

# The Italian maritime cluster:

the role of the sea in the national economy and its protection.

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EU Maritime Economy and Blue Growth

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March 20, 2020 Erasmus+ program

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Tot pages minus bibliography/sitography and Index/cape = 25

#### 1. INTRODUCTION - GENERAL CONSIDERATIONS:

"Italy, despite its 8,000 km of coastline, finds it difficult to find its maritime identity and understand how much its economy and its daily life depend on the sea."

Since the second post-war period, the sea has assumed great importance in economic, social and political terms. Before, it was considered as a mean of communication and the resources at its disposal were partially known and were exploited inefficiently. Then, it began to be understood as a space to be enhanced and protected at the same time. Awareness of the economic importance of the sea has increased and the way of assessing the role of maritime spaces has changed.

In the first part of this paper I will try to describe the great change in which the sea has been the protagonist since the 1950's. In particular, the fact that the sea has undergone a territorialization process will be highlighted in this work. New plants for offshore mariculture were born and larger and more equipped areas for aquaculture were implemented; fishing started to take on industrial dimensions thanks to the development of shipbuilding, scientific explorations and new fish conservation techniques. The search for hydrocarbons and the birth of new offshore structures for mineralogical research have led the sea to be considered an important resource to be exploited as a source of wealth.

Marine resources are important in the European Union and can contribute significantly to the economic prosperity and social well-being of its Member States. In 2008, a framework directive was adopted, the Marine Strategy Framework Directive or MSFD, the environmental pillar of the European integrated maritime policy, which has the general objective of achieving a good environmental status in European marine areas. The great importance of the sea, however, led to new forms of claiming sovereignty, followed by the need to create a regulation governing the exploitation of the biological and mineralogical resources of the sea. The UNCLOS, United Nations Convention on the Law of the Sea, was created with the aim of safeguarding the sea and establishing the principles within which each state can use the resources it has available in its territory. The Convention identifies two marine environments of international regime and some sections of national jurisdiction.

The second part of this work will focus on Italy; in particular on the economic value of the sea and on the main characteristics of the Italian maritime cluster. After an excursus on the evolution of the Italian maritime system in the second half of the 21st century, the current value of the sea for the Italian nation-system will be analyzed. The difficulties and weaknesses of the Italian maritime cluster will also be highlighted, but also its strength and its important impact on employment.

Il mare (The Sea) - Monographic course of economic geography, Venice University Library, 1966 pp. 22-23

#### 1.1 TOWARDS AN ITALIAN MARITIME CLUSTER:

Starting from the second post-war period, as we saw, the sea began to take on a very important economic, social and political role. It is no longer considered only as a way of communication and a medium for earth-earth relations; but it is intended as a living space, to be protected and used at the same time, exploiting all the possibilities it has to offer. The sea promotes economic activity as a source of natural resources, a field and object of scientific research, a field for recreational, sporting or military applications. It has embarked on a process of territorialization, assuming an autonomous form that produces profound changes in the way of managing and thinking about the activities of the continental territory.

In industrialized countries and large consumers of raw materials, the greatest influence on the economic structure of coastal regions comes from the sea. A key to understanding this process of change is an increasingly widespread human presence in the sea.2 . In particular, the human presence is evidenced by the construction of offshore platforms and for the search for minerals, the creation of offshore structures for mariculture and larger areas for aquaculture.

The sea offers a great deal of biological resources, used since ancient times by coastal populations for food purposes. In fact, fishing has always represented an important food resource and a source of economic advantages despite the inadequate initial exploitation of biological resources. Thanks to the increase in knowledge and the development of fishing techniques, it began to become more aware of the great contribution that these resources could have on the economic and nutritional well-being of the population.

Fishing began to take on an industrial dimension, in particular thanks to three factors: the progress in shipbuilding and the development of navigation techniques are also reflected in the fishing boats that begin to take the form of modern ships from fishing; scientific explorations allow us to identify which are the most fishy areas and the best seasons for fishing; the development of fish conservation techniques allows the expansion of the markets. It is only after the Second World War that these progresses reach their peak and in particular, they make themselves felt in our century. As for the progress on shipbuilding, the rowing boat is replaced by two other types: the steel ship and the modernization of the craft boat.

In the next figure we can see how much world fishing production increases in the period between the eve of the First World War and the early 1960's.

<sup>2</sup> For further details, see: Evolutionary aspects of the maritime and port economy, Ugo Marchese, Bozzi Editore Genova, 1986, pp. 389 and following

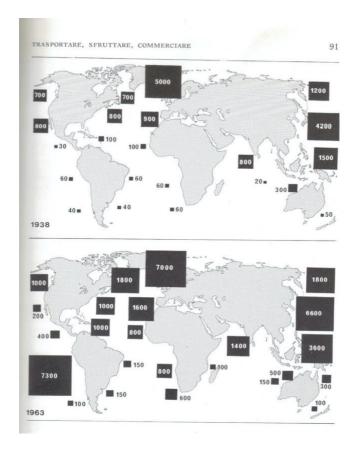


Figure 1: World production (in thousands of ton) of fishing in 1938 and 1963

Source: Ecumene Oceano, A. Vallega, Mursia, 1985, p. 91

In the twenty years spanning from the First World War to the early Sixties, new fishing areas have emerged. For example, participation in the Third World fishery product increased from 6% to 25% 3; most of the fishing that comes from emerging countries is exported to the western world to countries such as the United States and western Europe.

As regards the distribution of fishing by oceanic areas, the Pacific holds the record with more than half of the world product; it follows the Atlantic with 40%

Mediterranean remainder divided between the and the Indian Ocean. However, the exploitation of biological resources requires an international discipline that establishes within which it the principles can take The United Nations Convention on the Law of the Sea of 1982 introduced some principles which established that all States had the right to exploit biological resources in proportion to their food needs, within certain limits. This legislation proved to be not effective enough so the FAO in 1995 adopted a code to regulate and allow adequate exploitation of biological resources. FAO's Code of Conduct for Responsible Fisheries has the main purpose of promoting and facilitating fishing activity and improving fish conservation models; all this while preserving the ecosystem, using environmentally safe fishing tools and practices and ensuring the protection of the quality of the fish. The Code also establishes certain duties for the governments of States.

