blue Growth Model for Jobs

About 97% of more than 5 million people who work in blue economy are employed in five sectors:

- shipping
- shipbuilding,
- non-living resources (primarily oil and gas),
- Living resources (fishing, aquaculture, processing) and
- Coastal and nautical tourism.

Figure below shows contribution of blue economy to GDP and employment in the EU blue economy sector (Source: Eurostat 2016)



 $\label{prop:prop:companies} \emph{Figure 3} \ \ \text{employment includes those companies providing goods and services to the primary sectors.}$

Image 45: Contribution of blue economy to GDP and employment in the EU blue economy sector (Source: Eurostat 2016)

Employment opportunities are divided in following categories (direct employment opportunities taking into account CNE capacities):

Sector	Employment opportunities (sub-sectors)	
	Building ships and floating vessels	
Shipbuilding and	Building yachts for sports and recreation	
refurbishment	Repair and maintenance of ships	
	Repair and maintenance of leisure yachts	
	Infrastructure building	
	Services in maritime transport	
	Port services	
Shipping, ports and transport	 Transport of passengers in internal and international traffic 	
шинорого	Transport of cargo in internal and international traffic	
	Activities of maritime agents	
	Storage	

	Cargo handlingLogisticsMaritime equipment and engines
Sea bed exploitation	Oil and gas explorationsActivities supporting oil and gas extraction
Aquaculture (connected with MSP)	 Fishing boats (small coastal fleet, industrial fleet) Aquaculture (fish, shellfish, etc.) Processing and distribution (processing and canning of fish, crabs and molliscs, retail and wholesale distribution, ready meals, production of oil and fat and other food products)
Maritime tourism	 Accommodation (hotels, motels, camps, agro-tourism etc.) Transport (air, road, railway, marine) Other (food industry, HoReCa services, agencies, etc.)
Renewable energy souces	 Energy communities, solar power plants, windmills, hydro powerplants, etc

Table below shows the economic contribution of blue economy in EU countries by sectors (Eurostat database, estimates from August 2019):

Employed persons (in thousands)	2009	2010	2011	2012	2013	2014	2015	2016	2017
Coastal and nautical tourism	1,954	1,883	1,850	1,790	1,817	1,741	1,728	1,916	2,175
Living marine resources	591	590	571	577	560	561	560	573	571
Non-living resources	175	177	175	177	169	168	170	162	162
Port activities	455	451	432	463	463	495	521	574	574
Shipbuilding and refurbishment	345	311	296	293	292	296	302	316	315
Maritime transport	239	231	229	219	219	234	239	232	232
Blue economy	3,761	3,643	3,554	3,519	3,520	3,495	3,521	3,774	4,030
Total employment in EU	215,597	212,661	212,612	211,935	211,410	213,486	215,818	218,972	221,993
Blue economy (% EU jobs)	1.7%	1.7%	1.7%	1.7%	1.7%	1.6%	1.6%	1.7%	1.8%

BDP (EUR million)	2009	2010	2011	2012	2013	2014	2015	2016	2017
Coastal and nautical tourism	51,631	51,812	52,144	50,424	52,416	52,505	54,407	58,359	65,116
Living marine resources	16,631	16,828	17,413	17,629	17,192	18,185	19,218	20,846	20,681
Non-living resources	34,719	36,507	37,214	37,302	35,678	32,705	30,901	22,757	22,757
Port activities	28,245	28,290	31,707	29,149	29,697	31,152	34,452	34,440	34,440
Shipbuilding and refurbishment	12,816	13,901	13,640	13,626	13,252	14,464	141,311.10	14,916	14,821
Maritime transport	22,548	25,008	21,238	21,907	23,256	23,423	27,597	21,944	21,944
Blue economy	166,590	172,345	173,356	170,038	171,491	172,435	180,886	173,261	179,758
EU BDP (EUR billion)	11,116	11,525	11,835	12,076	12,178	12,600	13,274	13,380	13,751
Blue economy (% BDP)	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	1.4%	1.3%	1.3%

Table 18: Economic contribution of blue economy to EU countries by sectors

The figure below shows the standard that Montenegro should strive to in terms of contribution of blue economy. In the countries where blue economy makes progress, the share of blue growth in the employment of the local population is higher because of the preserved marine environment and more moderate industrial development

Figure 8 Size of the Blue Economy compared to the total per Member State, 2017, percentage

Share of Blue Economy in national

Share of Blue Economy in national GVA

employment

Share of Blue Economy in national GVA

employment

EL HR MT CY EE ES PT DK LV BG IE FI IT EU UK LT SE NL FR PL DE RO SI BE HU SK CZ AT LU

Image 46: Share of blue economy in employment of local population and in the national gross added value - EU

C.3. Maritime Clusters

C.3.1 Concept of Clusters

Cluster is defined as a group of geographically close interconnected companies and related institutions in certain field connected with external economy. External economy for a cluster includes economic and financial intersectorial relations, common knowledge and technology base and labour market. Institutions in a cluster compete with each other but they cooperate too. Clusters are drivers of growth and development and means for attracting foreign investments.

The main cluster benefits can be achieved through cluster activities, such as:

- Promotion campaigns;
- Economic reports on the maritime cluster;
- Cooperation between cluster organizations and knowledge institutions;
- Specific support programmes
- Platforms to exchange best practices

Most maritime clusters that include more than one maritime sector were founded in the last 15 years. Threre are different approaches to developing maritime cluster organization. The initiative can be taken top-down, i.e by the Government, or it can be taken bottom-up, by leading firms and/or sector associations.

Key goals of cluster establishment are to install a structure that provides clear solutions for cluster issues and to define cluster development policy.

Characteristics of diferrent maritime cluster organizations are presented below.

	↓ Top-down	1 Bottom-up		
Strengths	Focus on long term strategy based on budget callculations for financing their activities	II		
Weaknesses	Challenge caused by continuous balancing process between interests of cluster organizations and those of sector associations	Coping with differences in sector's interests		
Opportunities	Taking initiatives to exstablish a single-pont-of-entry into the cluster	Taking initiatives to increase the government involvement in the activities important for the cluster		
Threats	Limited structural sector involvement that may lead to focusing too much on long-term benefits or conflict with cluster's companies short term interests.	Too narrow local focus may lead to inappropriate activity of a maritime cluster organization		

Table 19: Characteristics of maritime clusters organizations

European organization for cluster observation - Cluster Collaborat - recognizes and maps certain clusters in Montenegrio (Montenegrin IT Cluster, Montenegrin Raspberry Cluster, Montenegrin Tourism Cluster, Montenegrin Wine Cluster) that seem to have the bottom-up organization.

Maritime clusters

Maritime cluster can exist in the following formats:

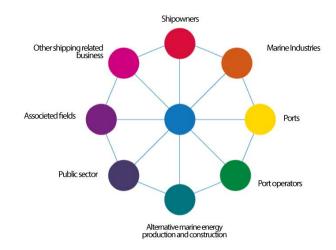


Image 47: A Typical Maritime Cluster

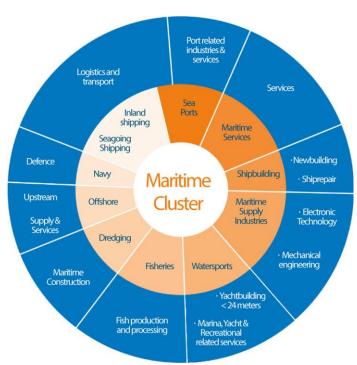


Image 48: Integration in A Maritime Cluster

Since the Blue Growth initiative clusters have been mapped and observed by sectors in the Europen Cluster Observatory, which reflects the importance EU attaches to the cluster concept.

Maritime clusters within EU - case studies

Many EU countries have not yet established maritime clusters that would integrate sub-sectors of Blue Economy. Although solid economic results are not so visible and tangible, synergy among sectors and subsectors of Blue Economy produces significant results. Bellow is an overview of some of the representative maritime clusters:

Dutch Maritime Cluster

In the mid 1990s, under the influence of the Dutch maritime industry crisis, Dutch shipowners association convinced the government to look into the fundamental problems of the industry and to come up with a new bold policy. For this purpose several studies were conducted and they led to a change in policy focus. Private sector took the

initiative to establish the Dutch Maritime Network in June 1997 with an independent board of maritime industry leaders and financial support from trade organizatons and Dutch government. The objective of the Dutch Maritime Network was to promote and strengthen the Dutch Maritime Cluster. The cluster is mostly financed from the private sector and it provides the Dutch maritime industry with research information and a forum for discussion. Its activities focus on the following topics: communication and promotion, manpower and education, export and innovation. The Dutch maritime Network also represents the inudstry before the Government on matters such as competition policy in order to ensure that the Dutch maritime industry is not at a competitive disadvantage either domestically or internationally. The Dutch Maritime Network is considered the most successful among all initiatives supporting maritime clusters. The Dutch maritime cluster includes 11 sectors and 11,850 companies, which probably makes it one of the most important and one of the most complex clusters in the world⁶¹.



Source: Journal of Maritime Business, No 81, pp. 89-114, December 2006.

Image 49: Various integrated cluster approaches: The Dutch Maritime Cluster

London Maritime Services Cluster

Similar to other European developed maritime countries, United Kingdom faced the same situation in 1980s. In an increasingly competitive environment, the Londom Maritime Cluster was established in 2000. Key objectives of the London Maritime Cluster include: (1) to maintain and enhance London's position as the world's premier maritime center, (2) to promote the maritime service sector, and (3) to attract new maritime related business to London and the UK.

According to the report "The Future of London's Maritime Service Cluster: A Call for Action (2004)", maritime service cluster consists of five sectors: shipping, intermediate services, maritime governance and regulation, support services and industry associations. The importance of maritime service cluster in London and the UK can be explained by IFSL report "Maritime Services" (2003). According to the report, net overseas earnings of maritime services in London and the UK rose by 16%, to 1,092 GBP between 1999 and 2002, and maritime services form a key segment within London's status as an international financial centre. Adding more than one billion GBP of overseas earnings from UK shipping, the combined net overseas earnings of maritime services in UK totalled 2.2 billion GBP.

Bulgarian approach to maritime clusters

Marine Cluster Bulgaria (MCB) is a non-government organization established in Varna in 2007. Its members include small and medium-size enterprises from various fields of the maritime industry, universitites, research-development centres and associations that are mostly active in the maritime sector. MCB acts towards the creation of favourable

_

⁶¹ Total added value of the Dutch Maritime Cluster in 2002 amounted to 12.6 billion euro, while its share in the Dutch GNP was 2.9%. Turnover of this cluster was 21.4 billion euro, export being 12.6 billion euro. Export of the Dutch Maritime Cluster made 5.4% of the total export of the Netherlands. Number of employees in the Dutch Maritime Cluster achieved about 190 000 people. (Chul-hvan Han, 2006., Dongseo University, "Comparative Analysis on World's Major Maritime Clusters")

conditions for development and enhanceent of competetiveness of the blue economy by introducing new organizational, product, market and technological solutions, training, implementation of best practices, as well as for its promotion at national and international level by introducing new organizational, product, market and technological solutions, training, implementation of best practices, as well as for its promotion at national and international level. MCB actions in the last couple of years were mostly focused on the promotion of clusters by initiating national and international forums related to topical maritime issues, organized in cooperation with local and European partners.

Key objectives of the cluster include: creation of conditions for development of maritime industry in Bulgaria, by ensuring synergies between all stakeholders with a view to enhancing competitiveness of this sector; promoting maritime sector on the national and international level; facilitating integration of the international transport network; supporting members in the activities they do.

Intermodal Transport Cluster – Croatian approach to maritime clusters

Intermodal transport cluster was established in Croatia in 2005 as a Croatian Shortsea Promotion Centre. It was established at the initiative of the Croatian Ministry of the Sea, Transport and Infrastructure and its members are maritime port authorities, operators, Croatian railways, bigger agents and transporters, as well as other participants in transport. Activities of the Croatian Maritime Cluster include: promotion, development projects and digitalization of intermodal transport services.

Malta Marittima Agency

Malta Marittima Agency puts effort into efficient implementation of integrated maritime policy and promoting maritime economy on the local, European and international level. Goals of this agency include: creation and promotion of maritime sector cluster; keeping an open dialogue between private and public stakeholders; strengthening cluster competitiveness; promoting sustainable projects, etc.

Spanish Maritime Cluster

Spanish Maritime Cluster (Cluster Maritimo Espanol – CME) is based on the synergy of all Spanish sea-related activities, line maritime transport, shipbuilding and ship repair, engineering and maritime supporting industry, fisheries and mariculture, nautical industry, marines, ports and port services, exploration of the sea, organized trainings etc. In addition to this, the aim of the Spanish Maritime Cluster is to align with the European maritime policy approved in the so called Blue Book, whose main goal is to maintain and strengthen leadership, growth, competitiveness and sustainability of maritime activities, in the context of which CME's support is very important.

C.4 S.W.O.T. Analysis of Montenegrin Maritime Economy

Using the S.W.O.T. method the scheme below presents internal and external environment of Montenegrin maritime economy sector and current circumstances on the national and international level tackled in the chapters B and C.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
 Favourable geostrategic position; Rich maritime tradition; Relatively balanced distribution of port infrastructure along Montenegrin coast; Favourable and stable business environment for attraction of foreign investments; Existance of appropriate legal framework for implementation of infrastructural projects in the field of port infrastructure and suprastructure (Law on Concessions, Law on Public-Private Partnership); All types of ports are represented (by purpose); Improved network of regional and trunk roads; Established maritime navigation security system and system for surveillance of maritime transport and responses in emergencies; High quality organizatonal structure of Montenegrin maritime administration and clearly defined division of competences; Montenegro is recognized as a nautical destination and the number of arrivals of foreign sport and leasure vessels is continuously increasing; Montenegro is recognized as a destination for cruisers and there is a continuous increase in the visits of cruise ships to our coast; There are higher education institutions for education of human resources in maritime sector and licenced centres for training of seafarers; Preserved environment, i.e. marine environment; 	 The system of statistical observance of relevant indicators in Montenegrin maritime economy is not established; State budget does not ensure sufficient funds for activities that can contribute to improvement of the situation in the maritime economy sector; Weak connections between coastal region and key European corridors; Insufficiently developed port infrastructure and connections between ports and hinterland; Lack of capacities for refurbishment of ships for internal navigation; Insufficiently represented liner shipping in the total maritime transport Insufficiently developed multi-modal transport; Insufficiently utilized potentials of the Free Zone of the Port of Bar; Decentralized port management; Insufficiently developed electronic services and efficiency of maritime administration; Insufficiently attractive conditions for employment of qualified human resources in Montenegrin maritime administration; Insufficient participation of Montenegrin maritime administration; Insufficiently attractive conditions for relevant international maritime organizations and other bodies; Insufficiently motivating tax policy for shipping activities and for stimulating investment in «eco-ships»; Lack of willingness of the financial sector to support investment projects in maritime economy; Underdeveloped Montenegrin merchant fleet; Lack of cluster connections between maritime administration and industry are not sufficiently included in the processes of sectorial policy and maritime legislation development; Professional association and industry are not sufficient capacities and technical equipment for acting in case of pollution and other large-proportion extraordinary situations at the sea; 	 Financial sector support to development projects in maritime economy; Improved conditions for employment in maritime administration and continuous training of human resources; Joint promotion of investment potentials in the maritime economy sector by public and private sector; Valorizing potentials of the Port of Bar Free zone; Development of multi-modal transport; Stronger involvement of professional associations and industry into the processes of sectoral policy and maritime legislation development; Valorizing abandoned and unutilized port infrastructure; Huge biodiversity of the sea and other marine resources; Important potentials for further development of nautical tourism and curise-ship tourism; Hiring experts in Montenegrin maritime administration; Financing from European Union pre-accession funds and other international sources; Encouraging tax policy for investment in shipping activities, enlargement of merchant fleet and training of human resources in private sector; 	Sharp increase of investment in port infrastructure and increase in frequency of maritime transport increases their impact on environment parameters; Increase in frequency of maritime transport increases the risk of maritime casualties and incidents; Port development will not come along with harmonized development of railway and road infrastructure; Insufficient budget funds for implementation of activities defined in this strategic document; Strengthening the position of competitive ports in the region; Influence of other human activities and pressure on the environment and sea (eutrophicaition, pollution and unsustainable fishing); Crisis in the international freight market and fall in demand for maritime trade and services; Sharper competition in the international labour market in maritime industry and outflow of human resources; Mismatch in the implementation of various activities in the field of blue economy that are within the competences of different authorities;

PART D. STRATEGIC GOALS OF INTEGRATED MARITIME POLICY

D.1 Strategic Goals and Operational Objectives

Analysing internal and external environment, as well as opportunities and threats to the markets that Montenegro participated in, project team identified the following key components that the Strategy for Development of Maritime Economy of Montenegro is based on: private sector, public sector, civil society, expert community and the environment.

Maritime economy ensures social and economic benefits for current and future generations contributing to better standard of living, higher incomes and employment. It is based on clean technologies and renewable energy sources and aims at ensuring economic and social stability that will be sustained through time. It can be said that blue economy is actually controlled through public and private processes that are inclusive, proactive, adaptable, transparent, multi-secctoral, long-term oriented and innovative.