Within the European Union, aquaculture includes three main types of farming: fish in the sea, mollusks and crustaceans in the sea and fish in fresh water. In recent years, offshore mariculture facilities and adjacent to coastal areas have increased significantly. In the European Union in the period between 1990 and the early 2000's, aquaculture production

<sup>&</sup>lt;sup>3</sup> Ecumene Oceano, A. Vallega, Mursia, 1985, p. 178 6 Ecumene Oceano, A. Vallega, Mursia, 1985, p. 178 7 Ecumene Oceano, A. Vallega, Mursia, 1985, p. 179

increased by 38%, compared to a decrease in fish production due to a minor presence of fish in the Mediterranean and to stringent EU policies.

In Italy, in 2019, aquaculture constituted 31% of national production, thanks above all to the development of mariculture, there was an increase in the production of marine species. Offshore plants are a valid alternative to traditional breeding structures, such as tanks on land. They guarantee an economic benefit as they provide for lower production and investment costs and, compared to farms on land, they guarantee better water quality thanks to the use of the sea.4

The FAO report "The state of fishing and aquaculture in the world" (Sofia 2010)<sup>5</sup> revealed that these activities provide employment for 540 million people, or 8% of the world's population. This figure is significant given that there has never been such a high consumption value of fish products and there has never been such a high participation of people in these sectors.

#### 1.2 MINERAL RESOURCES:

The presence of minerals in the seabed and in the seabed has been for many years an element unknown to humanity; only thanks to the advancement of knowledge about the sea and geological studies have the great potentials that the seabed has from been highlighted.

Only from the early seventies do we have the necessary elements to describe the geography and characteristics of maritime and oceanic mineral resources. It is possible to distinguish three ways in which it is possible to explore and exploit mineral resources.

There are pure minerals, such as hydrocarbons, potassium and sulphides, which can be extracted through the well drilling; or there are minerals of coal, iron and other elements that are found in deposits of the oceanic background and that can be reached by digging mines rooted on the mainland. For the last method a mine vehicle is placed on the bottom thanks to two helical supports; the nodules are collected with the use of a continuous belt rake, subsequently they are crushed and pumped in the form of a liquid mixture into a connecting element which is connected to the surface vessel through a bundle of pipes.6

Deep sea mining is the way to search and exploit mineral resources that requires a more advanced organizational system. It requires a detailed system of oceanographic information and reliable and sophisticated control instruments and equipment.

<sup>4</sup> III Report on the Economy of the Sea, Federation of the Sea, Franco Angeli, 2006, p. 164

<sup>&</sup>lt;sup>5</sup> Source: FAO "The state of fishing and aquaculture in the world" (Sofia 2010)

<sup>&</sup>lt;sup>6</sup> In this regard, see: Economic and social geography of the sea, Francesco Carfi, Tyrrhenian publishing company Livorno, 1959, pp. 75 and following

This means that this activity requires huge investments and high costs of study and research.<sup>7</sup> It was not until the early 1990's that the world's major maritime powers, first of all Japan and the United States, inaugurated deep-sea mining After ascertaining the presence of hydrocarbons and verifying their extension, we move on to development and production. The first phase involves the design and construction of oil platforms for the transfer of oil products. Often these platforms are installed on the high seas and then their products are transported to the mainland thanks to oil pipelines. Offshore terminals indicate how the sea is used by man and how it is taking on a fundamental role for humanity.

#### 1.3 MARINE SPATIAL PLANNING:

Marine spatial planning is a public process of allocating resources and defining the human activities that take place in marine areas. It aims to establish a more rational use of the marine space, creating an interaction between the uses, guaranteeing the protection of the environment and the achievement of social and economic objectives. This process is similar to that which occurs for the planning of land uses, only in this case we are talking about marine waters.

This is to demonstrate what was said in the previous paragraphs, or how the sea is increasingly assimilating the characteristics of a territory. The planning process of the marine space usually translates into a global management plan; in fact it is not just a matter of planning a particular marine area but this process includes the implementation, monitoring, evaluation, research, public participation and financing and therefore a global management of the marine area.8 The main objective of the MSP is to increase the sustainability of resources; furthermore, it should aim to balance economic, social and ecological objectives. Some of these are listed below9:

- Identify the uses compatible with the development area
- Reduce conflicts between incompatible uses and between uses and the ecosystem
- Promotion of efficient use of resources and space
- · Identify areas of biological and ecological importance
- Incorporate biodiversity objectives with management and planning of marine spaces
- Allocate space for biodiversity and nature conservation
- Reduce the cumulative impacts of human uses and activities on the ecosystem
- Improve community participation opportunities
- Identify and improve the protection of cultural heritage
- · Identify and preserve the spiritual and social values related to the use of the ocean

<sup>7</sup> Ecumene Oceano, A. Vallega, Mursia, 1985, p. 166

<sup>8</sup> On this regard, see: For a geography of the sea, maritime transport and economic revolutions, A. Vallega, Mursia, 1980, pp. 146 and following

<sup>9</sup> www.greenpeace.com

There are many countries in the world that use this process to avoid over-exploitation of their marine territories and to ensure proper use of marine resources and services. Especially the countries that use this tool want to increase the value of their biodiversity at sea.

Marine resources are important in the European Union and can make a significant contribution to the economic prosperity and social well-being of its Member States. For this reason, the European marine environment needs to be protected and protected in order to keep it healthy and productive for future generations.

Maritime spatial planning is considered one of the most important tools in support of the integrated European maritime policy; PSM, as we have seen previously, is a process through which human activities are distributed in marine areas and has the objective of achieving balanced economic, environmental and social objectives.