To achieve the strategic goals that will contribute to sustainable economic environment favourable for the blue sector, public and private stakeholders have to:

- Set clear, measurable and consistent goals to create sustainable blue economy;
- Assess their own performance against the set goals;
- Create equal economic and legislative setting that provides blue economy with adequate incentives and adequatly regulates the field;
- Plan, conduct and efficiently manage utilization of marine space and resources;
- Develop and implement standards, guidelines and best practices that encourage blue economy.
- Recognize that economy at the sea and economy on land are mutually connected and that many threats that marine environment faces originate from the land.
- Cooperate actively, share information, knowledge, best practices, lessons learned, perspectives, ideas etc.

D.1.1 Setting Strategic Goals

The comprehensive analysis of the situation is followed here by presentation of goals. In order to follow the achivement of the goals the project team identified indicators of success (performance indicators), planning and budgeting of the activities. Goals are directly linked with the analysis of the state-of-affairs. They are the key elements of this strategic document and serve as the basis for policy development and evaluation of success. The overall aim is to improve current state-of-affiars in the maritime economy sector by achieving the set goals through the Strategy implementation.

Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents envisages strategic goals and operational objectives. Strategic goal is defined as the desired result that is to be achieved in public policy on the national level. These are general goals defined for a longer period of time that are to be achieved on the national level through implementation of the strategy. These are the goals that the Government plans to achieve through improving specific areas of policy in relevant sectors. Developing the Strategy for the Maritime Economy Development, the project team tried to set the strategic goals in such a way that each of them is a sum of all operational objectives related to it.

Strategic goals set by the project team are as follows:

Component of the Quintiple Helix Model	Strategic goal
Private sector	To increase the contribution of the maritime economy and related activities to overall economic development
Public sector	To strengthen capacities of the Montenegrin maritime administration and simplify administrative procedures
Civil society	3. To ensure a more intensive involvement of the civil sector, particularly professional non-government associations, in all processes that precede the adoption of strategic decisions, legislative pieces, and proposing system solutions for overcoming challenges in the maritime economy sector
Expert community	To ensure that the expert community becomes a driver of maritime economy development
Environment	To ensure that maritime economy growth is based on green economy principles

D.1.2 Performance Indicators for the Level of Achievement of Defined Operational Objectives

Information about the level of success (performance) achieved in certain public policy area shows to what extent the responsible insitution is achieving the set goals. These indicators are useful for decision makers when they are deciding about conducting sectorial policy in the future. Through this process it can be clearly seen where the budget funds should be allocated and where other sources of financing are required, like donations, funds, international financial institutions etc. Information about success (performance) can be obtained through indicators and their target values. Indicator is a criterium for measuring level of success in achieving a goal or checking whether certain activity was implemented and what it achieved. These indicators ensure an assessment of whether the set strategic goals and operational objectives have been achieved, i.e. if the envisaged activities were implemented.

Having defined strategic goals and operational objectives, the Project team defined performance indicators for each operational objective. Performance indicator shows changes caused by the results of activities. Setting each performance indicator individually, the Project team established a clear link between the envisaged activities and operational objective to be achieved through their implementation. Each indicator is defined in such a way that it indicates to the result intended to be achieved by that particular objective. In addition to this, the base values are given and 2018 was taken as the baseline year, i.e. as the input parameter for the state-of-affairs. Target value is then estimated and given as a mid-term value to be achieved by 2025 and the end target value is given as a long-term value to be achieved at the end of the implementation of the strategic document (2030).

According to Methodology for development of policies and development and monitoring implementation of strategic documents, at least one and at most three indicators have been defined for each operational objective.

The table below offers a detailed presentation of Performance indicators for achieving the defined operational objectives.

Performance indicators for the achievement of operational objectives								
Strategic goal:	1	To increase the	contribution of the maritime econ	omy and related activities to overall eco	nomic development			
Operational objective:	1.1	Achieve susta	nable growth and competitiveness	in the port sector				
Duf		Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:			
Performance indicator:	1	Volume of transhipment in ports	"Luka Bar" AD 1.382.5 AD "Port of Adria" 173.		"Luka Bar" AD 2.751.964 t AD "Port of Adria" 390.106 t	"LUKA BAR" AD AD "Port of Adria"		

PART D: Strategic Goals of Integrated Maritime Policy – Performance Indicators of the Level of Achievement of Defined Operational Goals

	Performance indicators for the achievement of operational objectives							
	2	Number of concluded concession contracts for provision of port services	4	8	14	MSPMA		
	3	Number of active contracts on doing business activities in the Free Zone	65	80	95	A.D. "Luka Bar"		
	4	Number of containers transshipped in Montenegrin ports (in TEU units)	50.444	83.689	120.146	A.D. "Port of Adria"		
Operational objective:	1.2	Increase gross tonnage of	of Montenegrin merchant fleet					
Deference			Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:		
Performance indicator:	1	Gross tonnage of the Montenegrin merchant fleet	142.000 BT	240.000 BT	450.000 BT	MSP, Harbour Master's Offices		
Operational objective:	1.3	Increase number of yach	ts registered in the Montenegrin y	yachts register				
Performance indicator:	1	Number of yachts registered in the Montenegrin Yachts Register	Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:		

		Perfor	mance indicators for the achiever	ment of operational objectives		
			259	350	520	MSPMA, Department for Yacht Register
	2	The amount of fees collected for registration of yachts in the Yachts register, deleting yachts from the Register and technical inspections	40.053,83 euro	56.000 euro	100.000 euro	MSPMA, Department for Yacht Register
Operational objective:	1.4		wth and competitiveness of the M takeholders in the maritime econo			
Performance			Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:
Performance indicator:	1	Number of active Blue Economy business operators	488	650	750	Tax administration
Operational objective:	1.5	Position Montenegro as	an attractive nautical and cruise-s	ship destination		
			Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:
Performance indicator:	1	Number of issued vignettes	5.076	7.000	10.000	Ministry of Transport and Maritime Affairs

PART D: Strategic Goals of Integrated Maritime Policy – Performance Indicators of the Level of Achievement of Defined Operational Goals

		Perfor	mance indicators for the achiever	ment of operational objectives		
	2	Number of nautical tourism ports	5	7	10	Ministry of Transport and Maritime Affairs
	3	Number of shipyards intended for building and refurbishing yachts and mega-yachts	2	2	3	Ministry of Transport and Maritime Affairs
	4	Number of visits of cruise ships to the port of Bar	16	31	50	Ministry of Transport and Maritime Affairs, Harbour Master's Office
Strategic goal:	2	To strengthen capacities	of the Montenegrin maritime adm	ninistration and simplify administ	rative procedures	
Operational objective:	2.1	Ensure that Montenegro	meets the international obligation	ns it has as a costal state, flag sta	te and port state	
			Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:
Performance indicator:	1	ADREP reports applied	2.232	2.800	4.000	MSPMA
	2	Training of employees in the Maritime-Operational Centre	10	25	35	MSPMA

PART D: Strategic Goals of Integrated Maritime Policy – Performance Indicators of the Level of Achievement of Defined Operational Goals

	Performance indicators for the achievement of operational objectives												
	3	Number of controls conducted by Recognized organizations	0	3	5	Ministry of Transport and Maritime Affairs							
Operational objective:	2.2	Continuously improve maritime navigation safety and sa	afety of human lives and property	at the sea, as well as security of	port facilities and ships								
		Number of employed inspectors for safety of maritime	Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:							
	1		4	10	16	Ministry of Transport and Maritime Affairs							
Performance indicator:	2	Number of distress calls on an annual level	45	30	20	MSPMA							
	3	3	3	3	3	3	3	3	Number of maritime casualties and incidents	5	4	2	National Commission for Investigation of Casualties and Serious Inccidents
	4	Number of search and rescue actions at the sea	35	25	15	MSPMA							

PART D: Strategic Goals of Integrated Maritime Policy – Performance Indicators of the Level of Achievement of Defined Operational Goals

	Performance indicators for the achievement of operational objectives							
	5	Parameter of the process of departure of S&R boats	15	10	5	MSPMA		
	6	Number of over speeding instances in Boka-Kotor Bay	1.000	500	300	MSPMA		
Operational objective:	2.3	Simplify administrative procedures						
		Number of electronic services related to the maritime sector and the maritime economy available in the eAdministration portal or elsewhere	Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:		
Performance indicator:	1		0	5	10	Ministry of Public Administration		
	2	Number of electronic records of registered boats, ships, yachts and other vessels	2	3	4	Ministry of Transport and Maritime Affairs		
Strategic goal:	3	To ensure a more intensive involvement of the civil sector			rocesses that precede the adoption	on of strategic		
Operational objective:	3.1	decisions, legislative pieces, and proposing system solutions for overcoming challenges in the maritime economy sector Increase media coverage of all activities of the Montenegrin maritime administration, with a view to ensuring active involvement of civil society in development processes in the Montenegrin maritime economy						
Performance indicator:	1	Number of public calls sent in the initial stage of development of an enactment	Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:		

PART D: Strategic Goals of Integrated Maritime Policy – Performance Indicators of the Level of Achievement of Defined Operational Goals

		Perfori	mance indicators for the achiever	nent of operational objectives		
			2	5	10	Ministry of Transport and Maritime Affairs
	2	Number of organized Round tables within public consultation processes	2	10	15	Ministry of Transport and Maritime Affairs
Strategic goal:	4	To ensure that the expert community becomes a driver of	of maritime economy developmen	t		
Operational objective:	4.1				ector, educated and qualified to to	ake an active part in
			Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:
Performance indicator:	1	Number of trainings attended by employees in maritime administration	he expert community becomes a driver of maritime economy development Enhanced structure of human resources in the maritime active rendering decisions and designing courses of development Baseline value (2018): gs attended by employees in maritime 10 yees in maritime administration 3 yelopment and lifelong learning of all stakeholders of the Montenegrin maritime		30	Ministry of Transport and Maritime Affairs
	2	Number of employees in maritime administration	3	8	10	Ministry of Transport and Maritime Affairs
Operational objective:	4.2	Professional development and lifelong learning of all sta	keholders of the Montenegrin ma	ritime economy		
Performance indicator:	1	Number of accredited programmes for the professional development of employees in the Montenegrin maritime economy	Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:

PART D: Strategic Goals of Integrated Maritime Policy – Performance Indicators of the Level of Achievement of Defined Operational Goals

		Perfori	mance indicators for the achiever	ment of operational objectives		
			0	4	8	Ministry of Education
	2	Number of tax facilities for operators in the maritime economy who invest in training of human resources	0	1	3	Ministry of Finance
Strategic goal:	5	To ensure that maritime economy growth is based on gr	een economy principles			
Operational objective:	5.1	Create appropriate preconditions in the public and priva	te maritime sector for economic ç	growth based on green economy	principles	
			Baseline value (2018):	Target value at the mid-point of the strategic document implementation (2025):	Target value at the end of the strategic document implementation (2030):	Verification source:
Performance indicator:	1	Number of ratified international conventions concerned with the green economy	0	Ratified International Convention on Removal of Wrecks, 2017 (Nairobi Convention)	Ratified The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009	Ministry of Foreign Affairs
	2	Number of ports with their own equipment for reception and management of ship generated waste and cargo residues	0	2	All ports have their own equipment for reception and management of ship-generated waste and cargo residues, in line with MARPOL Convention and national legislation	Ministry of Transport and Maritime Affairs

D.1.3 Overview of Strategic Goals and Operational Objectives

In addition to strategic goals, *Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents* also envisages operational objectives. Strategic goal is defined as the desired result that is to be achieved in public policy on the national level. Operational objective is a tangible result to be achieved within a strategic goal through implementation of activities planned in certain period of time. Developing the Strategy for the Maritime Economy Development, the project team tried to set strategic goals in such a way that each of them is a sum of all operational objectives related to it. Each operational objective is defined in such a way that it is specific, measurable, action-oriented, realistic and time-limited.

The scheme that follows presents key activities identified by the Project team. Each key activity that is a part of the Integrated Action Plan will be assigned to an authority to be responsible for the state of implementatio/financing/operation.

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
				1.1.1	Amend current legislation with a view to establishing an integrated and centralized management of all ports in Montenegro
				1.1.2	Reconstruction and modernization of existing port capacities
				1.1.3	Construction of a new container terminal in the Port of Bar that will position the Port of Bar as a port of regional importance
				1.1.4	Encourage development of the Port of Bar as a logistic centre integrated in a multi-modal transport system and establish a working team with the task to follow and coordinate the development of logistic activities through the port of Bar and Montenegro
4	To increase the contribution of the maritime economy and	1.4	Achieve sustainable growth and	1.1.5	Development of inter-modality and accessibility through construction and modernization of road and railway infrastructure with a view to ensuring better transport connectivity of Montenegrin ports with the hinterland and eliminating bottlenecks on the road infrastructure
'	related activities to overall economic development	1.1	competitiveness in the port sector	1.1.6	Achieving full utilization of the potentials of the Free zone of the Port of Bar through incentives for production and processing activities within the zone
				1.1.7	Opening of the border crossing Sukobin for the transport of goods with a view to ensuring better transport connectivity of the Port of Bar with the hinterland
				1.1.8	Intensify activities regarding the increase in volume of railway container transport to reduce total transport costs and improve competitiveness of the Port of Bar, which will lead to a reduced impact of combined transport on the environment
				1.1.9	Work continuously on improving the efficiency and quality in provision of primary port services in order to ensure competitiveness of Montenegrin ports in comparison to ports in the region
				1.1.10	On an annual level, plan the port services and an infrastructural project for which the procedure of awarding concessions or establishing a private-public partnership will be started. All of this is aimed at

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
			Ĺ		stimulating investment in the maritime economy, improving efficiency and quality in provision of port services. In the end it will all contribute to the competitiveness of Montenegrin ports
				1.1.11	Improve the existing Port Community System (PCS), developed by AD "Luka Bar", as the single and integrated information system for data exchange between port operators, authorities and other entities participating in maritime transport, i.e. port business operations
				1.1.12	Encourage construction of the port LNG terminal
				1.1.13	Ensure adequate acceptance capacities for the fishing fleet
				1.1.14	Activate abandoned or unutilized port infrastructure and other coastal structures to work in the interest of economic development
				1.1.15	Construction of water terminals and construction of new piers for the reception of passengers in internal maritime transport
				1.1.16	Developing the analysis of potentials to use hydroplanes for transport of passengers and operations of search and rescue at the sea and the analysis of the needs to construct acceptance capacities. Depending on the results specific activities are to be taken
				1.1.17	Ensure adequate refurbishment capacities for regular and extraordinary refurbishment primarily of ships in maritime internal navigation (ferries, tugboats and pushers, fishing boats, smaller passenger boats, boats for commercial activities and other vessels).
				1.2.1	Through improvement of organizational structure and qualifications of human resources, i.e. through the strengthening of capacities of maritime administration, ensure adequate flag state control on ships under the Montenegrin flag, i.e. control of work by recognized organizations doing the technical supervision and statutory certification of Montenegrin ships
			Increase gross tonnage	1.2.2	Intensify activities of the transfer of authorities for technical supervision and statutory certification of ships to other Recognized organizations, i.e. classification societies, creating thus preconditions for increasing the total number of ships under the Montenegrin flag
		1.2	of Montenegrin merchant fleet	1.2.3	Use a stimulating tax policy, i.e. implementing a fiscal policy based on the single taxation system for shipping activities in form of tonnage tax, attract a large number of shipowners to register their ships into the Montenegrin register
				1.2.4	Encourage the financial sector to include investment projects of purchase of ships into financing
				1.2.5	Liberalize conditions for the registration in the Montenegrin register of maritime merchant ships, in terms of nationality of shipowners
				1.2.6	Digitalization of Montenegrin ship registers

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
				1.3.1	Develop an analysis of attractiveness of the Montenegrin flag and current legislative framework governing registration of yachts into the Montenegrin Yacht Register. The goal of that analysis will be to identify comparative advantages and potentials of the Montenegrin flag and to define in more details the Action plan for the implementation of this operational goal.
			Increase number of	1.3.2	Improve the organizational structure and human resources qualifications. Strengthening administrative capacities of the Montenegrin Yacht Register can include the establishment of an independent Yacht Register and the participation of the private sector in all areas related to the registration of yachts, including flag promotion
		1.3	yachts registered in the Montenegrin yachts register	1.3.3	Establishing a global network of independent technical inspectors that would be authorized by the Yacht Register to do the basic, i.e. regular and extraordinary technical inspections of the yachts of registered length under 24 m that meet the requirements to be registered in the Montenegrin Yacht Register
				1.3.4	Intensifying activities of the promotion of the Montenegrin Yacht Register through active participation of administration in nautical fairs and publications in specialized magazines
				1.3.5	Simplifying administrative procedures through the digitalization of the procedures of yacht registration, issuing documents and managing the Yacht Register
				1.3.6	Use a stimulating tax policy, i.e. a fiscal policy based on tonnage tax to attract as large a number of yachts as possible to register their yachts into the Montenegrin Yacht Register, with a particular focus on mega-yachts for commercial activities
				1.4.1	Establishment of the Montenegrin maritime cluster whose members will be the economic entities operating in the blue economy sector
			Achieve sustainable growth and competitiveness of the Montenegrin maritime	1.4.2	Institutional support to the active participation of members of the Montenegrin maritime cluster in international and local maritime fairs with a view to promoting potentials of the Montenegrin maritime economy and attracting foreign investment in maritime economy
			economy in the context of Blue Economy, through synergy and	1.4.3	Institutional support to developing synergies between the Montenegrin maritime cluster and organizations that work on strengthening bilateral economic cooperation in the maritime sector, in innovation and research
		1.4	joint contribution of all stakeholders in the maritime economy	1.4.4	Restructuring of shipping companies "Crnogorska plovidba" AD Kotor and "Barska plovidba" AD Bar to achieve their sustainability and financial stability
			applying the integrated, multi- sectorial approach with	1.4.5	Support purchase of RO-RO passenger ship with a view to ensuring international maritime transport and smooth line transport of goods and passengers between Montenegro and other countries of the region by domestic shipowners
			coordinated harmonization of priorities	1.4.6	Use tax exemptions and other facilities to encourage the development of internal maritime transport through the use of "eco-ships"
			P	1.4.7	Enhance the efficiency of the public sector in attracting and implementing foreign direct investment in maritime economy and establish an attractive business environment. Form a special working body that

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
			·		will deal with the promotion of investment potentials of the Montenegrin maritime economy in the country and abroad through the development of appropriate promotion materials, good media coverage, participation in international and local maritime fairs etc.
				1.4.8	Prepare an Action plan to define activities aimed at improving the labour-law status of Montenegrin seafarers.
				1.5.1	Encourage investment in the construction of new nautical tourism ports and port capacities for refurbishment of yachts and mega yachts
				1.5.2	Create conditions for a balanced redistribution of acceptance of cruise ships between commercial ports of national importance
				1.5.3	Stimulate yacht owners to choose one of the Montenegrin nautical tourism ports as their homeport, inter alia, by construction of winter berths for yachts. Create conditions for already recognizable nautical tourism ports to become centres of activities for maritime entities managing mega-yachts commercially with all the multiplication effects that it brings.
		1.5	Position Montenegro as an attractive	1.5.4	Establish an inter-sectorial body to follow the development of nautical and cruise-ship tourism and adopt remedial measures if needed
		1.3	nautical and cruise- ship destination	1.5.5	Organizing a Round table about compulsory insurance from liability for damage that the owner, i.e. user of a vessel inflicts on a third party using the vessel, extension of these risks and revision of the minimum insured amount. All relevant institutions should take part in this Round table – insurance companies, interested experts and other stakeholders of the maritime economy. That would be the best way for them to analyse and then propose very specific innovated legal solutions.
				1.5.6	Organizing an expert discussion about insurance from responsibility of the nautical tourism ports and existing solutions from the Law on obligation relations. The fact is that this issue is reflected in the nature and material elements of contract on berth that as such has not been directly recognized neither in this Law nor in the Law on Maritime and Inland Navigation from 1998 that deals with obligation relations in the maritime sector.
2	To strengthen capacities of the Montenegrin maritime administration and simplify administrative procedures	2.1	Ensure that Montenegro meets the international obligations it has as a costal state, flag state	2.1.1	Develop a comprehensive strategic document, in line with the Transport Development Strategy 2019-2035 dealing with the level to which Montenegro complies with its international obligations and responsibilities as a flag state, a port state and a coastal state. This document should analyse the state-of-affairs and plan additional implementation (if needed) of the provisions of relevant international conventions and other conventions in the field of maritime property law, codex, protocols and resolutions, as well as EU acquis.
			and port state	2.1.2	Active participation of the Montenegrin maritime administration in the activities of the International Maritime Organization (IMO), International Labour Organization (ILO), European Union bodies and

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
					other bodies (EMSA, IALA, IMSO) and mandatory information, where applicable, of all stakeholders in the maritime economy in Montenegro about all activities in progress in these organizations.
				2.1.3	Establish a separate section on the official website of the Ministry of Transport and Maritime Affairs that will contain the entire national legislation regulating maritime-law matter, including international conventions and European legislation transposed into national legislation
				2.1.4	Comply with the recommendations of the European Commission and start drafting and adopt the Law on Inland Navigation
				2.2.1	Enhance administrative capacities, organization structure and qualifications of human resources in the inspectorate for security of maritime navigation in line with international standards and needs of the maritime economy. Coordination with other inspection bodies
				2.2.2	Achieve full-fledged membership in PARIS MoU
				2.2.3	Full implementation of VTMIS system for monitoring and managing maritime transport. This system should cover all Montenegrin ports and the territorial sea of Montenegro. It should also be updated further (implementation of CISE and STM, replacement of out-dated sensors and installation of modern sensor equipment) and maintenance).
			Continuously improve maritime navigation	2.2.4	Define and classify water ways and update all nautical maps to ensure optimization and enhancement of safety at the sea
		2.2	safety and safety of	2.2.5	Establish nautical anchorages and conditions for vessels to use them
		2.2	human lives and property at the sea, as well as security of port	2.2.6	Construct and modernize facilities for security of maritime navigation and facilities for maritime signalization, improving continuously the system of maritime telecommunication
			facilities and ships	2.2.7	Modernize the service of search and rescue at sea in order to increase its efficiency. Improve inter- regional cooperation in search and rescue operations with neighbouring countries in line with international agreements
				2.2.8	Development of an application for boatmen that activates distress calls from mobile telephones
				2.2.9	Ensure a consistent application of legislation on security protection of port facilities and ships in all Montenegrin ports
				2.2.10	Develop an analysis of how justified the mandatory use of tugboats or pushers is in Boka-Kotor Bay for a certain category of vessels
		2.3	Simplify administrative procedures	2.3.1	Establish the system of a "National Single Window" in line with EU legislation and the European Commission recommendations

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
				2.3.2	Gradually establish and update existing electronic records (Maritime Information System) for Montenegrin registers of ships, boats, yachts and other vessels; foreign vessels located in the Montenegrin territorial sea; issued vignettes for private use and commercial activities; concluded contracts on compulsory insurance in transport and other compulsory insurance types for users of vessels. These records and database should also be gradually connected with the existing information systems, and exchange should be ensured between UPSUL, inspection bodies, Harbour Master's Offices, insurance companies, local self-government bodies and customs bodies. That will ensure that all authorities have precise information in real time about every vessel, i.e. whether the users of vessels in the territorial sea of Montenegro have an appropriate contract on compulsory insurance in transport and whether they do the activity of chartering vessels lawfully, i.e. comply with national legislation.
				2.3.3	Introduce the eManifest system based on the model of analogous solutions in the European Union, with the technical support of EMSA
				2.3.4	Prepare an analysis on the introduction of information-communication technologies in the maritime economy sector in order to increase the number of electronic services related to the maritime sector and the maritime economy available on the eAdministration portal
				2.3.5	Development and maintenance of the web application, i.e. mobile application for the electronic submission of documents for issuing and paying vignettes
	To ensure a more intensive involvement of the civil sector, particularly professional non-		Increase media coverage of all activities of the	3.1.1	Before the process of the development of draft laws, strategies or programmes starts, the interested public should be publicly invited to submit their proposals and suggestions to the Montenegrin maritime administration already in the preparatory stage
3	government associations, in all processes that precede the adoption of strategic decisions,	3.1	Montenegrin maritime administration, with a view to ensuring active involvement of civil	3.1.2	Continuous cooperation with the Montenegrin Chamber of Commerce, Council for Competitiveness, Union of Municipalities, business associations in the process of development of sectorial policies and development directions in the maritime economy sector
	legislative pieces, and proposing system solutions for overcoming challenges in the maritime economy sector		society in development processes in the Montenegrin maritime economy	3.1.3	Intensive media coverage of maritime administration to promote sectorial policy so that the civil sector could actively participate in relevant consultative processes
			Enhanced structure of human resources in	4.1.1	Encourage training programmes both in the country and abroad, so that human resources employed in administration and the industry could follow trends of the global maritime market
4	To ensure that the expert community becomes a driver of maritime economy development	4.1	the maritime administration and in the private sector,	4.1.2	Improve conditions for work in the maritime administration for qualified human resources with experience to make working in public administration attractive to them.
			educated and qualified to take an active part in	4.1.3	Encourage the development of documentaries on maritime sector that would be broadcast in Montenegrin media and disseminate knowledge about the maritime sector

Ref. No.	Strategic goal	Ref. No.	Operational objectives	Ref. No.	Activities
			rendering decisions and designing courses	4.1.4	Encourage the organization of expert and research events aimed at developing knowledge about blue and green economy in the context of development of the Montenegrin maritime sector
			of development in the maritime sector	4.1.5	Establish an innovation "hub" in Bar that would ensure support for implementation and commercialization of certain segments of entrepreneurial ides related to maritime sector.
		4.2	Professional development and lifelong learning of all stakeholders of the Montenegrin maritime economy	4.2.1	Develop accredited programmes for the professional development of employees in the Montenegrin maritime industry with the possibility to introduce a system of tax facilities for maritime economy operators that invest in continuous professional development of their human resources
				5.1.1	Promotion activities raising awareness among all maritime economy stakeholders about the benefits of economic growth based on green economy principles
				5.1.2	Ratify The International Convention on the Removal of Wrecks, 2017 (Nairobi Convention)
				5.1.3	Ratify The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009
				5.1.4	Ensure conditions for an available and efficient service of reception and management of ship-generated waste and cargo residues in all Montenegrin ports
	To ensure that maritime economy		Create appropriate preconditions in the public and private	5.1.5	Develop an analysis of optimization of maritime transport in Boka-Kotor Bay with a view to improving security of maritime navigation and reducing the impact of maritime transport on marine biodiversity and other environment parameters
5	growth is based on green economy principles	5.1	maritime sector for economic growth based on green economy principles	5.1.6	Encourage the development of new technologies and continuously monitor and improve knowledge and legislation to prevent pollution of the marine environment that can be caused by ship or port activities, operations of exploration and exploitation of hydrocarbons, laying under water pipelines, cables and other installations
				5.1.7	Purchase of equipment for remedying consequences of sea pollution from vessels and other structures
				5.1.8	Procurement of a special ship for remedying consequences of pollution from vessels and for the activities of search and rescue at the sea
				5.1.9	Intensify activities of accreditation of laboratories for control and measuring of exhaust gasses from ship engines and laboratories for measuring marine fuel quality

D.1.4 Time Schedule of Activities Presented in the Gantt Diagram

Ref.	Activities	Period envisaged for implement							plemen	tation	of acti	ivities										
No	Activities	2	020	2021	20	22	202	23	20	24	20	25	20	26	20)27	202	28	2029		2030	
1.1.1	Amend current legislation with a view to establishing an integrated and centralized management of all ports in Montenegro																					
1.1.2	Reconstruction and modernization of existing port capacities																					
1.1.3	Construction of a new container terminal in the Port of Bar that will position the Port of Bar as a port of regional importance																					
1.1.4	Encourage development of the Port of Bar as a logistic centre integrated in a multi-modal transport system and establish a working team with the task to follow and coordinate the development of logistic activities through the port of Bar and Montenegro																					
1.1.5	Development of inter-modality and accessibility through construction and modernization of road and railway infrastructure with a view to ensuring better transport connectivity of Montenegrin ports with the hinterland and eliminating bottlenecks on the road infrastructure																					
1.1.6	Achieving full utilization of the potentials of the Free zone of the Port of Bar through incentives for production and processing activities within the zone																					
1.1.7	Opening of the border crossing Sukobin for the transport of goods with a view to ensuring better transport connectivity of the Port of Bar with the hinterland																					
1.1.8	Intensify activities regarding the increase in volume of railway container transport to reduce total transport costs and improve competitiveness of the Port of Bar, which will lead to a reduced impact of combined transport on the environment																					
1.1.9	Work continuously on improving the efficiency and quality in provision of primary port services in order to ensure competitiveness of Montenegrin ports in comparison to ports in the region																					
1.1.10	On an annual level, plan the port services and an infrastructural project for which the procedure of awarding concessions or establishing a private-public partnership will be started. All of this is aimed at stimulating investment in the maritime economy, improving efficiency and quality in provision of port services. In the end it will all contribute to the competitiveness of Montenegrin ports																					
1.1.11	Improve the existing Port Community System (PCS), developed by AD "Luka Bar", as the single and integrated information system for data exchange between port operators, authorities and other entities participating in maritime transport, i.e. port business operations																					
1.1.12	Encourage construction of the port LNG terminal																					
1.1.13	Ensure adequate acceptance capacities for the fishing fleet																					
1.1.14	Activate abandoned or unutilized port infrastructure and other coastal structures to work in the interest of economic development																					

Ref.	Activities					Pe	eriod e	envisa	iged fo	or impl	ement	ation	of acti	vities					
No	Activities	2	020	2021	2022	2023		2024	4	202	5	202	26	2027	2028	20	29	203	0
1.1.15	Construction of water terminals and construction of new piers for the reception of passengers in internal maritime transport																		
1.1.16	Developing the analysis of potentials to use hydroplanes for transport of passengers and operations of search and rescue at the sea and the analysis of the needs to construct acceptance capacities. Depending on the results specific activities are to be taken																		
1.1.17	Ensure adequate refurbishment capacities for regular and extraordinary refurbishment primarily of ships in maritime internal navigation (ferries, tugboats and pushers, fishing boats, smaller passenger boats, boats for commercial activities and other vessels).																		
1.2.1	Through improvement of organizational structure and qualifications of human resources, i.e. through the strengthening of capacities of maritime administration, ensure adequate flag state control on ships under the Montenegrin flag, i.e. control of work by recognized organizations doing the technical supervision and statutory certification of Montenegrin ships																		
1.2.2	Intensify activities of the transfer of authorities for technical supervision and statutory certification of ships to other Recognized organizations, i.e. classification societies, creating thus preconditions for increasing the total number of ships under the Montenegrin flag																		
1.2.3	Use a stimulating tax policy, i.e. implementing a fiscal policy based on the single taxation system for shipping activities in form of tonnage tax, attract a large number of shipowners to register their ships into the Montenegrin register																		
1.2.4	Encourage the financial sector to include investment projects of purchase of ships into financing																		
1.2.5	Liberalize conditions for the registration in the Montenegrin register of maritime merchant ships, in terms of nationality of shipowners																		
1.2.6	Digitalization of Montenegrin ship registers																		
1.3.1	Develop an analysis of attractiveness of the Montenegrin flag and current legislative framework governing registration of yachts into the Montenegrin Yacht Register. The goal of that analysis will be to identify comparative advantages and potentials of the Montenegrin flag and to define in more details the Action plan for the implementation of this operational goal.																		
1.3.2	Improve the organizational structure and human resources qualifications. Strengthening administrative capacities of the Montenegrin Yacht Register can include the establishment of an independent Yacht Register and the participation of the private sector in all areas related to the registration of yachts, including flag promotion																		
1.3.3	Establishing a global network of independent technical inspectors that would be authorized by the Yacht Register to do the basic, i.e. regular and extraordinary technical inspections of the yachts of registered length under 24 m that meet the requirements to be registered in the Montenegrin Yacht Register																		
1.3.4	Intensifying activities of the promotion of the Montenegrin Yacht Register through active participation of administration in nautical fairs and publications in specialized magazines																		

Ref.	Activities							Period	d envis	saged	for imp	lemen	ntation of activities									
No	Activities	2	020	2021	20	22	202	23	20	24	20	25	202	26	20:	27	202	28	2029)	2030	
1.3.5	Simplifying administrative procedures through the digitalization of the procedures of yacht registration, issuing documents and managing the Yacht Register																					
1.3.6	Use a stimulating tax policy, i.e. a fiscal policy based on tonnage tax to attract as large a number of yachts as possible to register their yachts into the Montenegrin Yacht Register, with a particular focus on mega-yachts for commercial activities																					
1.4.1	Establishment of the Montenegrin maritime cluster whose members will be the economic entities operating in the blue economy sector																					
1.4.2	Institutional support to the active participation of members of the Montenegrin maritime cluster in international and local maritime fairs with a view to promoting potentials of the Montenegrin maritime economy and attracting foreign investment in maritime economy																					
1.4.3	Institutional support to developing synergies between the Montenegrin maritime cluster and organizations that work on strengthening bilateral economic cooperation in the maritime sector, in innovation and research																					
1.4.4	Restructuring of shipping companies "Crnogorska plovidba" AD Kotor and "Barska plovidba" AD Bar to achieve their sustainability and financial stability																					
1.4.5	Support purchase of RO-RO passenger ship with a view to ensuring international maritime transport and smooth line transport of goods and passengers between Montenegro and other countries of the region by domestic shipowners																					
1.4.6	Use tax exemptions and other facilities to encourage the development of internal maritime transport through the use of "eco-ships"																					
1.4.7	Enhance the efficiency of the public sector in attracting and implementing foreign direct investment in maritime economy and establish an attractive business environment. Form a special working body that will deal with the promotion of investment potentials of the Montenegrin maritime economy in the country and abroad through the development of appropriate promotion materials, good media coverage, participation in international and local maritime fairs etc.																					
1.4.8	Prepare an Action plan to define activities aimed at improving the labour-law status of Montenegrin seafarers.																					
1.5.1	Encourage investment in the construction of new nautical tourism ports and port capacities for refurbishment of yachts and mega yachts																					
1.5.2	Create conditions for a balanced redistribution of acceptance of cruise ships between commercial ports of national importance																					