The integrated European maritime policy has been developing strongly over the years and finds its environmental pillar in Directive 2008/56/ EC, known as the "Marine Strategy Framework Directive" 10; it was adopted on 17 June 2008 and its aim is mainly to achieve a good environmental status (GES11) of the entire European marine environment by this year, 2020. Furthermore, the directive outlines an ecosystem approach in the management of activities that will also support the



sustainable use of marine goods and services and contribute to the integration of environmental problems in various policies.

The MSFD represents a vital environmental component for the European Union's integrated environmental policy, adopted to be able to exploit the maximum potential of the oceans and seas, but always paying attention to their protection.

Figure 3: Marine strategy of the EU Member States Source: www.ec.europa.eu

The directive establishes four European marine regions<sub>12</sub>, based on geographical and environmental criteria; each Member State, cooperating with other Member States and not, with which they share marine areas, are required to develop strategies for their marine areas.

<sup>10</sup> www.ec.europa.eu

<sup>11</sup> GES Good Environmental Status European Commission. Maritime spatial planning in the EU - results and future evolution

<sup>12</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. (COM (2010) 771). Directorate-General for Maritime Affairs and Fisheries

From the next figure it is possible to better understand what has been said so far and what the strategy aimed at achieving the environmental status of European marine area provides.

#### 1.4 UNCLOS: THE NEW LEGAL REGULATION OF THE SEA:

In the late 1960's, the mineral resources of the sea began to assume great importance, in particular for two reasons. One of these is the fact that the exploitation of submarine hydrocarbon deposits had reached an advanced technological level such as to be able to start a new phase in production, namely offshore research and production. Furthermore, the presence on the seabed of an enormous patrimony rich in deposits deposits metals discovered. and ofpure was These circumstances caused two reactions. The first by the coastal and island states that claimed their rights to exploit the seas in front of their territories, often even at a great distance from the coast. The second by the United Nations which realized the need to bring order into national policies and to safeguard the sea by activating an international code of conduct that promoted inter-state cooperation on environmental protection. In 1973 the III United Nations Conference on International Law of the Sea opened with the aim of reformulating international law of the sea. It ended on December 10, 1982, giving birth to the United Nations Convention on the Law of the Sea, which entered into force only in 1994. The ratification by Italy took place on 13 January 1995.

The Convention identifies some areas of national jurisdiction; proceeding from land to sea, they are the territorial sea, the contiguous zone, the continental shelf and the exclusive economic zone. To these must be added the exclusive fishing area and the archipelagic waters.

In addition to the national jurisdictional bands, the Convention identifies two environments of international regime: the high seas and the international seabed. As regards the areas of international regime, all States have free access and equal rights and obligations; in the areas of national jurisdiction instead, the individual states exercise their prerogatives; in particular there are two types of government: that of uses and that of the ecosystem. Both can take partial or global form. A third typology was introduced at the United Nations Conference on the environment and development in 1992 which provides for the contextual governance of uses and the environment. 13

Third countries enjoy some territorial rights over the sea of a state. In particular, they have the right to harmless passage, i.e. ships can cross the territorial sea only in the presence of certain conditions, and they have the possibility to carry out scientific research only with the authorization of the State. The legal characteristics of the territorial sea do not differ much from those of the internal waters; the coastal or island state can exploit the entire space of both bands and can exercise global governance both from the point of view of uses and from that of the ecosystem.14

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<sup>13</sup> www.un.org, United Nations Convention on the Law of the Sea, section 2 article 3 Government of the sea and sustainable development

<sup>14</sup> A. Vallega, 1986, Mursia, p 95

The contiguous area is a strip of sea that cannot extend beyond 24 nautical miles from the baselines with which the territorial sea is measured. The convention, in particular, establishes that, in the contiguous area, the coastal or island state has the right to prevent violations of its own laws, be they customs, tax or immigration or health matters. In addition, the state can punish violations of its rules on its territorial sea or on its territory.15

Third States have fishing rights and may carry out other types of intervention on the adjacent area; for this reason the coastal or island state can exercise a partial government of the uses on its own contiguous area, succeeding in any case to maintain a protection on the patrimony that lies on the seabed. The 1982 Convention established the introduction of the exclusive economic zone into national law. It is a maritime range of 200 nautical miles from the base lines, which can be established through the proclamation of the state with a unilateral act, or through bilateral acts as in the case of the continental shelf with the same peculiarities. 16

As can be understood from what has been said about the exclusive economic zone, the State exercises prerogatives for the exploitation of all resources, from the extraction of minerals to fishing and therefore exercises a form of global governance of uses and the ecosystem. The figure of the exclusive fishing zone does not appear in the 1982 Convention.

The exclusive economic zone provides for the coastal or island state to exercise the full right of fishing, but some situations have occurred which lead to the introduction of the exclusive fishing zone.

Examples are when a state proclaims a range of jurisdiction for fishing, without having proclaimed an exclusive economic zone; or when a state proclaims both zones. In the first case we speak of partial governance of the ecosystem and uses. As far as archipelagic waters are concerned, the Convention makes a distinction between the archipelago state and the archipelago itself. In particular, it establishes that the first is a state that includes one or more archipelagos and in addition other possible islands; the second, on the other hand, is a group of islands closely connected to each other, such as to form a single geographical, political and economic area. The archipelagic waters represent the marine space inside the perimeter that can be traced between the outermost points of the islands that are part of the archipelago state. In this space the latter exercises full rights, as if it were inland waters.18

About 20% of the ocean surface is covered by the areas of national jurisdiction described above. The remaining 80% are subject to the international regime. Since the 1980's, with the introduction of the continental shelf and the exclusive economic zone within

<sup>15</sup> www.un.org, United Nations Convention on the Law of the Sea, section 4 article 33.2 Government of the sea

<sup>16</sup> A. Vallega, 1986, Mursia, p 97

<sup>17</sup> www.un.org, United Nations Convention on the Law of the Sea, section 4 article 33.2 Government of the sea

<sup>18</sup> Government of the sea and sustainable development, A. Vallega, Mursia, p. 101s

the national jurisdictional bands, it is possible to say that the high seas have shrunk; the latter in fact extends beyond the bands described above, therefore at 200 nautical miles from the baselines. 19 The high seas are regulated by UNCLOS in articles 116-120; the Convention does not include any preferential rights affecting coastal States. However, the inadequacy in the regulation of fishing in the high seas and the pressure from some countries led the United Nations to convene a Conference in which an Agreement was made to give greater management powers to coastal States outside their economic zones exclusive.