Ref. No	Activities -						Period	d envis	saged	for im	olemen	tation	of acti	vities					
		2020	202	1	2022	20	023	20	24	20	25	20:	26	202	7	202	8	2029	2030
1.5.3	Stimulate yacht owners to choose one of the Montenegrin nautical tourism ports as their homeport, inter alia, by construction of winter berths for yachts. Create conditions for already recognizable nautical tourism ports to become centres of activities for maritime entities managing mega-yachts commercially with all the multiplication effects that it brings.																		
1.5.4	Establish an inter-sectorial body to follow the development of nautical and cruise-ship tourism and adopt remedial measures if needed																		
1.5.5	Organizing a Round table about compulsory insurance from liability for damage that the owner, i.e. user of a vessel inflicts on a third party using the vessel, extension of these risks and revision of the minimum insured amount. All relevant institutions should take part in this Round table – insurance companies, interested experts and other stakeholders of the maritime economy. That would be the best way for them to analyse and then propose very specific innovated legal solutions.																		
1.5.6	Organizing an expert discussion about insurance from responsibility of the nautical tourism ports and existing solutions from the Law on obligation relations. The fact is that this issue is reflected in the nature and material elements of contract on berth that as such has not been directly recognized neither in this Law nor in the Law on Maritime and Inland Navigation from 1998 that deals with obligation relations in the maritime sector.																		
2.1.1	Develop a comprehensive strategic document, in line with the Transport Development Strategy 2019-2035 dealing with the level to which Montenegro complies with its international obligations and responsibilities as a flag state, a port state and a coastal state. This document should analyse the state-of-affairs and plan additional implementation (if needed) of the provisions of relevant international conventions and other conventions in the field of maritime property law, codex, protocols and resolutions, as well as EU acquis.																		
2.1.2	Active participation of the Montenegrin maritime administration in the activities of the International Maritime Organization (IMO), International Labour Organization (ILO), European Union bodies and other bodies (EMSA, IALA, IMSO) and mandatory information, where applicable, of all stakeholders in the maritime economy in Montenegro about all activities in progress in these organizations.																		
2.1.3	Establish a separate section on the official website of the Ministry of Transport and Maritime Affairs that will contain the entire national legislation regulating maritime-law matter, including international conventions and European legislation transposed into national legislation																		
2.1.4	Comply with the recommendations of the European Commission and start drafting and adopt the Law on Inland Navigation																		
2.2.1	Enhance administrative capacities, organization structure and qualifications of human resources in the inspectorate for security of maritime navigation in line with international standards and needs of the maritime economy. Coordination with other inspection bodies	·			•														
2.2.2	Achieve full-fledged membership in PARIS MoU																		

Ref.	Activities		Period envisaged for implementation of activities																			
No		20	20	202	1	202	2	202	3	202	24	20	25	202	6	2027		2028	2	029	20	30
2.2.3	Full implementation of VTMIS system for monitoring and managing maritime transport. This system should cover all Montenegrin ports and the territorial sea of Montenegro. It should also be updated further (implementation of CISE and STM, replacement of out-dated sensors and installation of modern sensor equipment) and maintenance).																					
2.2.4	Define and classify water ways and update all nautical maps to ensure optimization and enhancement of safety at the sea																					
2.2.5	Establish nautical anchorages and conditions for vessels to use them																					
2.2.6	Construct and modernize facilities for security of maritime navigation and facilities for maritime signalization, improving continuously the system of maritime telecommunication																					
2.2.7	Modernize the service of search and rescue at sea in order to increase its efficiency. Improve inter-regional cooperation in search and rescue operations with neighbouring countries in line with international agreements																					
2.2.8	Development of an application for boatmen that activates distress calls from mobile telephones																					
2.2.9	Ensure a consistent application of legislation on security protection of port facilities and ships in all Montenegrin ports																					
2.2.10	Develop an analysis of how justified the mandatory use of tugboats or pushers is in Boka-Kotor Bay for a certain category of vessels																					
2.3.1	Establish the system of a "National Single Window" in line with EU legislation and the European Commission recommendations																					
2.3.2	Gradually establish and update existing electronic records (Maritime Information System) for Montenegrin registers of ships, boats, yachts and other vessels; foreign vessels located in the Montenegrin territorial sea; issued vignettes for private use and commercial activities; concluded contracts on compulsory insurance in transport and other compulsory insurance types for users of vessels. These records and database should also be gradually connected with the existing information systems, and exchange should be ensured between UPSUL, inspection bodies, Harbour Master's Offices, insurance companies, local self-government bodies and customs bodies. That will ensure that all authorities have precise information in real time about every vessel, i.e. whether the users of vessels in the territorial sea of Montenegro have an appropriate contract on compulsory insurance in transport and whether they do the activity of chartering vessels lawfully, i.e. comply with national legislation.																					
2.3.3	Introduce the eManifest system based on the model of analogous solutions in the European Union, with the technical support of EMSA																					
2.3.4	Prepare an analysis on the introduction of information-communication technologies in the maritime economy sector in order to increase the number of electronic services related to the maritime sector and the maritime economy available on the eAdministration portal																					

Ref.	Activities							Period	envis	aged 1	for imp	olemen	tation	of acti	ivities							
No	Activities	20	20	2021	20	22	202	3	202	24	20	25	20	26	20	27	20	28	202	29	203	0
2.3.5	Development and maintenance of the web application, i.e. mobile application for the electronic submission of documents for issuing and paying vignettes																					
3.1.1	Before the process of the development of draft laws, strategies or programmes starts, the interested public should be publicly invited to submit their proposals and suggestions to the Montenegrin maritime administration already in the preparatory stage																					
3.1.2	Continuous cooperation with the Montenegrin Chamber of Commerce, Council for Competitiveness, Union of Municipalities, business associations in the process of development of sectorial policies and development directions in the maritime economy sector																					
3.1.3	Intensive media coverage of maritime administration to promote sectorial policy so that the civil sector could actively participate in relevant consultative processes																					
4.1.1	Encourage training programmes both in the country and abroad, so that human resources employed in administration and the industry could follow trends of the global maritime market																					
4.1.2	Improve conditions for work in the maritime administration for qualified human resources with experience to make working in public administration attractive to them.																					
4.1.3	Encourage the development of documentaries on maritime sector that would be broadcast in Montenegrin media and disseminate knowledge about the maritime sector																					
4.1.4	Encourage the organization of expert and research events aimed at developing knowledge about blue and green economy in the context of development of the Montenegrin maritime sector																					
4.1.5	Establish an innovation "hub" in Bar that would ensure support for implementation and commercialization of certain segments of entrepreneurial ides related to maritime sector.																					
4.2.1	Develop accredited programmes for the professional development of employees in the Montenegrin maritime industry with the possibility to introduce a system of tax facilities for maritime economy operators that invest in continuous professional development of their human resources																					
5.1.1	Promotion activities raising awareness among all maritime economy stakeholders about the benefits of economic growth based on green economy principles																					
5.1.2	Ratify The International Convention on the Removal of Wrecks, 2017 (Nairobi Convention)																					
5.1.3	Ratify The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009																					

Ref.	Activities						Period	d envis	saged 1	for imp	olemen	tation	of acti	vities						
No	Addition	202	0	2021	2022	202	23	20	24	20	25	20	26	2027	2	028	20	29	203	80
5.1.4	Ensure conditions for an available and efficient service of reception and management of ship-generated waste and cargo residues in all Montenegrin ports																			
5.1.5	Develop an analysis of optimization of maritime transport in Boka-Kotor Bay with a view to improving security of maritime navigation and reducing the impact of maritime transport on marine biodiversity and other environment parameters																			
5.1.6	Encourage the development of new technologies and continuously monitor and improve knowledge and legislation to prevent pollution of the marine environment that can be caused by ship or port activities, operations of exploration and exploitation of hydrocarbons, laying under water pipelines, cables and other installations																			
5.1.7	Purchase of equipment for remedying consequences of sea pollution from vessels and other structures																			
5.1.8	Procurement of a special ship for remedying consequences of pollution from vessels and for the activities of search and rescue at the sea																			
5.1.9	Intensify activities of accreditation of laboratories for control and measuring of exhaust gasses from ship engines and laboratories for measuring marine fuel quality																			

D.1.5 Action Plan for the Period 2020-2021

Action Plan defines the activities for implemenation of the Strategy for Development of Maritime Economy aimed at achieving the set strategic goals and operational objective. It is an integral part of this strategic document. The proposed Action Plan covers the period of two years, i.e. 2020 and 2021. If the Annual reports on implementation of the Strategy for Development of Maritime Economy show that it is needed, the Action Plan may be revised. Given the fact that the implementation of the Strategy is planned as a long-term process, action plans will be developed periodically to reflect in realistic manner current trends in the maritime sector (market, economic, political, social etc.) Adoption of each new action plan upon expiry of the previous, will also give us the possibility to revise the set goals if they turn to be unrealistically planned and to take into account possible that changes in relation to initially identified problems or new priority reforms.

On the basis of key principles contained in the legislation regulating the manner and methodology for development of strategic documents and their action plans, the Action Plan that follows contains all mandatory elements for planning the activities whose implementation will start in 2020 and in 2021. Activities that will be continuously implemented in the period 2020 – 2030 or in the period after the expiry of the two-year action plan are, due to their strategic planning and importance, structured in the tables that follow and contain detailed description of the planned activities with parameters known at the time of development of this strategic document, given the maturity of the project. The concerned activities are classified as mid-term or long-term, depending on the timing envisaged for their implementation.

Action Plan 2020-2021

Ref. No.	Activity		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	Strategic goal:	1	To increase the contribution of the maritime econ-	omy and related activities to ove	erall economic deve	elopment		
	Operational objective:	1.1	Achieve sustainable growth and competitiveness	in the port sector				
1.1.1	Amend current legislation with a vie establishing an integrated and centra management of all ports in Montenegro		Innovate legal framework for port management. Ensure that all port management authorities that are now divided between Administration body (Management Safety and Port Management Administration) and the Legal entity (Public Company for Coastal Zone Management) are entrusted to one competent body – MSPMA.	Law on Ports adopted	МТМА	No funds required	n/a	2021
1.1.16	Developing the analysis of potentials to hydroplanes for transport of passengers operations of search and rescue at the sea the analysis of the needs to consacceptance capacities. Depending on results specific activities are to be taken	s and a and struct n the	Use of hydroplanes would significantly improve efficiency of transport, reduce costs and shorten travel time. Investment into infrastructure would be reduced. Hydroplanes would provide exceptional support during the search and rescue operations at the sea because they practically ensure all the capabilities of aircrafts and vessels within such actions.	The analysis of potentials to use hydroplanes for transport of passengers and operations of search and rescue at the sea and the analysis of the needs to construct acceptance capacities developed.	MTMA	10,000 euro	Budget	2020

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	Operational objective: 1.3	Increase number of yachts registered in the Monte	enegrin yachts register				
1.3.1	Develop an analysis of attractiveness of the Montenegrin flag and current legislative framework governing registration of yachts into the Montenegrin Yacht Register. The goal of that analysis will be to identify comparative advantages and potentials of the Montenegrin flag and to define in more details the Action plan for the implementation of this operational goal.	It is necessary to analyse and identify barriers that have to be removed to ensure competitiveness of the Montenegrin Yacht Register. Comparative analysis of competitive registers will suggest the measures that need to be undertaken to increase the number of yachts registered in Montenegrin Yacht Register. The analysis will also show if the activity 1.3.2 has to be undertaken in the segment related to constituting an independent Yacht Register and participation of the private sector in all areas related to registration of yachts, including the promotion of Montenegrin flag	The analysis of attractiveness of the Montenegrin flag and current legislative framework governing registration of yachts into the Montenegrin Yacht Register developed.	MTMA	20,000 euro	Budget	2021
1.3.2	Improve the organizational structure and human resources qualifications. Strengthening administrative capacities of the Montenegrin Yacht Register can include the establishment of an independent Yacht Register and the participation of the private sector in all areas related to the registration of yachts, including flag promotion	Given the current number of employees in the Department for Yacht Register, and the fact that their continuous training has to be ensured, the organizational structure has to be upgraded and professional qualifications of human resources in the Yacht Register have to be strengthened. This will lead to the achievement of the operational objective i.e. the increase in the number of yachts registered in the Montenegrin Yacht Register. Professional development of the human resources in the Yacht Register will be implemented by MSPMA Depending on the results of the analysis from 1.3.1, this activity can include amendments to the Law on Yachts for which the budget funds are planned;	Larger number of employees and adequately educated employees in the Department for Yacht Register	MTMA MSPMA MF	5,000 euro	Budget	2020-2022
1.3.5	Simplifying administrative procedures through the digitalization of the procedures of yacht registration, issuing documents and managing the Yacht Register	Administrative procedures related to registration of yachts, issuing documents and keeping the Yacht Register have to be improved to ensure better efficiency and easier access for users. It has to be done through digitalization process just like all of the competitive flags did. Digitalization process implies making of a list and analysing the procedures that have to be digitalized by using information technologies. This activity includes procurement and installation of appropriate software as well as training of employees.	Administrative procedures related to registration of yachts, issuing documents and keeping the Yacht Register are digitalized.	MTMA MSPMA	30,000 euro	Budget	2021-2022
1.3.6	Use a stimulating tax policy, i.e. a fiscal policy based on tonnage tax to attract as large a	Tax policy, i.e. fiscal policy in this field has to be improved so that Montenegrin Yacht Register can	Legal framework that makes tax policy, i.e. fiscal policy	MF MTMA	No funds required	n/a	2021-2022

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	number of yachts as possible to register their yachts into the Montenegrin Yacht Register, with a particular focus on mega-yachts for commercial activities	become competitive and attract primarily owners of mega-yachts intended for commercial activities with all the ensuing benefits. This activity implies intersectorial consultations. Tonnage tax has already been introduced by many European countries to improve competitiveness of their national flags.	stimulating and that attracts yacht owners to register their yachts into the Montenegrin Yacht Register	MSPMA Tax Administration			
	Operational objective: 1.4	Achieve sustainable growth and competitiveness contribution of all stakeholders in the maritime ec					
1.4.1	Establishment of the Montenegrin maritime cluster whose members will be the economic entities operating in the blue economy sector	One of the key reasons for insufficient utilization of the potentials of the blue economy sector is the fact that the economic entities in maritime economy do not have an appropriately organized and clearly coordinated approach to the market and to the institutions. Establishment of the Montenegrin Maritime Cluster would significantly improve and strengthen market position of all economic entities individually, but also of the entire blue economy sector.	Montenegrin Maritime Cluster is established and comprises economic entities operating in the blue economy sector	MTMA Economic entities in the Blue Economy sector	No funds required	n/a	2021
1.4.4	Restructuring of shipping companies "Crnogorska plovidba" AD Kotor and "Barska plovidba" AD Bar to achieve their sustainability and financial stability	Given the situation in the global maritime market and the fact that for some time already these shipping companies have not been able to service their liabilities based on loans taken to build four ships for dry bulk cargo, the analyses done with a view to ensuring rationalization of their business operations proposes restructuring of these shipping companies and consolidation of their fleet as the only solution.	Completed procedure of restructuring shipping companies	MSP "Crnogorska plovidba" AD Kotor "Barska plovidba" AD Bar	No funds required	n/a	2021
1.4.7	Enhance the efficiency of the public sector in attracting and implementing foreign direct investment in maritime economy and establish an attractive business environment. Form a special working body that will deal with the promotion of investment potentials of the Montenegrin maritime economy in the country and abroad through the development of appropriate promotion materials, good media coverage, participation in international and local maritime fairs etc.	Maritime administration has to take an active part in the processes that can contribute to attracting and implementing foreign direct investment. In negotiations with potential investors it is particularly important to send a clear message that the administration supports high quality development projects and contracts. Therefore the passive role of the public sector has to be replaced by a proactive approach.	A working body was formed and given a clear task to promote investment potentials of the Montenegrin maritime economy in the country and abroad	MTMA Secretariat for Development Projects	No funds required	n/a	2020-2021
1.4.8	Prepare an Action plan to define activities aimed at improving the labour-law status of Montenegrin seafarers.	This activity envisages development of a separate Action plan to define activities aimed at improving the labour-law status of Montenegrin seafarers. The	Action plan that defines in details the activities aimed at improving the labour-law	MTMA	15,000 euro	Budget	2020-2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		seafarers are certainly the potential important for further development of Montenegrin maritime sector. This action plan will envisage the activities of: further improvement and updating of the information system for maritime sector, i.e. the electronic database of seafarers, issued maritime documents and certificates of qualifications and years of service in navigation; revision of the criteria and manner of control of education institutions active in education of seafarers and centres for training of seafarers; harmonization of competences of different Ministries in the field of education, training, social and health care for seafarers; development of programme for employment of seafarer trainees on domestic and foreign ships; including seafarers into the national system of social and health care using the model of other maritime countries; analysis and possible changes of tax policy related to taxation of salaries of seafarers; adoption of branch collective agreement for seafarers hired in international coastal navigation etc.	status of Montenegrin seafarers was adopted.				
	Operational objective: 1.5	Position Montenegro as an attractive nautical and	cruise-ship destination				
1.5.4	Establish an inter-sectorial body to follow the development of nautical and cruise-ship tourism and adopt remedial measures if needed	Establishing Operational teams for implementation of key infrastructural projects has so far been useful in practice. It produced tangible results and therefore this practice should continue. An inter-sectorial working body should be established with the task to follow the development of nautical tourism and in that sense it would timely indicate to the measures that should be undertaken to follow nautical tourism continuously but also to improve it.	Inter-sectorial body for development of nautical tourism established	MTMA MSDT	No funds required	n/a	2021
1.5.5.	Organizing a Round table about compulsory insurance from liability for damage that the owner, i.e. user of a vessel inflicts on a third party using the vessel, extension of these risks and revision of the minimum insured amount. All relevant institutions should take part in this Round table – insurance companies, interested experts and other stakeholders of the maritime economy. That would be the best	Organizing a Round table about compulsory insurance from liability for damage that the owner, i.e. user of a vessel inflicts on a third party using the vessel, extension of these risks and revision of the minimum insured amount. Analysis of the situation identified weaknesses in the system solutions for compulsory insurance in maritime transport that can pose obstacles for further development of nautical tourism. Current legislation stipulates that owner, i.e.	Round table about compulsory insurance from liability for damage that the owner, i.e. user of a vessel inflicts on a third party using the vessel, extension of these risks and revision of the minimum insured amount was organized. Participants	MTMA ISA NBIMN etc.	1,000 euro	Budget	2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	way for them to analyse and then propose very specific innovated legal solutions.	authorized user of a vessel that is registered in the register of vessels according to relevant legislation, has to conclude a contract on insurance from liability for damage that he might inflict on third parties by using the vessel in form of bodily injuries, harm to health or death. Damage is the term denoting the damage inflicted on third parties due to a fall or throwing out of items from a vessel. Thus, the insurance contracts that are to be concluded according to this law do not include liability for the damage that owner or user of a vessel using the vessel inflicts on other vessels, things of third parties, including the damage on port infrastructure and environment. Since this is a very complex matter, solution to this issue requires inter-sectorial approach and hiring of appropriate expert and human resources potentials. Therefore the drafter of this strategic document envisaged specific activity aimed at analysing and possible amendments to the existing legislation regulating this field. Therefore, after the adoption of the Strategy for Development of Maritime Economy the drafter will organize the Round table about compulsory insurance from liability for damage that the owner, i.e. user of a vessel inflicts on a third party using the vessel, extension of these risks and revision of the minimum insured amount and include all the relevant institutions, insurance companies, interested experts and other stakeholders in maritime economy to ensure the best possible analysis and proposals for amendments to legislation.	discussed the identified weaknesses and proposed precise legislation amendments.				
1.5.6	Organizing an expert discussion about insurance from responsibility of the nautical tourism ports and existing solutions from the Law on obligation relations. The fact is that this issue is reflected in the nature and material elements of contract on berth that as such has not been directly recognized neither in this Law nor in the Law on Maritime and Inland Navigation from 1998 that deals with obligation relations in the maritime sector.	Analysing the system of compulsory insurance the drafter of this Strategy established that the activities of nautical tourism ports are not covered by compulsory insurance and that this is topical also in other countries in the region that have developed nautical tourism and that want to improve it additionally. There is no doubt that it would raise the level of responsibility of the port users, which would result in the smaller number of harmful events,	Legislative framework regulating in an appropriate manner the compulsory insurance from liability for activities of nautical tourism ports established, as well as material elements of contract on berth.	MTMA MSPMA ISA NBIMN AMMN etc.	1,000 euro	Budget	2021