The Second figure introduced by the Convention is that of international marine funds and substrates. The Convention, in the first article, states that this Area is defined the sea bottom and the marine subsoil extended beyond the national jurisdiction. Natural resources, such as energy sources or mineral deposits, found in these areas are considered to be a common heritage of humanity; for this reason, their exploitation and management cannot take place unilaterally by the state, but through a figure established by the Convention called the International Authority of seabed. It is composed of an assembly, a board and an operating body, called the Company, to which the Authority entrusts the production cycle of the resources found in the Area, which goes from the extraction, transportation and marketing of the themselves.

As for Italy, the Italian government has established the baselines by issuing DPR 816 of 1977. The lines are straight and enclose the internal waters within them as well as the space enclosed between the most distant islands of the Tuscan and Campania archipelagos.

A particular case that has caused many conflicts and protests from the United States and England

TIRRENO

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is that of the Gulf of Taranto. It is considered a historical bay and falls within the Italian inland waters.

In the figure below you can see the baselines of Italy established by DPR 816 of 1977.

Figure 5: Italian baselines established with DPR 816/1977 Source: Government of the sea and sustainable development, A Vallega, Mursia, p. 103

The United Nations International Conference on the Law of the Sea was launched in 1974 and continued, amid many problems and tensions, until 1982 with the Convention on

19 Government of the sea and sustainable development, A. Vallega, 1986, Mursia, p 99

the Law of the Sea. The latter was not adopted immediately by consensus, due to the impossibility of reconciling the claims of all States; in fact, it was approved using the majority criterion. States were required to sign and ratify the Convention. During these years, a competition between states arose regarding the exploitation of the resources of the bottom of the ocean. On the one hand there were the industrialized states that demanded an exclusive use of the seabed, on the other the developing countries that pursued an equitable distribution of resources.

The Convention has tried to resolve these controversies the fruits would then have been equally distributed between developing countries and technologically more advanced countries. However, this has found conflicting opinions from developed countries, first of all the United States. The United States has not yet ratified the Convention; the main reasons according to them are the fact that such regulation could cause the Company's monopoly, difficult mining research and a transfer of technologies to less industrialized countries that the United States would not accept. Another reason for conflict concerns the delimitation of the areas of national jurisdiction and in particular the legal competences of States.

# **1.5 THE BARCELONA CONVENTION - MAP (the Mediterranean Action Plan):**

The extraction of hydrocarbons at sea can pose serious dangers to environmental sustainability and economic development. Offshore platforms, in particular during the exploration and extraction of hydrocarbons, lose sludge and fluids at sea which cause serious damage to marine flora and fauna. Industrial discharges are often poured directly into the sea and the wastewater from cities is discharged without treatment. This causes the risk of extinction of many animal species.

For over twenty years the sea has been suffering from pollution degradation. As regards the Mediterranean Sea, the governments of coastal countries have joined efforts to stop the phenomenon of sea degradation.

In 1975, three years after the Stockholm Ministerial Conference which established the United Nations Environment Program (UNEP), 16 coastal nations and representatives of the European Community met in Barcelona and adopted the MAP (Mediterranean Action Plan). MAP was the first plan established by UNEP and was intended to assist contracting states on the assessment and control of marine pollution; furthermore, its main objectives were to assist States in the formulation of their environmental policies, improve the skills of governments to identify the best development alternatives and optimize their choices on the allocation of resources.

MAP's interest initially focused only on the control of marine pollution, but it was later understood that socio-economic trends, combined with inadequate development management, were the basis of most environmental problems. Consequently, the MAP began to extend its attention also to the planning of coastal areas to be used as a useful tool for solving many problems. Currently the MAP includes 22 countries facing the Mediterranean Sea; they intend to address the

problem of degradation of the sea, coastal areas and inland, protecting the Mediterranean Sea region and improving its quality of life. MAP proposes some challenges to face in the next decades. The main objectives of the Convention are attributable to those listed below:

- Protect marine and coastal habitats and endangered species
- Making maritime activities safer and making them respectful of the environment
- Allow a significant reduction in pollution caused by sources located on land
- Intensify planning in coastal areas
- Monitor the spread of invasive species
- Promote sustainable development in the Mediterranean region
- Limiting and intervening on oil and gas pollution

Economic forecasts are positive as the Mediterranean is on track to become a great economic power and an important potential for the influx of investments in the next decade.

The important aspect to consider is that the economic success of this Plan will only occur if the inhabitants of the Mediterranean region and its visitors have respect for the environment and will not harm it. For this reason, an important objective of the MAP is to motivate and encourage people to respect the marine environment of the Mediterranean and its surroundings.20

This Convention also contains some specific addictive protocols which, if implemented, would led to the complete conservation and protection of the Mediterranean Sea.21

The original Convention was modified on June 10, 1995 by adopting some amendments and this version was called the Convention for the protection of the marine environment and of the coastal regions of the Mediterranean.

<sup>&</sup>lt;sup>20</sup> www.unepmap.org, Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention)

<sup>21</sup> www.unepmap.org "Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean" to elaborate.

#### 2. DEVELOPMENT AND FUNCTIONS OF THE SEA IN ITALY:

### THE EVOLUTION OF THE ITALIAN MARITIME SYSTEM IN THE SECOND HALF OF THE TWENTIETH CENTURY

"Geography clearly states that our role is one as a seafaring power."