Ref. No.	Activity		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
			improved safety and security of Montenegrin nautical tourism ports and vessels. In the end, owner or user of a vessel will certainly prefer a nautical destination that has an appropriate legal framework providing a safe and secure environment for his vessel and fast and efficient collection of insurance money for any damage that might happen while using the services of the nautical tourism port. In principle, the issue of insurance from liability is connected to every commercial activity, including the activities of nautical tourism ports. In case of nautical tourism ports it could be concluded that they do risky activities given the fact that they are in charge of the assets of big value based on the contract with users of its berth. The job of guarding the high value property can lead to causing damage on such property, which includes liability of the port and the need to be insured from such liability. In that respect, this strategic document envisages implementation of a specific activity aimed at analysing and proposing possible amendments to the existing legislation that classifies this type of insurance into the category of voluntary insurance.					
	Strategic goal:	2	To strengthen capacities of the Montenegrin marit	time administration and simplify	administrative pro	cedures		
	Operational objective:	2.1	Ensure that Montenegro meets the international o	bligations it has as a costal stat	e, flag state and po	rt state		
2.1.1	Develop a comprehensive strategic docuin line with the Transport Develop Strategy 2019-2035 dealing with the lewhich Montenegro complies with international obligations and responsibility a flag state, a port state and a coastal This document should analyse the star affairs and plan additional implementationeded) of the provisions of reinternational conventions and conventions in the field of maritime prolaw, codex, protocols and resolutions, a as EU acquis.	pment evel to n its ties as state. ate-of- tion (if elevant other operty	In order to clearly define all the existing deficiencies related to the level to which Montenegro meets its international obligations and responsibilities as a flag state, port state and coastal state, they should all be identified in a systematic manner and subject to a strategic approach, i.e. a particular strategic document should be developed. Such a strategic document should contain an analysis of the existing legal and institutional framework and the level to which it is aligned with undertaken international commitments, including those defined in the European Union acquis, conventions in the field of private maritime law etc. It also should include a	Strategic document dealing with the process of meeting international obligations and responsibilities of Montenegro as a flag state, port state and coast state was developed.	MTMA	30,000 euro	Budget	2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		proposal of activities required for ratification of international conventions and alignment with EU acquis. Implementation of this activity, in relation to the activity 2.1.3, implies establishment of an operational team, i.e. a working body that will list and follow international conventions, primarily those from the field of maritime property law that Montenegro should accede to in order to create a uniform maritime-legal framework that would be a good starting point for improving competitiveness of Montenegrin maritime economy.					
2.1.3	Establish a separate section on the official website of the Ministry of Transport and Maritime Affairs that will contain the entire national legislation regulating maritime-law matter, including international conventions and European legislation transposed into national legislation	Although the official website presentation of the Ministry of Transport and Maritime Affairs has the section related to legislative framework, that section includes legislation related to all Directorates. For the sake of easier reference, and better access for all interested persons, and using the model of traditional maritime countries, systematization of maritime legislative framework should be done in a short-term period.	The official website presentation of the Ministry of Transport and Maritime Affairs has the section that contains all national and international pieces of legislation relevant for the maritime sector	MTMA MFA	No funds required	n/a	2021
2.1.4.	Comply with the recommendations of the European Commission and start drafting and adopt the Law on Inland Navigation	European Commission Report for 2019 underlined that there was no progress in aligning inland navigation legislation with the EU acquis, i.e. with the following directives: • Directive 2006/87/EC • Directive 96/50/EC, • Directive 2004/26/EC Therefore the process of drafting the concerned legislation should start. Its adoption by the Government of Montenegro is planned for 2021.	Adopted Law on Inland Navigation	MTMA	10,000 euro	Budget	2021
	Operational objective: 2.2	Continuously improve maritime navigation safety	and safety of human lives and p	property at the sea,	as well as security o	f port facilities and	ships
2.2.2	Achieve full-fledged membership in PARIS MoU	Better progress should be made in relation to port state control in order to ensure membership in the Memorandum of Understanding on Port State Control (Paris MoU). This activity will be implemented through consistent implementation of recommendations based on membership and implementation of appropriate legislation.	Montenegro is a full-fledged member of Paris MoU-a	MTMA	No funds required	n/a	2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
2.2.3	Full implementation of VTMIS system for monitoring and managing maritime transport. This system should cover all Montenegrin ports and the territorial sea of Montenegro. It should also be updated further (implementation of CISE and STM, replacement of out-dated sensors and installation of modern sensor equipment) and maintenance).	VTMIS system is intended for regulating maritime transport and for its use in cases of search and rescue at sea. The activities aimed at its full implementation should be continued. Implementation of VTMIS system is a result of efforts to predict, prevent and undertake measures for mitigating high risk of marine pollution etc.	VTMIS system fully implemented	MSPMA	Funds have already been secured for the first stage of full implementation. For maintenance and modernization of the system in the period 2025 – 2030 and after 2030 the funds will be assessed at a later stage	IPA III Budget	2020-2021 (modernization is envisaged for 2025, 2026, and 2030)
2.2.4	Define and classify water ways and update all nautical maps to ensure optimization and enhancement of safety at the sea	This activity has to be implemented due to the increase in the volume of maritime transport that carries not only the benefits but also certain risks, primarily in the field of safety of maritime navigation.	Water ways classified	MTMA MSPMA IHSM	60,000.00 euro	Budget and other	2020-2022
2.2.5	Establish nautical anchorages and conditions for vessels to use them	According to current legislation, particularly the provisions of the Law on Ports, an anchorage is defined as a developed and marked part of the sea intended for anchoring and/or berthing vessels. Port area for ports of national, i.e. local importance and port anchorages are designated by the Government of Montenegro upon a proposal of Administration body i.e. Legal entity in line with the planning document defining the coastal area. Marking the boundaries of the port anchorage referred to in paragraph 1 of this Article is done with the consent of the Harbour Master's Office. According to the provisions of the Law on Ports, establishing the boundaries and criteria for establishing the boundaries of the port area and port anchorage, as well as the manner of marking such boundaries, are stipulated by the Government. The anchorages are currently stipulated in the Law on Amendments to the Law on Maritime Navigation Safety from 2019. This Law defines anchorage in the same way as previous legislation, i.e. as a developed and marked part of the sea intended for	Nautical anchorages established	MTMA MSPMA	No funds required	n/a	2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		anchoring vessels. As for designating the areas as anchorages, the amendments define that anchorages are designated by administration body in charge of maritime security in cooperation with the administration body in charge of hydro graphic activities. Designating anchorages and defining conditions for anchorages are necessary primarily due to safety of maritime navigation. Initiatives that were undertaken in the past never produced any tangible results, and since this activity has to be implemented it is recognized here as a priority activity and it is reflected in the deadline set for its implementation.					
2.2.6	Construct and modernize facilities for security of maritime navigation and facilities for maritime signalization, improving continuously the system of maritime telecommunication	Planned activity will contribute to safety of maritime navigation and to preserving and protecting life and property at sea. Indirectly, as it is expected that the volume of maritime transport will increase, the revenues from fee for using facilities ensuring safety of navigation are also expected to increase.	New facilities built and existing facilities for security of maritime navigation and facilities for maritime signalization modernized System of maritime telecommunication improved	MSPMA	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	Budget	2020-2022
2.2.10	Develop an analysis of how justified the mandatory use of tugboats or pushers is in Boka-Kotor Bay for a certain category of vessels	If we exclude 2020 where, due to the COVID-19 pandemic, the number of arrivals into the Boka-Kotor Bay dropped, there is no doubt that the number of arrivals of various vessels into the Boka-Kotor Bay has been on a constant increase in the last decade, particularly when it comes to the cruise-ships. However, the significant increase in the volume of maritime traffic in this limited aquatorium increases the risk for safety of maritime navigation. Therefore a comprehensive analysis should be done to respond to the question of whether the obligation to	The analysis of whether mandatory use of tugboats i.e. pushers in Boka-Kotor Bay is justified for certain category of vessels is done	MTMA IPA II, III	60,000 euro	Budget IPA	2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		use tugboats or pushers in Boka-Kotor bay is justified for certain categories of vessels.					
	Operational objective: 2.3	Simplify administrative procedures					
2.3.2	Gradually establish and update existing electronic records (Maritime Information System) for Montenegrin registers of ships, boats, yachts and other vessels; foreign vessels located in the Montenegrin territorial sea; issued vignettes for private use and commercial activities; concluded contracts on compulsory insurance in transport and other compulsory insurance types for users of vessels,. These records and database should also be gradually connected with the existing information systems, and exchange should be ensured between UPSUL, inspection bodies, Harbour Master's Offices, insurance companies, local self-government bodies and customs bodies. That will ensure that all authorities have precise information in real time about every vessel, i.e. whether the users of vessels in the territorial sea of Montenegro have an appropriate contract on compulsory insurance in transport and whether they do the activity of chartering vessels lawfully, i.e. comply with national legislation.	Goal of this activity is to improve the work and efficiency of maritime administration of Montenegro through introduction of information technologies. This is particularly important for inspection bodies. Implementation of this activity will significantly improve safety at sae, and significant effects are expected also in combating grey economy in the field of chartering vessels. This activity will be done in several stages, and every database will be launched as soon as it is completed.	Maritime Information System established	National bureau of insurers MTMA MSPMA IPA II, III	30,000 euro	Budget	2020-2021
2.3.4	Prepare an analysis on the introduction of information-communication technologies in the maritime economy sector in order to increase the number of electronic services related to the maritime sector and the maritime economy available on the eAdministration portal	Information-communication technologies have become necessary in the maritime economy sector. Therefore, development of an appropriate analysis will ensure that we can identify the electronic services that should be introduced and what benefits that will bring to maritime administration and users of public services that maritime administration provides to citizens	The Analysis on introduction of information-communication technologies in the maritime economy sector is done	МТМА	15,000 euro	Budget	2021
2.3.5	Development and maintenance of the web application, i.e. mobile application for the electronic submission of documents for issuing and paying vignettes	Development and maintenance of the web application, i.e. mobile application for the electronic submission of documents for issuing and paying vignettes is one of the priorities in the efforts to remove administrative barriers for development of nautical tourism. The envisaged budget, within this	Developed application for the electronic submission of documents for issuing and paying vignettes	MTMA	30,000 euro	Budget IPA	2021

Ref. No.	Activity		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
			action plan, includes only development of the application, while additional funds will be envisaged for its maintenance					
	Strategic goal:	3	To ensure a more intensive involvement of the civor of strategic decisions, legislative pieces, and prop					cede the adoption
	Operational objective:	3.1	Increase media coverage of all activities of the Modevelopment processes in the Montenegrin mariti		ion, with a view to e	ensuring active invol	vement of civil soc	iety in
			y for achievement of the strategic goal 3 are planned a n the Action Plan of Long-Term Activities and not here.	s continuous and will demand full	commitment of all ac	tivity holders in a long	period of time (2020)-2030). Therefore,
	Strategic goal:	4	To ensure that the expert community becomes a	driver of maritime economy dev	elopment			
	Operational objective:	4.1	Enhanced structure of human resources in the madecisions and designing courses of development		e private sector, edu	cated and qualified	to take an active pa	art in rendering
4.1.2	Improve conditions for work in the madministration for qualified human reswith experience to make working in administration attractive to them.	ources	Inadequate salary is given as the key reason for difficulties in ensuring highly qualified human resources in maritime administration, particularly given the fact that salaries of ship crew are even several tens of times higher than the salaries of top managers in maritime administration.	Qualified human resources employed in maritime administration are adequately rewarded for their work	MTMA MF MSPMA	Yes, but the amount cannot be assessed because it is related to policy for salaries in public sector	Budget	2020-2022
4.1.3	Encourage the development of docume on maritime sector that would be broad Montenegrin media and disseknowledge about the maritime sector	dcast in	This activity would imply that the documentaries should show not only the rich maritime tradition, but also the current and expected trends in maritime sector. The maritime sector should also be presented in an adequate manner as a field offering almost unlimited opportunities and potentials for using this important resource. This should encourage young people to choose maritime education and vocations.	Documentary on maritime sector made Documentary on maritime sector broadcast	MTMA	20,000 euro	Budget	2021-2022
	Strategic goal:	4	To ensure that the expert community becomes a	driver of maritime economy deve	elopment			
	Operational objective:	4.2	Professional development and lifelong learning of	f all stakeholders of the Monten	egrin maritime ecor	nomy		
			y for achievement of the strategic goal 4 are planned a these activities is presented in the Action Plan of Mid-T				ers in a mid-term of i	in a long period of
	Strategic goal:	5	To ensure that maritime economy growth is based	d on green economy principles				
	Operational objective:	5.1	Create appropriate preconditions in the public and	d private maritime sector for eco	onomic growth base	ed on green econom	y principles	
5.1.2	Ratify The International Convention Removal of Wrecks, 2017 (Convention)	on the Nairobi	Since 2009 European Commission has been continuously promoting ratification and application of all IMO conventions regulating the issue of liability of shipowners and system of compensation for	The International Convention	MTMA MFA	No funds required		2021