During the 21st century, the development of activities related to the sea experienced some difficulties that caused a slowdown in the evolution of the Italian maritime system. One of these is the peculiarity of the national cultural and social fabric; the Italians seem in part to have a mixed attitude towards the sea. This complex relationship is mostly due to the fact that in Italy the maritime tradition and culture is present but is not enhanced.

Although this distrust is present in the relationship between the Italians and the sea, the latter has been important in our history, the Romans managed to strengthen their Empire when they discovered the value of the sea and began to exploit it (thalassocracy). The sea can be considered by the uninitiated in the sector as a poor and poorly profitable working environment. For example, fishing activities are considered activities that give little satisfaction, full of pitfalls and not very profitable.

Although the numbers in the sector indicate that it is very profitable, as in the case of agriculture (or even most), in the last quarter of the 21st century there has been a progressive decline in the number of employees and in particular a decrease in the percentage of young people active in the sector. The new generations do not consider fishing as a possible professional outlet and the cause seems to be the severity of the work and the continuous mainly bureaucratic difficulties that must be faced. New legislation in this area, often excessive restrictions concerning quotas or limitations of the fishing zone, must be respected.

Another cause of the slowdown in the development of the Italian maritime system is the historical evolution of the nation itself and the related strategic decisions. During the period of the Maritime Republics, the sea experienced its golden era in my country as entire civilizations invested a lot in the maritime transport sector and navigation.

If this represented the apex point for the Italian maritime tradition, on the other hand it also expressed the beginning of its decline. This is essentially due to three reasons: the delay of technological innovations, the inability of entrepreneurs to follow the evolution of the market and the dynamism of maritime traffic and the inadequacy on the part of institutions with respect to social, cultural and political changes.

After the period of the Maritime Republics, in fact, there have been other attempts, but none capable of strongly developing the maritime sector.

One of these occurred at the end of the Second World War with the aim of rebuilding the Italian state experienced by the war consequences and creating the necessary conditions for economic

development. The evolution of the sea economy was also influenced by the behavior of some actors active in the sector, in particular the public administration. The state, however, being both a producer and consumer of maritime services and being quite inefficient, has sometimes slowed down development, this caused market stagnation and a slowdown in industrial production in the maritime sector. The slowdown in the evolution of the maritime system peaked between 1970 and 1980, years in which various sectoral dynamics included in the sea economy were experiencing a period of crisis. For example, we are referring to a loss of competitiveness and excess of workers with regard to ports and in the shipbuilding sector; fishing as mentioned above is an activity that does not attract the new generations, causing a decrease in business and production; few infrastructures and operating costs too high for pleasure boating; decline also in the armament sector, an area on which our country could also focus within the NATO dynamics, given the favorable geographical position that would benefit an investment in the Navy.

Over the past century, our country has experienced a progressive delay in terms of modernizations compared to other European powers and one of the major causes seems to be the scarce presence of the sea in the political debate as a tool of power projection, the ability of a nation to be present beyond its borders, that exercises above all across the sea. The example of the USA and the importance of the Navy and aircraft carriers are emblematic.

At the end of the 1980's, however, a new cycle opened which allowed the maritime sector to progress, thanks to innovations and changes affecting activities and sectors within the economy of the sea.

## 2.1. THE IMPORTANCE AND VALUE OF THE SEA AND ITS CRITICAL POINTS

The maritime system plays an important role in the national economy; despite the crisis of recent years, it has managed to maintain its strength and competitiveness.

The maritime cluster is made up of a number of sectors, including maritime transport, activities and services to assist transport and port logistics, shipbuilding, pleasure boating and fishing.

The Italian maritime cluster plays an important role in the Italian economy, so much so that it contributes to more than 2% of the national GDP (3.5%, if considering only private activities); the activities related to the sea as well as contributing positively on the Italian employment level allow the exploitation of the resources and possibilities that the sea has to offer.

The economy of the sea plays a fundamental role in our country and can be an important key for the future; in addition to producing an important turnover, this sector has strong growth margins and can also collect large investments, also oriented towards foreign countries.

It must be said, however, that Italy, compared to other European and non-European countries, still does not manage to make the best use of its potential.

The maritime cluster deserves more attention, primarily from a political point of view; an example concerns the reform on the governance of ports which has not been taken into consideration for years and the need to update it has been discussed for years.

Furthermore, human resources in this sector should be more valued; university education poles in the maritime field are few and should be relaunched.22

Italy has a coast of about 8300 km which can act as a crucial point for the future development of the nation. In a country like Italy, lacking in raw materials but with a strong industry and important tourism activity, the maritime system has a strong and direct impact on the economy. This is well shown by the social and economic importance of coastal cities and islands, that positively influenced the Country and whose development would have been impossible without the presence of intense maritime activity. Even though the Country has gone through a long period of crisis, the Italian maritime cluster is still one of the most dynamic sectors of the national economy and currently produces 33 billion euros per year, providing work, directly or indirectly, for around half a million employees.

In twenty years, the size of the production and employment of maritime activities has changed: from a production of 21 billion euro it has gone to almost 33 billion; employment has grown from 120,000 direct and 190,000 indirect employees in 170,000 and 300,000 respectively. It has been a growth of 55%, although slowed by the long economic and financial crisis of 2008, which obviously heavily hit activities deeply integrated in the world trade.

Italy has primarily a transformation economy, where raw materials arrive from abroad and form other members of the EU to be processed in semi-finished and finished products and then sold on other markets in Europe and worldwide. And it also has an economy where domestic and international tourism plays and will play an increasingly key role in development.

Shipping is the fulcrum around which the maritime economy keeps turning. Considering the range of activities dedicated to it - not just maritime transport, but also shipbuilding and port activities (with all the functions related to it, administration, agency and maritime brokerage, logistics, handling and storage, certification and insurance, technical-nautical services, etc.) - the annual production is now more than 22 billion Euro, with direct employment of 84,000 employees and other 170,000 in connected industries. Then add leisure boating, with 4.5 billion Euro contribution to GDP and a total employment of 97,000 people, fishery (4.8 billion Euro and 56,000 employees), the Institutional maritime activities (4.5 billion Euro and 64,000 employees).