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		damage related to shipping activities. A significant progress has been made in this field, particularly when the Convention on the Removal of Wrecks from 2017 came into force.					
5.1.3	Ratify The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009	Ratifying this Convention Montenegro would commit to implement its provisions fully and consistently in order to prevent, reduce, minimize to the extent possible and eliminate casualties, injuries and other negative consequences for human health and environment that can be caused by the activities of recycling ships and to improve security of ships, protection of human health and environment throughout the entire life of a ship	The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 ratified	MTMA MFA	No funds required	n/a	2021
5.1.4	Ensure conditions for an available and efficient service of reception and management of shipgenerated waste and cargo residues in all Montenegrin ports	As for European legislation on port reception facilities for ship-generated waste and cargo residues, European Commission has undertaken a number of activities to improve this segment of European maritime industry. European Commission namely issued a number of guidelines aimed at improving manipulation of ship-generated waste in European ports and more efficient supervision of authorities over the implementation of MARPOL convention and other related regulations. This activity is recognized in this strategic document as one of the priority activities and deadline for its implementation is set accordingly.	Appropriate conditions for an available and efficient service of reception and management of ship-generated waste and cargo residues ensured in all Montenegrin ports	MSPMA Ports	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concessions	2020-2022
5.1.5	Develop an analysis of optimization of maritime transport in Boka-Kotor Bay with a view to improving security of maritime navigation and reducing the impact of maritime transport on marine biodiversity and other environment parameters	From the perspective of sustainable development we should have in mind that the reception of a too large number of vessels in the Boka-Kotor Bay can potentially have a negative effect on some environment parameters, primarily on marine biodiversity. It is therefore necessary to define reception capacity of the Bay and dynamics for arrival of vessels and regimes in ports in this area, reducing thus the impact of maritime transport on the environment by defining clear measures to mitigate such effects.	The analysis of optimization of maritime transport in Boka-Kotor Bay with a view to improving security of maritime navigation and reducing the impact of maritime transport on marine biodiversity and other environment parameters was done	MTMA	30,000 euro	Budget	2020-2021

Re		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
5.1	Purchase of equipment for remedying consequences of sea pollution from vessels and other structures	According to international commitments and national legislation, purchase of adequate equipment for remedying consequences of sea pollution from vessels and other structures is necessary, so that the authorities could respond urgently and efficiently in cases of sea pollution and complying with the National Emergency Response Plan.	Equipment for remedying consequences of sea pollution from vessels and other structures was purchased	MSPMA	Yes	Budget IPA	2020-2021
5.1	Procurement of a special ship for remedying consequences of pollution from vessels and for the activities of search and rescue at the sea	In line with international commitments of Montenegro as a coastal state, special ship for remedying consequences of pollution from vessels should be purchased so that the authorities could respond urgently and efficiently in cases of sea pollution.	Special ship for remedying consequences of pollution from vessels was purchased	MSPMA	Yes	Budget IPA	2021
5.1	Intensify activities of accreditation of laboratories for control and measuring of exhaust gasses from ship engines and laboratories for measuring marine fuel quality	Law on Air Protection stipulates the manner of monitoring air quality, as well as measures for protection, evaluation and improvement of air quality, planning and managing air quality. On the basis of Article 30 of this Law, Decree on marginal values of the contents of polluting matters in the liquid fuels of oil origin was adopted and published in the Official Gazette of Montenegro 17/2017. This Decree stipulates the types of liquid fuels of oil origin, marginal values of the contents of polluting matters, contents of metal-based additives and other fuel features that fuels placed in the market should meet. The Decree also regulates: the use of fuel in vessels in ports, territorial waters and exclusive economic zones and zones of control of oxide sulphur emissions; the manner of monitoring fuel characteristics; methods for reducing emissions of polluting matters in the air and reporting on complying with marginal values of the contents of polluting matters. According to Article 8 of this Decree, the ship diesel fuel can be marketed if the sulphur content is not above 15 g/kg (1,5% m/m), while the ship gas oil can be placed in the market if the sulphur content is not above I g/kg (0,1% m/m). In this respect it is necessary to define laboratories that can measure emissions from ship engines (NOx, Sox, CO, CO2, PM particles), particularly from	Laboratories for control and measuring of exhaust gasses from ship engines and laboratories for measuring marine fuel quality have been accredited.	MTMA ABMN ENPA	No funds required	n/a	2021

PART D: Strategic Goals of Integrated Maritime Policy – Action Plan 2020-2021

Ref No.	Δετινιτν	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		ship exhaust systems, and the quality of ship fuel to establish possible deviations from standards stipulated in international and national legislation.					

D.1.6 Mid-term Action Plan 2020-2025

Mid-term Action Plan 2020-2025

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	Strategic goal: 1	To increase the contribution of the maritime economy	and related activitie	s to overall economi	c development		
	Operational objective: 1.1	Achieve sustainable growth and competitiveness in the	ne port sector				
1.1.4	Encourage development of the Port of Bar as a logistic centre integrated in a multi-modal transport system and establish a working team with the task to follow and coordinate the development of logistic activities through the port of Bar and Montenegro	Constructing new container terminal Montenegro would get an opportunity to become one of the first ports in Europe for the ships that come from Asia. That would increase further transport of goods by feeder ships, railway and road transport towards Central and East Eruope, North Africa and Western Asia, and one of the last ports in Europe on the path to Far East. In addition to transport activities that would bring to the port of Bar an opportunity to develop manufacturing and packaging of container goods. Improving the road and railway infrastructure would create appropriate conditions for multi-modal transport system. In that respect a working body will be established with the task to follow and coordinate development of logistic activities through the Port of Bar and Montenegro.	Port of Bar became a logistic centre integrated into the multi- modal transport system.	MTMA MSPMA Railways Adminisration Railways Infrastructure of Montenegro AD Montecargo AD Montecargo AD	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concession	2020-2025
1.1.6	Achieving full utilization of the potentials of the Free zone of the Port of Bar through incentives for production and processing activities within the zone	Free zone of the Port of Bar is a significant economic potential. Attracting foreign investments through free zones that offer a number of advantages to the host country and foreign investors, has been recognized as one of priorities. At this moment, potentials of the free zone in the Port of Bar have not been used to the maximum. It is important to achieve the level of full utilization of the potentials that the free zone offers.	Free zone is fully utilized. There is a significant number of concluded contracts on manufacturing and processing activities in the free zone	ME "Luka Bar" AD	No funds required	n/a	2020-2023

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
1.1.7	Opening of the border crossing Sukobin for the transport of goods with a view to ensuring better transport connectivity of the Port of Bar with the hinterland	Revitalization of this activity, particularly given the investments in road infrastructure in the Republic of Albania and shorter time and transport costs, would improve competitive position of the Port of Bar, both for the cargo exported from Montenegro and for the flows of goods that would be redirected from /through Albania to Montenegro or would be transiting through Montenegro	Increased volume of trade in goods in the Port of Bar	MFA MI	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator		2020-2023
1.1.11	Improve the existing Port Community System (PCS), developed by AD "Luka Bar", as the single and integrated information system for data exchange between port operators, authorities and other entities participating in maritime transport, i.e. port business operations	Port Community System (PCS) developed by AD "Luka Bar" is centralized and automatized and serves for data and information exchange between organizations and maritime authorities. PCS is an electronic plaftorm aimed at connecting various information systems, various organizations and operators in port business.	PCS is improved and links different information systems, organizations and operators in port business.	AD "Luka Bar"	No funds required	n/a	2020-2024
1.1.13	Ensure adequate acceptance capacities for the fishing fleet	With the view to develop fisheries it is necessary to ensure appropriate logistics in the coast which implies establishment of infrastructure for fisheries on the coast, i.e. establishment of the point of first landing, point of first sale, places for berthing fishing boats in ports, places for refurbishment of fishing boats and so called fishing huts.	Ensured adequate acceptance capacities for fishing fleet	MTMA MARD MSPMA Ports Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	IPARD Budget PPP Concessions	2020-2023
1.1.14	Activate abandoned or unutilized port infrastructure and other coastal structures to work in the interest of economic development	It is necessary to activate the abandoned or unutilized port infrastructure and other coastal structures, to increase potentials in the blue economy sector to develop port activities to a larger extent and in a larger port area	Abandoned or unutilized port infrastructure is again put to use	MTMA UPSUL Ports Private sector	Yes, but at this stage of maturity of the concerned projects it is	PPP Concessions	2020-2024

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
			for economic development		impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator		
1.1.15	Construction of water terminals and construction of new piers for the reception of passengers in internal maritime transport	Within the procedure of valorisation of all forms of transport infrastructure and maximizing the potentials, the proposed activity would include construction of water terminals within the airport in Tivat. That would contribute to more efficient and to more economic transport of passengers from the airport and relief the road infrastructure in the coastal area. The same effect would be achieved by construction of new piers for reception of passengers in internal maritime transport.	Water terminals constructed New piers for reception of passengers in internal maritime transport constructed	MTMA MSPMA Ports Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concessions	2021-2025
1.1.17	Ensure adequate refurbishment capacities for regular and extraordinary refurbishment primarily of ships in maritime internal navigation (ferries, tugboats and pushers, fishing boats, smaller passenger boats, boats for commercial activities and other vessels).	Shipyard ports in Montenegro are primarily focused on vessels for sport and leisure, and in that respect there is the need to ensure conditions for regular and extraordinary refurbishment primarily of ships in maritime internal navigation in Montenegro.	Refurbishment capacities ensured	MTMA MSPMA Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concessions	2020-2025

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
Operati	onal objective: 1.2	Increase gross tonnage of Montenegrin merchant flee	t				
1.2.1	Through improvement of organizational structure and qualifications of human resources, i.e. through the strengthening of capacities of maritime administration, ensure adequate flag state control on ships under the Montenegrin flag, i.e. control of work by recognized organizations doing the technical supervision and statutory certification of Montenegrin ships	Insufficient qualifications of human resources have been recognized as one of the basic deficiencies of Montenegrin maritime administration. That is why the measures within the proposed activity cannot be implemented in an appropriate way and fully. In order to implement the concerned activity organizational structure has to be improved and qualifications of human resources have to be strengthened.	Improved organizational structure Strengthened capacities of maritime administration	MTMA MSPMA MF	50,000 euro	Budget	2020-2023
1.2.2	Intensify activities of the transfer of authorities for technical supervision and statutory certification of ships to other Recognized organizations, i.e. classification societies, creating thus preconditions for increasing the total number of ships under the Montenegrin flag	The ships that are hired in international navigation have to comply with international regulations on safety, security, and environment protection contained in the instruments of IMO (International Maritime Organization). Implementation and enforcement of this legislation is within the competences of every flag state that can delegate all or a part of its authorities in terms of statutory certification of ships and technical supervision to classification societies. As the ships grow bigger and more complex only classification societies like IACS members have the required technical and expert capacities to control them and inspect them wherever possible through their highly developed international network of inspectors.	Authorities for technical supervision and statutory certification of ships transferred to Recognized Organizations that we still do not have the contracts on transfer of authorities with	MTMA MFA MSPMA	No funds required	n/a	2020-2024
1.2.6	Digitalization of Montenegrin ship registers	Administrative procedures related to registration of yachts, issuing documents and keeping the Register of ships have to be improved to ensure better efficiency and easier access for users. It has to be done through digitalization process just like all of the competitive flags did. Digitalization process implies making of a list and analysing the procedures that have to be digitalized by using information technologies. This activity includes procurement and installation of appropriate software as well as training of employees. This activity will be implemented in several stages and it will be elaborated in details in the Action Plan 2020-2023.	Procedure of digitalization of register fully implemented	MTMA	150,000 euro	Budget, IPA	2021-2025
Operati	onal objective: 1.3	Increase number of yachts registered in the Monteneg	rin yachts register				
1.3.3	Establishing a global network of independent technical inspectors that would be authorized by the Yacht Register to do the basic, i.e. regular and	As the ships grow bigger and more complex only classification societies like IACS members have the required technical and expert capacities to control them	Global network of independent technical	MTMA MSPMA	Yes, but at this stage of maturity of the concerned	Budget	2021-2023

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	extraordinary technical inspections of the yachts of registered length under 24 m that meet the requirements to be registered in the Montenegrin Yacht Register	and inspect them wherever possible through their highly developed international network of inspectors.	inspectors established		projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator		
Operati	ional objective: 1.4	Achieve sustainable growth and competitiveness of contribution of all stakeholders in the maritime econo					
1.4.5	Support purchase of RO-RO passenger ship with a view to ensuring international maritime transport and smooth line transport of goods and passengers between Montenegro and other countries of the region by domestic shipowners and operators	Analysis done with a view to finding solution that will ensure sustainability of shipping companies in majority ownership of the state, showed that the purchase of a RO-RO passenger ship is an opportunity to contribute to potential sustainability and stability of the restructured shipping company. That is why this activity is proposed	Ro-Ro passenger ship bought and used for the international transport line	MTMA MF IDF	12,000 000 euro	Loan of the shipping company taken from commercial banks or IDF PPP	2022
Operati	ional objective: 1.5	Position Montenegro as an attractive nautical and crui	ise-ship destination				
1.5.2	Create conditions for a balanced redistribution of acceptance of cruise ships between commercial ports of national importance	This strategic document envisages implementation of certain investment projects in the port area of the Port of Bar, like for example extension of the operational shore in the Quay V. In addition to this, certain activities were planned that include deepening of the seabed to ensure entrance to ships with deeper draught. Strategy also envisages development of the Analysis of optimization of maritime transport in Boka-Kotor Bay, which implies possible limitations in terms of number of entrances and categories of vessels in this sensitive area. This was already done by some coastal countries that have cruise-ship tourism developed in environmentally sensitive areas. In relation to this, coordinated development policy through this activity tries to create preconditions for balanced re-distribution of reception of cruise-ships between the ports of national importance.	Reception of cruise ships is more adequately distributed between merchant ports of national importance	MTMA Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concessions	2020-2025

Ref. No.	Activity		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation	
1.5.3	Stimulate yacht owners to choose one of Montenegrin nautical tourism ports as homeport, inter alia, by construction of wiberths for yachts. Create conditions for alre recognizable nautical tourism ports to become centres of activities for maritime entities mana mega-yachts commercially with all multiplication effects that it brings.	their vinter eady come	Implementation of this activity would contribute to creating a stimulating legal framework for yacht owners to encourage them to choose some of Montenegrin nautical tourism ports as their homeport.	A larger number of yachts having Montenegrin ports as their home ports	MTMA MSPMA MF Customs Administration Tax Administration	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concessions	20212024	
Strateg	ic goal: 2	2	To strengthen capacities of the Montenegrin maritime	administration and	simplify administrati	ve procedures			
Operati	onal objective: 2	2.1	Ensure that Montenegro meets the international obligation	ro meets the international obligations it has as a costal state, flag state and port state					

Operational objectives and activities whose implementation is necessary for achieving the strategic goal 2 are planned as short-term and as such they are included in the Action Plan 2020-2021 or they are envisaged as continuous, i.e. will require full commitment of all activity holders in a long-term in the period 2020-2030. That is why more elaborated structure of these activities is presented in the Action Plan 2020-2021 and Plan for long-term activities

Operation	onal objective: 2.2	Continuously improve maritime navigation safety and	Continuously improve maritime navigation safety and safety of human lives and property at the sea, as well as security of port facilities and ships						
2.2.1	Enhance administrative capacities, organization structure and qualifications of human resources in the inspectorate for security of maritime navigation in line with international standards and needs of the maritime economy. Coordination with other inspection bodies	No matter how hard they work, Inspectorate for security of maritime navigation, given the current number of employees, cannot adequately conduct inspection supervision in the jagged coastline in Montenegro, particularly not during the summer tourism season. To ensure more efficient inspection supervision and general and special prevention in all entities subject to supervision, the number of employees in the position of inspectors has to be increased. It is also necessary to organize continuous training of inspectors.	Sufficient number of employed inspectors for security of maritime navigation	МТМА	Yes, depending on the number of employees	Budget	20202024		
2.2.7	Modernize the service of search and rescue at sea in order to increase its efficiency. Improve interregional cooperation in search and rescue operations with neighbouring countries in line with international agreements	Department for search and rescue at the sea in MSPMA works in a high quality way and efficiently, but better conditions of work should be ensured. That would increase the efficiency of search and rescue operations. On the basis of bilateral agreements, cooperation in the field of search and rescue with neighbouring countries could be significantly improved and contribute to efficiency of all signatories.	Modernized service for search and rescue at the sea Improved interregional cooperation with neighbouring countries	MSPMA	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the	Budget IPA	2021-2024		

Ref. No.	Activity	Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
					implementation of this activity and achieving the desired performance indicator		
2.2.8	Development of an application for boatmen that activates distress calls from mobile telephones	Application for mobile phones that all boatmen will be able to use to navigate safely in Montenegrin waters. This application is free of charge and it will provide all its users with information about all ports/berths in Montenegrin coast, weather forecast, basic rules on navigation at the sea, possibility of SOS calls, network connections with other vessels using this application, GPS tracking, etc. This will contribute to security of maritime navigation and protection of human lives and property at the sea.	Developed and activated application for boatmen	MSPMA Mobile operators in Montenegro	50,000 euro	Budget	2022
2.2.9	Ensure a consistent application of legislation on security protection of port facilities and ships in all Montenegrin ports	Legislation regulating issues of importance for security protection of port facilities and ships are adopted, but it is necessary to ensure full compliance of work of all ports with that legislation.	All Montenegrin ports have the Plan of security adopted in line with ISPS Code	MSPMA	No funds required	n/a	2020-2024
Operati	ional objective: 2.3	Simplify administrative procedures					
2.3.1	Establish the system of a "National Single Window" in line with EU legislation and the European Commission recommendations	Being aware that it is necessary to ensure technological modernization and simplify procedures for notification and reception of ships, declaration of cargo and passengers, i.e. providing free transport in the ports of EU Member States, European Commission adopted Directive 2016/65/EU and introduced compulsory implementation of the Maritime Single Window (MNSW) system. Expected implementation costs amount to 700,000.00 €, out of which the national contribution is 15%. Co-financing is ensured through IPA II and that is why this Action Plan does not envisage any funds for this. This measure creates conditions for stronger competitiveness of our ports and for reducing the total time ships spend in the port, i.e. for reducing the costs of maritime transport. In addition to the Ministry of Transport and Maritime Affairs and Maritime Safety and Port Management Administration, other state administration	The system of National Single Window established	MTMA MSPMA MI MF Customs Administration Police Directorate Administration for inspection affairs	n/a	Budget	2020-2025