Today the Italian flag fleet is among the largest ones in the world (3/4° of the major countries, gathered in the G20) and exceeds 16 million gross tons, with leading positions in the most sophisticated sectors (ro-ro vessels, cruise ships, tankers for chemical products). It holds the European leadership in

THE ITALIAN MARITIME CLUSTER

<sup>22</sup> Some of these are located in Taranto, where a Degree Course in Management of the Resources of the Sea and the Coast has been established for some years or in Rome where the Sciences of the sea are studied.

the cruise traffic (with 6.2 million passengers and 4,600 port calls), and is the first in the world in the construction of passenger ships and luxury motor-yachts.

Instead, the data confirm the shift of the Italian port system from the 1st to 3rd place in imports and exports of goods by sea in Europe, with 215 million tons. The impact of maritime activities on the Italian economy goes beyond the aspects most closely related to transport services and directly involves even manufacturing and tertiary economy.

The industrial maritime cluster annually spends nearly 20 billion Euro in purchases of goods and services. Accordingly, Italy has a high multiplier both for income (equal to 2.63) and for employment (equal to 2.77): 1000 Euro of increase in income in the maritime cluster activates about 2630 Euro of National income and 1000 new jobs in the maritime sector units activate 2770 units nationwide.

Maritime transport is the sector which, compared to labor productivity, ranks first in the cluster (339,000 Euro / employee). A significant measure of the competitive position currently taken by the national maritime cluster can be represented by the value added per unit of work that, for the maritime industry and tertiary activities, stand at 68.300 Euros per year. It is a value that places the maritime cluster in a more advanced position than building, commerce and many major sectors of the 'Made in Italy' production, including food. It also takes on a very interesting competitive position towards others important sectors; for example, it is located above the textile and IT sectors but below sectors that concern the extraction of minerals, financial intermediation and chemicals.

To better understand the characteristics of the maritime system, it is interesting to identify its strengths and weaknesses. The former are a skilled workforce, the will to operate abroad and a good degree of internationalization of the sectors within the system. Furthermore, a good quality of services and the plurality of services offered by the latter are undoubtedly competitive advantages. As for the weak points, they mainly derive from too restrictive and rigid safety and control regulations in the port and naval field. Furthermore, if compared with other European countries, Italy has a less effective export credit system.

## 2.2. THE EMPLOYMENT IMPACT OF THE MARITIME CLUSTER AND SECTORAL DYNAMICS:

The sectors with the highest employment are fishing and maritime transport; only the latter contribute to almost half of the direct work units. As for the activity that holds the record, in addition to sea fishing, fish farming and fresh water breeding activities are considered; with regard to maritime transport, workers employed on board (around 35,300) and on land (around 7,100) are considered.

However, there are substantial differences if we speak in terms of productivity, therefore of added value for direct employees. Port authorities rank first, as a direct work unit in a port authority produces € 172400 of added value, followed by the shipbuilding and maritime transport sectors, in which a work

unit generates 97500 respectively euro and 96100 euro of added value. The activities that occupy the last places are pleasure boating, harbor master's offices and fishing.

#### 2.3. MARITIME TRANSPORT:

The maritime cluster as we saw. is constituted internally by a series of sectors which we will now describe. The first sector of the maritime cluster concerns activities related to maritime transport and is divided into freight and passenger transport. The good performances of this sector depend on many elements which together must work well; for example regulatory, political, market or aspects relating to the functioning of the infrastructures. Maritime role in the maritime transport plays important system. an The global recession of 2008 and 2009 caused a decrease in 2009 in terms of production and added value compared to 2004 data, but in the same way also a decrease in costs. In fact, we note that in 2004 there was a production of 18,079 million euros while in 2009 of 11,040 million euros; the added value drops from 7,636 million euros in 2004 to just over 4 million euros in 2009. In 2009, maritime transport contributed about 10 million euros to the GDP of the maritime cluster, while in 2004 the contribution to GDP was higher, or equal to 15,684 million euros. However, some analytical institutes have foreseen a recovery of the Italian armament since 2010 due to an increase in the worldwide demand for raw materials and energy products which would intensify the efficiency. Also, with regard to loans, there are decreases from 2009 compared to 2004; exports fall by around 6 million euros, end uses by around 5.5 million euros and the weight of exports on total loans, or the export coefficient, also decreases from 0.63 to 0.436.

### 2.4. ACTIVITIES AND SERVICES TO ASSIST TRANSPORT AND PORT LOGISTICS:

In the cluster we have a group which includes transport support and port logistics activities and services. It refers to the management of storage and custody, loading and unloading of goods, the activities of shippers and agencies that deal with customs operations; travel agencies and transport intermediaries also belong to this sector. This sector has the important function of being able to favor the development of the maritime transport system; intervening on the regulatory and bureaucratic structure it will be possible to facilitate the integration between the various transport possibilities and thus

allow

development.

Production in this sector grew from almost 4 million euros in 2004 to over 6,550.37 million euros in 2009; the value added over the course of five years has increased by around half a million euros. This sector also contributes to GDP with 6.7 million euros while in 2004 the contribution to GDP was around

4.5

million.

Between 2004 and 2009, intermediate and final consumption increased; exports grew more than double and total lending from just over  $\in$  5 million in 2004 to around  $\in$  7 million in 2009. As regards the employment impact, the sector of transport logistics and auxiliary activities records over 31,800 work units.

#### 2.5. SHIPBUILDING:

Shipbuilding is another sector of the maritime cluster which gives it a great deal of importance and strategic value from an international point of view. This sector includes the activities carried out in shipyards or the construction of metal products, the repair and maintenance of ships. In 2009 shipbuilding contributed 4.3 million euros to the GDP of the maritime cluster; the value of production in 2009 was 4.4 million euro, while in 2004 it was approximately 2.7 million. From an employment point of view, there was a slight decrease in direct work units; in 2004, a little over 12,000 units were registered, while in 2009 there were 11,800. Upstream, on the other hand, the workforce is close to 20,000, almost 5,000 more than in 2004; this means that total employment, both direct and indirect, has increased over the five years analyzed and that it turns out to be almost 30,000 in

As regards loans, there is a significant growth in terms of final uses due to an increase in gross fixed investments, changes in inventories and exports. The main suppliers of shipbuilding are the sectors of transport, metal and alloy construction, mechanical equipment and the professional sector. The main customers in this sector are the Public Administration and in a large part of the sector for means of transport.

#### **2.6. BOATING:**

The maritime cluster is made up of another sector: boating. It refers to the construction of sports boats and the production of engines or nautical accessories. The sector has experienced growth in terms of production and added value. The contribution to GDP 2009. it was € 2.5 million was 3.3 million in while five years earlier. The income statement of loans shows an increase in all its items. As regards the employment level, the direct units of work in 2009 amounted to 22,300, almost double compared to 2004. During these five years, the upstream work units have increased by about 4,000 while the downstream ones have decreased of about 1,800 units.

## 3. CONCLUSIONS - OVERVIEW OF CLUSTER'S PROPOSALS GOVERNANCE PROBLEMS:

"The hope of the Federation of the Sea is an adequate attention to the sector in politics."

The positive development of maritime and port activities now requires a renewed attention of the policy, which favors its continuation and recognizes its specialty: to this end, before indicating the proposals relating to the main sectors and the cross-cutting themes of the cluster, we note the absolute necessity to face the sector's governance problems in advance, also in light of recent experiences.

The maritime and port cluster seems to be in favor of the reunification of the Ministries of Transport and Infrastructure: but it would like or the Ministry of the Environment to be part of a new large dicastery. It also deems it useful to better clarify the competing competences between the State and the Regions and between these Institutions and the Port Authorities, whose role must be strengthened.

#### 3.1 ITALIAN MERCHANT FLEET:

Particularly striking was the evolution of the Italian merchant fleet, which, based on the legislative framework introduced in 1998 (International Register) promptly entered, with massive orders for new ships, in the upward trend of world maritime traffic, substantially doubling the fleet in the last decade.

The growth of the canal continues, recording an increase of 6% at the end of 2007 compared to the previous year. Italian shipowners' orders for new ships are also expected to reach more than 9 billion in 2021. To these investments must be added those made by the shipowners who carry out technical-nautical services in the ports, whose investments have been valued at around € 100 million in the past three years. With 14 million tonnes, the Italian fleet is in the group of the main merchant marinas, ranking 1st in Europe among large industrial countries and 13th in the world, with leadership positions in the ranking of some types of sophisticated ships, such as ro - ro, passenger, chemical ones.

To maintain this positive trend regulatory changes would be appropriate to:

- complete the internationalization process of the Italian shipping
- favor sustainable environmental choices,
- adopt a legislation that facilitates the introduction of innovative financial instruments
- simplification of national rules on navigation
- ensure support for maritime training activities
- give a sense of greater attention to the professions of navigation

### 3.2 SHIPBUILDING: Merchant & pleasure shipbuilding:

The Italian merchant shipbuilding industry has positioned itself for several years in the production segments of passenger ships (cruise ships and ferries), as they are characterized by high technological

content, marked construction quality and a strong degree of customization based on the customer needs. This competitive choice has allowed the Italian shipbuilding industry, on the one hand to free itself from mass and standardized production of the simplest ship (bulk carrier, tanker, general cargo, etc.), where the low production cost is rewarded, on the other enhance the technological and design skills typical of "made in Italy", also through a broad involvement of the related industries.

As a consequence of this field selection, the Italian shipbuilding industry has acquired leadership positions in the international field: in fact, the national shippards hold 44% of the world market, both in the cruise ship sector and in that of the larger ferries.

Consistent with this approach, the Italian shipbuilding industry has favored research and innovation as a competitive strategy to continuously improve the characteristics and performance of its products and raise barriers to entry for possible competitors, especially in the Far East.

In relation to all this, the Italian shipbuilding industry has successfully engaged, both at European and national and regional level, to activate tools to support research and innovation in its sector, in defense of a production that represents an asset fundamental of the national industry.

It is essential that this type of attention remains in the future, to offer the sector a continuity of support for innovation, which is an essential element for maintaining the leadership positions acquired.

The Italian boating industry has confirmed its position of international leadership for almost a decade: the national shipbuilding industry of large yachts is first in the world; the complex of Italian nautical production is first in Europe and second in the world after the United States.

Italian production is characterized by a strong export, exceeding 70% of turnover, achieved thanks to both a strong diversification on international markets and, above all, to substantial technological research and product innovation. However, it is strategic to promote and enhance the national market through a real country system of nautical tourism, which includes:

- the enhancement of the internal tourist port accommodation capacity, through the enhancement of existing structures,
- the simplification of bureaucracy and taxation, with the aim of promoting the registration under the Italian flag of more units produced in Italy;
  - homogeneous and integrated legislation for the rental and leasing;
  - · management of protected marine areas;
  - promotion of a national training system for companies and boating operators,
  - promotion of pleasure boating and nautical tourism.

#### 3.3 MARITIME FISHING:

A traditional segment of economic activities related to the sea is fishing and, more generally, production, processing and conservation of fishery and fish products.

The sector is characterized by a largely old-fashioned fleet, stationary productivity levels in the face of a significant increase in demand, which is however satisfied, at 65%, by imports.

The sector is suffering from excessive regulatory, with areas of overlap and duplication of interventions that constitute real improper burdens for businesses, as well as generating confusion and confusion among operators. There is therefore a need for legislative and administrative simplification, with the aim of improving the competitiveness of businesses, through a reduction of both costs and constraints.