Ref. No.	Activity		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
			bodies have to be involved if they have competences for entrance and departure of ships into/from Montenegrin ports. These include: Ministry of Interior (Police Directorate), Ministry of Finance (Customs Administration), Administration for Inspection Affairs etc. To ensure full dedication of responsible state bodies to implementation of this measure, reducing thus the risks related to the implementation of the measure and probability that they might occur, legal basis is needed for establishment of inter-sectorial work group that will deal with these issues. Implementation of this activity must be preceded by development of an analysis that will list the procedures done in the process of entrance and departure of a ship, etc. Proposed analysis is envisaged for 2020-2021, and it will be followed by implementation of the system.					
2.3.3	Introduce the eManifest system based model of analogous solutions in the Eu Union, with the technical support of EMSA	ıropean	Starting from the fact that digitalization is of key importance for improvement of integration of maritime transport into the multi-modal logistic chain, European Commission is now working on the introduction of the system of eManifest. The intention is to simplify further and to harmonize customs formalities in the ports of member states. Harmonization of the concerned administrative formalities will shorten the time ships spend in ports, which significantly influences operational costs of ships and aims at improving security and efficiency of maritime transport.	The system of eManifest introduced	MTMA MSPMA	20,000 euro	Budget	20222024
Strateg	ic goal:	3	To ensure a more intensive involvement of the civil					
	Operational objective: 3.1		adoption of strategic decisions, legislative pieces, and Increase media coverage of all activities of the Mor development processes in the Montenegrin maritime of	ntenegrin maritime				

Ref. No.	Activity		Detailed description of the activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation		
	Operational objectives and activities whose implementation is necessary for achieving the strategic goal 3 are planned as short-term or continuous, i.e. will require full commitment of all activity holders in a medium-term or long-term in the period 2020-2030. That is why more elaborated structure of these activities is presented in the Plan for long-term activities									
Strategi	ic goal:	4	To ensure that the expert community becomes a drive	r of maritime econo	my development					
Operati	onal objective:	4.1	Enhanced structure of human resources in the maritin decisions and designing courses of development in the		nd in the private secto	or, educated and qua	llified to take an acti	ve part in rendering		
4.1.3	Encourage the development of documental maritime sector that would be broaded. Montenegrin media and disseminate known about the maritime sector	cast in	This activity would imply that the documentaries should show not only the rich maritime tradition, but also the current and expected trends in maritime sector. The maritime sector should also be presented in an adequate manner as a field offering almost unlimited opportunities and potentials for using this important resource. This should encourage young people to choose maritime education and vocations, but would also initiate new ideas in economy. Documentary on maritime sector made MTMA 20,000 euro Budget Documentary on maritime sector made Documentary on maritime sector made Documentary on maritime sector made				Budget	2027-2028		
Strategi	ic goal:	4	To ensure that the expert community becomes a drive	r of maritime econo	my development					
Operati	onal objective:	4.2	Professional development and lifelong learning of all s	stakeholders of the	Montenegrin maritim	e economy				
4.2.1	Develop accredited programmes for professional development of employees Montenegrin maritime industry with the poto introduce a system of tax facilities for n economy operators that invest in conprofessional development of their resources	in the ssibility naritime tinuous	It is obvious that there is a lack of accredited programmes for training of employees in Montenegrin maritime economy. Thus in practice we can frequently notice deficiencies that result from insufficient education and training. This activity is proposed with a view to raising the level of qualifications of employees. Introduction of the system of tax reliefs is one of the measures aimed at stimulating employers to invest in the knowledge of their employees.	Accredited programme for training of employees in maritime economy	MTMA MJ MF	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	n/a	2020-2024		
Strategic goal: 5 To ensure that maritime economy growth is based on green economy principles										
Operati	onal objective:	5.1	Create appropriate preconditions in the public and pri		r for economic growt	h based on green ec	onomy principles			
5.1.1	Promotion activities raising awareness am maritime economy stakeholders about the l		In our region green economy has not been in the focus enough and that is why all stakeholders in maritime economy have to be trained continuously, to raise their	Blue economy in synergy with green economy	MTMA MSPMA	No funds required	n/a	2020-2023		

PART D: Strategic Goals of Integrated Maritime Policy – Mid-term Action Plan 2020-2025

Ref. No.	Activity Detailed description of the activity		Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	of economic growth based on green economy principles	awareness about the importance of green economy and the benefits of economic growth based on the green economy principles.					
5.1.7	Purchase of equipment for remedying consequences of sea pollution from vessels and other structures	Montenegro's international commitments and national legislation require purchase of adequate equipment for rehabilitation of the consequences of marine pollution from vessels and other structures, so that relevant authorities can urgently and efficiently react in cases of marine pollution.	the consequences	MSPMA	Yes	Budget IPA	20272028

D.1.7 Plan for Long-term Activities that will Start or Will be Completed in the Period Longer than Five Years

Plan for long-term activities that will start or will be completed in the period longer than five years

Ref. No.	Activity		Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation		
	Strategic goal:	1	To increase the contribution of the maritime economy and related activities to overall economic development							
	Operational objective:	1.1	Achieve sustainable growth and competitiveness in the	e port sector						
1.1.2	Reconstruction and modernization of existing paracities	port	Reconstruction and modernization of existing port capacities will create preconditions for higher quality, more efficient and more modern port activities, which will in the end improve competitive position of Montenegrin ports and generate significant revenues from using port area and port activities.	Full implementation of the Investment programme for all concessionaires, i.e. companies that use port area and do port activities on the basis of a Contract on using coastal management zone	MSPMA "Luka Bar" AD Bar "Luka Kotor" AD Kotor AD "Port of Adria" MYS (Consortium Adriatic Marinas and Damen Shipyard) Ports that use port area on the basis of contractual relatios with PCCMZ	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	Budget (Fees that constitute a budget revenue and are based on port activities and are intended for investment in port infrastructure) Private sector through the model of concession or PPP	2020-2030		
1.1.3	Construction of a new container terminal in the F of Bar that will position the Port of Bar as a por regional importance		This is the project of construction of a terminal able to accept ships of over 22,00 TEU in the area of the Port of Bar on the surface of 140 hA and the depth of the sea of 15-25 m on average.	New container terminal in the Port of Bar constructed	MTMA UPSUL Private sector throught the model of Public- Private Partnerhsip	1,6-2,5 billion euro	PPP	2021-2030		
1.1.5	Development of inter-modality and accessibe through construction and modernization of roand railway infrastructure with a view to ensure better transport connectivity of Montenegrin policy.	road iring	Although Montenegrin ports, given their geographic position, have significant comparative advantages in comparison with the ports of Norhtern Adriatic, only the construction and modernization of road and railway	Reconstructed or newly built road infrastructure	MTMA MSPMA	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise	Budget PPP and Concessions	2020-2030		

PART D: Strategic Goals of Integrated Maritime Policy - Plan for Long-term Activities that Will Start or Will be Completed in the Period Longer than Five Years

Ref. No.	Activity	Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	with the hinterland and eliminating bottlenecks on the road infrastructure	infrastrucrture can ensure development of the ports and the concept of inter-modality and accessibility.	Constructed bypasses around port cities Rehabilitated railway infrastructure and intensified container railway transport	Transport Administration Railways Administration Monteput doo Railway Infrastructure AD Local self- government units	estimate of the funds required for the implementation of this activity and achieving the desired performance indicator		
1.1.9	Work continuously on improving the efficiency and quality in provision of primary port services in order to ensure competitiveness of Montenegrin ports in comparison to ports in the region	High quality port services, with zero incident and accident rate if possible, will contribute to better competitiveness of Montenegrin ports.	Improved efficiency and quality of primary port services	MSPMA Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP and Concessions	2020-2030
1.1.10	On an annual level, plan the port services and an infrastructural project for which the procedure of awarding concessions or establishing a private-public partnership will be started. All of this is aimed at stimulating investment in the maritime economy, improving efficiency and quality in provision of port services. In the end it will all contribute to the competitiveness of Montenegrin ports	Since ports provide a large number of diverse services, and since there are certain market aspirations in the industry, but also the realistic needs of ports and shipowners and operators, it is necessary to ensure that high quality planning in this field meets realistic needs of the market and ensures that economic operators can work and have benefits from the provided services.	Adopted annual plan defining for which port services the procedure for awarding concessions will be started and what port services will be subject to public-private partnership	MSPMA Private sector	No funds required	n/a	2020-2030

PART D: Strategic Goals of Integrated Maritime Policy - Plan for Long-term Activities that Will Start or Will be Completed in the Period Longer than Five Years

Ref. No.	Activity	Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
1.1.12	Encourage construction of the port LNG terminal	Construction of the port LNG terminal would ensure energy needs and increase security of supply through new stream of natural gas for the countries of Central and South-Eastern Europe.	Construction of the port LNG terminal started	MTMA MSPMA Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP Concessions	2020-2030
	Operational objective: 1.2	Increase gross tonnage of Montenegrin merchant flee	t				
1.2.3	Use a stimulating tax policy, i.e. implementing a fiscal policy based on the single taxation system for shipping activities in form of tonnage tax, attract a large number of shipowners to register their ships into the Montenegrin register	Tax i.e. fiscal policy in this field has to be improved so that the Montenegrin Yacht Register can become competitive and attract primarily the yachts intended for commercial activities with all the ensuing benefits.	Increased number of ships registered in Montenegrin register.	MF MTMA MSPMA Tax Administration	No funds required	n/a	2024-2030
1.2.4	Encourage the financial sector to include investment projects of purchase of ships into financing	Financial sector in Montenegro is still not ready to accept insurance on ship and therefore it is not open to support investment projects of this kind. Such policy of the financial sector significantly limits or even makes absolutely impossible for the shipping companies to take loans and buy ships that they would exploit and ensure their sustainability in such a way.	Financial sector supported investment project of purchase of ship	MTMA MF Shipping companies	No funds required	n/a	2020-2030
1.2.5	Liberalize conditions for the registration in the Montenegrin register of maritime merchant ships, in terms of nationality of shipowners	Establishing an open register would significantly increase attractiveness of Montenegrin register, which would result in a larger number of registered merchant ships.	An increased number of merchant ships registered in Montenegrin register	MTMA MSPMA	No funds required	n/a	2026-2030
1.3.4	Intensifying activities of the promotion of the Montenegrin Yacht Register through active participation of administration in nautical fairs and publications in specialized magazines	Adequate promotion of Montenegrin Yacht Register with active participation of administration in recognized events and presenting potentials of the Register would contribute to an increased number of yachts registered in Montenegrin register.	An increased number of yachts registered in Montenegrin Yacht Register	MTMA MSPMA Private sector	10,000 euro	Budget	2020-2030

PART D: Strategic Goals of Integrated Maritime Policy - Plan for Long-term Activities that Will Start or Will be Completed in the Period Longer than Five Years

Ref. No.	Activity	Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	Operational objective: 1.4	Achieve sustainable growth and competitiveness of the contribution of all stakeholders in the maritime economic states.					
1.4.2	Institutional support to the active participation of members of the Montenegrin maritime cluster in international and local maritime fairs with a view to promoting potentials of the Montenegrin maritime economy and attracting foreign investment in maritime economy	Public sector, i.e. maritime administration has to take an active role in this process and give a decisive support to Montenegrin maritime cluster in all recognized events, so that the maximum synergy can produce maximum effect.	Montenegrin Maritime cluster and maritime administration together present the potentials in the sector of blue economy in Montenegro	MTMA	20,000 euro	Budget	2020-2030
1.4.3	Institutional support to developing synergies between the Montenegrin maritime cluster and organizations that work on strengthening bilateral economic cooperation in the maritime sector, in innovation and research	Public sector, i.e. maritime administration has to take an active role in this process and give a decisive support to Montenegrin maritime cluster with a view to establishing bilateral economic cooperation to produce maximum effect through synergy.	Montenegrin Maritime cluster and maritime administration together initiate bilateral cooperation in the blue economy sector	МТМА	No funds required	n/a	2020-2030
1.4.6	Use tax exemptions and other facilities to encourage the development of internal maritime transport through the use of "eco-ships"	It is necessary to regulate issues of importance for high quality and systemically regulated maritime public passenger transport along Montenegrin coast. Passenger transport would be important particularly during the summer season. It would be significantly simplified and accelerated, and the congestions in the road infrastructure in the coastal region would be reduced. Given the need to achieve sustainable development and given the principles of blue and green economy, additional encouragement and support are needed for development of this form of maritime transport using the eco-ships.	Developed internal maritime transport done with an increased use of eco-ships	MTMA MSDT PCCZM Private sector	Yes, but at this stage of maturity of the concerned projects it is impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator	PPP	2020-2030
	Operational objective: 1.5	Position Montenegro as an attractive nautical and cru	ise-ship destination				
1.5.1	Encourage investment in the construction of new nautical tourism ports and port capacities for refurbishment of yachts and mega yachts	Development of Montenegrin nautical tourism offer implies modernization of the existing and construction of new marinas. Potential for development of nautical tourism can be seen in the continuous increase of the	High quality network of nautical tourism ports constructed	MTMA MSDT Private sector	Yes, but at this stage of maturity of the concerned projects it is	PPP or Concessions	2020-2030

Ref. No.	Activity	Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
		number of arrivals of foreign vessels to nautical tourism ports in Montenegro. In the last ten years the number of arrivals of foreign vessels has increased by 67.8%. Construction of new marinas will additionally enrich the nautical tourism offer, which will generate new revenues.	in Montenegrin coast.		impossible to make any precise estimate of the funds required for the implementation of this activity and achieving the desired performance indicator		
	Strategic goal:	2 To strengthen capacities of the Montenegrin maritime		• •	•		
	Operational objective: 2	1 Ensure that Montenegro meets the international obligation	ations it has as a co	stal state, flag state a	and port state		
2.1.2	Active participation of the Montenegrin maritin administration in the activities of the Internation Maritime Organization (IMO), International Labo Organization (ILO), European Union bodies at other bodies (EMSA, IALA, IMSO) and mandato information, where applicable, of all stakeholde in the maritime economy in Montenegro about activities in progress in these organizations.	of maritime policy on the global level. Due to that reason it is necessary to ensure higher involvement of Montenegrin maritime administration in these organizations (technical and expert work group) and to acquire knowledge that will be applied in Montenegro and	Educated and qualified maritime administration	MTMA MSPMA	5,000 euro	Budget	2020-2030
	Operational objective: 2	2 Continuously improve maritime navigation safety and	safety of human live	es and property at th	e sea, as well as sec	urity of port facilities	s and ships
Plan and	d Mid-Term Activities Plan. Operational objective: 2	3 Simplify administrative procedures				·	
	d Mid-Term Activities Plan.	eving operational goal 2.3 have been strategically planned as so To ensure a more intensive involvement of the civil se				·	
	Strategic goal:	adoption of strategic decisions, legislative pieces, and	d proposing system	solutions for overco	ming challenges in t	he maritime econom	y sector
	Operational objective: 3	development processes in the Montenegrin maritime (economy	inistration, with a vie	ew to ensuring active	e involvement of civi	I society in
3.1.1	Before the process of the development of dra laws, strategies or programmes starts, the			MTMA MSDT	No funds required	n/a	20202030

PART D: Strategic Goals of Integrated Maritime Policy - Plan for Long-term Activities that Will Start or Will be Completed in the Period Longer than Five Years

Ref. No.	Activity	Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation
	interested public should be publicly invited to submit their proposals and suggestions to the Montenegrin maritime administration already in the preparatory stage	interested public in all important processes implemented by maritime administration.	suggestions to maritime administration in the stage preceding development of important enactments.	MARD MSPMA			
3.1.2	Continuous cooperation with the Montenegrin Chamber of Commerce, Council for Competitiveness, Union of Municipalities, business associations in the process of development of sectorial policies and development directions in the maritime economy sector	This activity was proposed in order to achieve full involvement of industry in the work of maritime administration and their active participation in all important processes implemented by maritime administration.	MNCC, CC, UOM actively participate in policy development in the maritime economy sector and on a partnership basis achieve optimum solutions with maritime administration.	МТМА	No funds required	n/a	20202030
3.1.3	Intensive media coverage of maritime administration to promote sectorial policy so that the civil sector could actively participate in relevant consultative processes	To ensure that civil sector can timely participate in relevant processes, it has to be informed in advance primarily through the media about the planned and current activities of maritime administration.	Civil sector is informed of important activities of maritime administration and it participates in consultation processes.	MTMA MSPMA	No funds required	n/a	20202030
	Strategic goal: 4	To ensure that the expert community becomes a drive					
	Operational objective: 4.1	Enhanced structure of human resources in the maritin rendering decisions and designing courses of develop			or, educated and qua	ilified to take an acti	ve part in
4.1.1	Encourage training programmes both in the country and abroad, so that human resources employed in administration and the industry could follow trends of the global maritime market	It has been noted that Montenegrin maritime administration is not sufficiently involved in the work of key international organizations that work on development of maritime policy on the global level. Due to that reason it is necessary to ensure higher involvement of Montenegrin maritime administration in these		MTMA MSPMA	10,000 euro per year	Budget	20202030

PART D: Strategic Goals of Integrated Maritime Policy - Plan for Long-term Activities that Will Start or Will be Completed in the Period Longer than Five Years

Ref. No.	Activity		Detailed description of activity	Performance indicator	Activity Holder	Required funds	Sources of funds	Timing of implementation	
			organizations and to acquire knowledge that will be applied in Montenegro.						
4.1.4	Encourage the organization of expert and research events aimed at developing knowledge about blue and green economy in the context of development of the Montenegrin maritime sector		To ensure that the state and all direct participants of this sector can feel all benefits of maritime economy, it is necessary to educate as large number of individuals and institutions as possible about the importance and opportunities of blue and green economy.	State and economy enjoy significant benefits of blue and green economy	MTMA MSPMA	No funds required	n/a	20202030	
4.1.5	Establish an innovation "hub" in Bar that would ensure support for implementation and commercialization of certain segments of entrepreneurial ides related to maritime sector.		The hub would have multi-purpose service that would function as a centralized platform for socialization through business and education interaction of innovators and experts, young innovators and experienced entrepreneurs. Such interaction would ensure continuous focus, insights and initiating of start-ups and support to development of the existing companies- small, medium-size and large.	Innovation hub established	Montenegrin Maritime Cluster Municipality of Bar	50,000 euro	Private sector Municipality of Bar IPA	20202021	
	Strategic goal:	4	To ensure that the expert community becomes a driver of maritime economy development						
	Operational objective:	4.2	Professional development and lifelong learning of all stakeholders of the Montenegrin maritime economy						
The act	ivities whose implementation is necessary for	achievin	g operational goal 4.2 have been strategically planned as m	nid-term. Therefore the	e detailed structure of	these activities is pres	ented in the Mid-Tern	n Activities Plan.	
	Strategic goal:	5	To ensure that maritime economy growth is based on	green economy prin	ciples				
	Operational objective:	5.1	Create appropriate preconditions in the public and pri	vate maritime sector	for economic growt	h based on green ed	conomy principles		
5.1.6	Encourage the development of new technologies and continuously monitor and improve knowledge and legislation to prevent pollution of the marine environment that can be caused by ship or port activities, operations of exploration and exploitation of hydrocarbons, laying under water pipelines, cables and other installations		It has been identified that knowledge of Montenegrin maritime administration about prevention of marine pollution has to be extended. Therefore it is necessary to ensure better education of Montenegrin maritime administration and industry about prevention of marine pollution that can be caused by ship and port activities, operations of exploration and exploitation of hydrocarbons, laying of under water cables, pipelines and other installations.	Educated administration, citizens and industry	MTMA ME Hydrocarbons Administration MSPMA	No funds required	N/a	20202030	

PART D: Strategic Goals of Integrated Maritime Policy - Plan for Long-term Activities that Will Start or Will be Completed in the Period Longer than Five Years

D.2 Plan for Implementation of Monitoring, Reporting and Evaluation of the Strategy for Development of Maritime Economy

In the process of defining activities of monitoring, reporting and evaluation of this strategic document, the Project team was led fully by guidelines provided in the *Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents.* What follows is a detailed description of each of these very important stages in the process of implementation of the Strategy for Development of Maritime Economy.

D.2.1 Monitoring

Since monitoring implies a complex process of monitoring implementation of the strategic document with particular focus on implementation of specific activities, deadlines, indicators defined in the action plan, reporting and evaluation, in this particular case the monitoring will be done by the Minsitry of Transport and Maritime Affairs. In this process, the Ministry will periodically collect data from the entities that are holders of certain activities aimed at achievement of the operational objectives or strategic goals. On the basis of the collected data the Ministry will have a clear structure of implemented activities. After collecting the relevant data, Directorate for Maritime Economy, as the organization of the Ministry of Transport and Maritime Affairs responsible for this field, will organize consultative meetings with all activity holders in charge of implementing the envisaged activities, as well as with representatives of industry, professional associations and non-government sector. The idea is to work with all stakeholders on joint conclusions and proposal of measures to be undertaken in the future to achieve the maximum effects in the implementation of this strategic document. Already in this stage, if there is any need to intensify certain activities or anything of that kind, the stakeholders will identify such needs toghether and propose certain remedial measures to be included in the annual Report. This process will be initiated by the Directorate for maritime economy at least twice a year, and more frequently if needed.

On the basis of the analysed level of implementation of the Strategy for Development of Maritime Economy. Directorate for Maritime Economy will prepare an Annual report on implementation of the Strategy for Development of Maritime Economy. The Ministry of Transport and Maritime Affairs will submit annual report to the Government for consideration. After the opinion of the Gerenal Secretariat of the Government is issued, the report will be submitted to the Commission for Economic Policy and Financial System and then to the Government of Montenegro for consideration in December. This process will take place every year during the entire period of the Strategy (2020 – 2030). Annual report will focus on results of activites achieved a year before. Every Annual report will be transparent and never classified as confidential. It will be published in the website of the Ministry of Transport and Maritime Affairs and the Government of Montenegro after consideration in the Government meeting. Every Annual report on implementation of the Strategy for Development of Maritime Economy will be submitted also to the Chamber of Commerce and Council for Competitiveness. This is to ensure high quality and critically oriented monitoring process. The process will be led by the Ministry of Transport and Maritime Affairs, but all stakeholders that the implementation of the Strategy depends on will participate actively. Broader community will also be timely informed about the course of implementation and results of activities of this stategic document. In that way the civil sector will be able to participate in the strategic process through intiatives, proposals for measures and similar activities.

In addition to Annual reports on implementation of the Strategy, after expiry of the entire period of implementation, Ministry of Transport and Maritime Affairs will prepare Final report on implementation of the Strategy. Final report will contain information about results of the activities from previous year but will also give a detailed overview of the level to which operational and strategic goals were achieved during the entire period of the Strategy. The Ministry will submit the prepared Final report to the General Secretariat of the Government for opinion. After obtaining their opinion, the Ministry will submit the Final report to the Commission for Economic Policy and Financial System for consideration, after which the Final report will be submitted to the Government . Just like regular annual reports, the Final report will be published in the website of the Ministry of Transport and Maritime Affairs and the Government of Montenegro after being discussed in the Government meeting. The Final report on implementation of the Strategy for Development of Maritime Economy will be submitted also to the Chamber of Commerce and Council for Competitiveness.

Annual reports and Final report on implementation of the Strategy will offer an analysis of key achievements but also of difficulties in implementing the Strategy and explanation why they happened. The reports will be fully structured in line with the requirements defined in the *Decree on the manner and procedure of development*,

harmonization and monitoring of the implementation of strategic documents. This will ensure timely identification of possible needs for adjusting the strategic document, particularly the activities planned for the forthcoming period. Such a situation and needs would be underlined in the relevant report (in the part titled Recommendations).

Evaluation of the Strategy for Development of Maritime Economy will be done as a mid-term activity, i.e. after the half of the observed period expires – in 2025. Evaluation will also be done ex-post, i.e. after the strategic document is implemented. For this activity the Ministry of Transport and Maritime Affairs will hire external experts – independent evaluators - to ensure that the process of evaluation is fully objective and impartial. Mid-term evaluation of the Strategy will aim at ensuring a comprehensive revision and insight into the effects achieved in the mid-term period. Estimated financial framework for this activity amounts to approximately 15,000 euro. A precise financial estaimate for implementation of an ex-post evaluation of the Strategy for Development of Maritime Economy cannot be given at this time, since it will be implemented after the entire period of the Strategy, i.e. after 2030. However, a rough estimate is that the financial framework of 30,000 euro should ensure appropriate quality of the evaluation process. Findings of ex-post evaluation will be incorporated in the Final report on implementation of the Strategy. It goes without saying that findings of evaluation will be fully taken into account in the process of development of the next strategic document dealing with the issues of importance for development of maritime economy in Montenegro.

D.2.2 Funds Required for Implemenation of the Activities Envisaged in the Strategic Document

Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents contains the principle of economical and cost-effective planning which implies that in planning and development of strategic documents due care should be given to the level of human, organizational, financial and material resources that are available for its implementation, monitoring of implementation, reporting and evaluation. Based on this principle, the team that prepared the Strategy for Development of Maritime Economy 2020-2030 with the Action Plan, defined specific activities in the Action Plan that should contribute to the achievement of strategic goals and operational objectives.

As stipulated in Article 2 paragraph 2 of the *Decree on the manner and procedure of development, harmonization and monitoring of the implementation of strategic documents* the Action Plan has to contain a cost estimate wherever quantification was possible. Approximative cost estimate for most of the activities defined in the Action Plan 2020-2021 amounts roughly to 300,000.00 euro. However, it is important to underline the fact that at the time of development of the Strategy it was not possible to estimate costs for certain activities defined in the Action Plan, particularly given the specific nature of the concerned activities or individual maturity of the projects related to them. For certain number of activities studies and analyses will have to be done, equipment procured, number of employees in certain positions increased, etc. It is impossible at this moment to express financial implications of these activities throug cost estimate.

It is also important to say that the Strategy for Development of Maritime Economy envisages a large number of infrastructural projects for which at this moment the appropriate project documentation or feasibility studies do not exist. This means that there is no specific assessment of funds needed for their implementation. Since these are mostly capital-intensive investment projects of extremely high values, the Project team is of the opinion that conditions are not met at this moment to set financial framework for these projects in the Strategy. This is even more true, given the fact that for the largest number of such project Public-Private Partnership will probably be used as a financing model. Threfore the value of such infrastructural projects might vary significantly in the future depending on the project and on the framework in which the investment programme would be set by public-private partnership, but also depending on the financial abilities of the potential private partner, market conditions at the time of commencement of works on infrastructural projects, competitiveness of our region in the global maritime market, etc. Given all of the above, it is our opinion that defining the estimate of the needed funds without appropriate documentation would be arbitrary and could become a limiting factor for the value of investment at the moment when the procedures for implementation of the infrastructural projects start.

In spite of the above, the team that prepared this strategic document will use the measures of adjustment and annual reports envisaged in this document and, whenever the level of accuracy of data allows, financial framework for implementation of each individual activity will be specified.

D.3 Sources of Funds

To ensure that strategic goals and operational objectives are achieved during the implementation of the Strategy for Development of Maritime Economy, it is necessary to ensure appropriate funds for the activities envisaged in the Action Plan. Therefore this chapter provides an overview of available financing schemes and potentials. Action Plan defines the potential sources of funds individually for each activity.

Although every year in the budget planning process, Ministry of Transport and Maritime Affairs envisages certain funds for activities that indirectly contribute to improvement of the situation in the maritime economy sector, these funds are not sufficient for any significant participation of the public sector in this maritime economy. It is therefore necessary to ensure funds for implementation of significant, primarily infrastructural projects from outher sources.

D.3.1 Financial Support within Instrument for Pre-Accession Assistance - IPA

Instrument for Pre-Accession Assistance – IPA is designed with the aim of ensuring EU support to the potential candidate countries or candidate countries in their efforts to meet criteria for membership in the EU. This instrument is used to provide a comprehensive support to the process of European integration in the field of financial, technical and expert support to reforms that are implemented in the country. IPA instrument is implemented in several separate parts, i.e. components, out of which each is implemented through individual projects or other forms of implementation (depending on the component). For implementation of each individual project, in addition to the funds allocated in IPA, certain amount of funds should be allocated in form of co-financing. It ranges between 10% and 15%, but, depending on the project needs, it can be more than the stipulated amount.

IPA II framework for EU pre-accession assistance for the period 2014-2020 is currently in force. It is aimed at implementing reforms within the sectors defined in advance that include both growth and competitiveness. Sectoral approach provides targeted assistance and at the same time also a more systematic use of the sectorial budget support. Indicative Strategy Paper for Montenegro 2014-2020 is the key document defining priorities on the national level for IPA II assistance. Indicative Strategy Paper for Montenegro envisages guiding of pre-accession assistance to Montengro in the period 2014-2020 through eight sectors, including the sector of transport. The basis for using IPA II funds is the Framework Agreement concluded between the Commission and the state beneficiary of IPA II. It defines principles of financial cooperation between beneficiaries and the Commission within this piece of legislation. Financial support is operationally based on signing a Finanial Agreement between the Commission and the state beneficiary of IPA II on an annual or multi-annual level.

On 14 June 2018 European Commission published its proposal of legislation establishing IPA III framework for EU pre-accession assistance for the period 2021-2027. In comparison to IPA II, IPA III is expected to have a budget larger by 13% (about 14.5 billion euro), but also to ensure a smooth continuity in the implementation of the existing IPA II framework, aligning its priorities with "A Credible Enlargement Perspective for and Enhanced EU Engagement with the Western Balkans" from February 2018. The core of IPA III framework will be the programming based on priorities and performance. That will ensure better evaluation of implementation of activities within this instrument but also higher flexibility in the context of assistance to the continuously evolving needs.

D.3.2 Western Balkans Enterprise Development and Innovation Facility (WB EDIF)

WB EDIF is the initiative funded by EU that aims at increasing availability of funds for small and medium-size enterprises with registered offices in the Western Balkans, and to provide support to development of private sector to encourage socio-economic development and ensure accession to EU for the entire region. Within this mechanism EU raised 145 milliom euro that international financial institutions, beneficiaries and bilateral donors will efficiently turn into more than 300 million euro of direct financing for small and medium-size enterprises in the region.

European Investment Fund coordinates and implements this support instrument in close cooperation with the governments of the Western Balkans, European Commission, European Investment Bank (EIB) and Eruopean Bank for Reconstruction and Development (EBRD). International Financial Institutions, international organizations and bilateral donors active in the region, like World Bank, DEG, OECD and others, cooperate and participate in the implementation with a view to developing private sector in the Western Balkans.

D.3.3 Western Balkans Investment Framework (WBIF)

WBIF supports socio-economic development and accession of Western Balkans to European Union through financing and technical assistance for strategic investment. This is a joint initiative of the EU, financial institutions, bilateral donors and Western Balkans governments. WBIF ensures funds and provides technical assistance for strategic investment in the sectors like energy, environment, social issues, transport and digital infrastructure. WBIF also provides support to the initiatives for development of private sector. In public procedures grants are allocated for the activities of preparation of infrastructural projects and also for further investment.

Calls for project proposals are published by the WBIF Steering Committee. Two calls are published annually for technical assistance and only one call for investment support. Guidelines are published for every call for proposals and they contain eligibility criteria and deadlines for application. Applications are assessed by the WBIF commission for financing projects. They send selected projects to the Steering Committee for approval. Approved grants are then implemented by teams for infrastructural projects and/or international financial organizations.

In relation to WB EDIF and WBIF, it is worth noting that entire framework is being improved. This is being done in parallel with the activities related to establishment of IPA III for the period 2021-2027. New approach of the European Commission implies integration of EDIF into the existing management structure of WBIF. There is also a plan to integrate other related instruments like Regional Energy Efficiency Programme (REEP), Green Growth Fund (GGF) and European Fund for South-Eastern Europe (EFSEE) under the umbrella of WIF.

D.3.4 Public-Private Partnerships

New legislative framework effected through the new Law on Public-Private Partnerships (Official Gazette of Monenegro 073/19) created preconditions for a higher quality systemic approach to the procedure of implementation of infrastructural projects by involving private sector. Adoption of this law also requires adoption of the Law on Ports that will incorporate the new legislative solutions and create an adequate investment environment for improvement of port infrastructure and port services.

Public-private partnerhsip, as defined in this Law, is a long term contractual relation between public and private partners based on sharing of rights, duties and risks in the implementation of works of public interest in public infrastructure and buildings and/or provision of services of public interest.

Article 13 paragraph 1 item 4 of the Law on Public-Private Partnerhip stipulates that the objects of public-private partnership according to this Law can include structures of water transportation and ports, in line with the law. Paragraph 2 of the same Article stipulates that public-private partnerships for construction and management of roads, railways, airports and ports are of strategic interest for Montenegro.

New legislative framework will open new possibilities for financing significant infrastrucrtural projects. Therefore in the period covered by the Strategy for Development of Maritime Economy the model of financing projects through public-private parnterships should be one of the dominant financing models.

D.4 Public Consultations - Opinions of Interested Parties

In the procedure of drafting the Strategy for Development of Maritime Economy, Ministry of Transport and Maritime Affairs informed all interested parties that the drafting process was in progress and invited them to send their suggestions and proposals already in the early stages so that they can be considered and potentially included in the strategic document. Ministry sent a similar invitation to the Chamber of Commerce and Council for Competitiveness as well as to economic operators, business associations, professional associations etc. to inform timely the interested public that the process of drafting the strategic document is in progress.

In addition to implementation of public debates and organizing Round table related to development of the Strategy for Development of Maritime Economy 2020-2030, public consultations will certainly continue through the entire period of implementation of this strategic document. All activity holders, representatives of the industry, professional associations and NGO sector will be included in the consultative process that will precede preparation of annual and final reports on implementation of the Strategy. This will ensure that all stakeholders define conslusions and propose measures together, which should lead to better effects in the implementation of the Strategy.