A lot of operators deem indispensable to rebalance management policies by reassigning centrality also to economic and social aspects and not only to purely environmental and biological ones, this is a critic towards the management of the protection of the sea, that we saw in the first part. Furthermore, they think that is necessary to protect the legitimate interests of the category, compromised by unilateral institutions of fishing inhibition zones proclaimed by various Mediterranean coastal states. These critics show how fragile the balance between interests and environmental protection is.

#### 3.4 PORT FACILITIES:

Italy is the first of the European Union countries for the quantity of goods imported outside the EU by sea (with over 206 million tons of goods). The importance of the political direction and of the consequent legislative framework in which the companies operate finds a significant testimony in the take-off that Italian ports have had after the law n. 84 of 1994, which allowed a development of the port activities, Port Authorities operate in port areas assigned to them by concession, they manage the landing, the business in an entrepreneurial way boarding and redistribution of goods.

An update of this law is now necessary, to avoid extemporaneous legislative interventions that are not the result of a thorough parliamentary debate. The financial autonomy of the Port Authorities should be enhanced. This autonomy should make it possible to handle the necessary processes for upgrading the infrastructural facilities in ports. Among the infrastructures to be upgraded, dredging and other works that can adapt seabed and water spaces to the drafts and dimensions of new generation ships certainly appear to be a priority. The problem of the impossibility of dredging in the country, unique among those of the European Union, constitutes an emblematic and extreme case of the need to solve the sector's governance problems.

A simplification of the planning and construction procedures of the port works is required, as well as establishing certain times for the various phases of the improvement process of the procedures.

It is quite clear that the problems of ports do not end in the ports and indeed the major problems are on the border and outside the ports themselves. For this reason, the connections between the main maritime ports and the road and railway networks, as well as with the inter-port nodes, should be monitored.

Starting from the analyzed elements, it is possible to identify some points on which it would be necessary to focus in order to improve the efficiency level of the maritime cluster:

- Protect the international competitiveness of the national maritime flag;
- Widen the financial base through bank concessions regulated by less rigid rules;
- Invest in technology to increase competitiveness compared to other countries;
- Improve the network of material infrastructures and the level of earth-connections;
- · Re-training the work force;
- Increase internationalization strategies by trying to collaborate with or oversee them;
- Clarify the application of certain rules on control and security, on tax, customs and port maintenance

#### 3.5 RESEARCH, INNOVATION AND HUMAN RESOURCES:

Industrial research and technological innovation are an important tool for maintaining and increasing the competitiveness of the maritime sector, vital for the competitiveness of the country system and subject to a very aggressive commercial policy by developing countries.

The European Commission itself, already in 2005, identified one of the main industrial assets in the sector on which to set the Framework Program for Research and Development. From this was born the European Waterborne Technology Platform, which, coordinated by RINA - Italian Naval Register (the only European Technology Platform with Italian coordination), produced the strategic Research and Development plan of the sector as a contribution to the programming of research and development.

In recalling that RINA, thanks to its activities related to the technical control of navigation safety and the certification of products, processes and services, plays a super role partes the suggestion of a similar initiative at national level (the National Maritime Technology Platform,) which sees the participation of all maritime industrial organizations, defining or the first time in the history of the sector a synergic research and innovation plan for 2020, should absolutely be implemented.

Having said this, it is believed that an industrial policy in the maritime sector cannot fail to contemplate focused actions both in respect of continuity (for several years the Italian government has demonstrated a tangible sensitivity to these aspects) and with a view to making the best use of the plan developed by the industry. In particular:

- the Blue Book 2007 of the European Commission, among other themes, emphasizes excellence in the fields of research, technology and innovation as indispensable tools for the sector.
- As we saw the proposal for a national research program for the sea (RITMARE).

- the 2008 financial law provided for the establishment at the Ministry of Transport of a fund intended, through research and innovation, to improve energy efficiency and reduce atmospheric emissions from passenger ships under way. This fund is currently being notified to the European Commission, which has glimpsed in it a timely form of transposition, albeit in a specific area, of the new Community regulation on state aid for environmental protection, a fact which is recognized positivity.
- increase in the appeal of the seafaring profession for the new generations;
- qualified and continuous support from the ground to the crew and vice versa, to overcome the needs of increasing multiplicity of skills and knowledge required to the maritime and land personnel;
- staff training, education and continuous updating;
- computerization of on-board functions and activities;
- emergency management; safety, prevention and containment of pollutions; security.
- the continuation of public support for innovative process and product projects developed by shipbuilding companies, in line with the regulation of state aid to shipbuilding adopted by the European Union since 2003;
- support for research institutes (INSEAN and CETENA) operating in the naval sector;

The enhancement of human resources has constituted as a collective commitment of the cluster. It is easy to understand how it responds to the general interests of the country. This support is already taking place in many fields, but the synergic commitment between institutions and companies must be further generalized and taken as a political direction.

# 3.6 CONCLUSIONS: THE FUTURE OF ITALY IN THE CLUSTERED MARITIME EUROPE:

The Italian Blue Economy employs over 413,000 people and generates around € 19.8 billion in GVA. It is dominated by the coastal tourism sector, which contributed 49% to jobs and 36% to GVA in 2017. Maritime transport is also an important contributor to the Blue Economy, generating 12% of jobs and 16% of GVA. Overall, Blue Economy-based jobs decreased by 8%, while GVA has seen a 15% increase compared to 2009.

Italy's national GDP has increased by 10% in recent years and the Blue Economy's contribution has increased further 5%. As for Blue Economy GVA, after seeing a downward trend in 2011- 2014, a rise has been observed since.

The reading of the long cycle transformations that have affected the maritime sector is closely linked both with the changes that have taken place in Italian society and in the productive fabric, and with the advent of the new globalized production and consumption markets.

Italy has always been a nation with a strong maritime and shipowning history. After the events of the Second World War, the fleet was gradually rebuilt and the sector has constantly accompanied the evolutionary scenarios of the country. On closer inspection, the first moment of crisis - certainly not

limited to maritime activities - occurred in the early seventies in conjunction with the first oil shock, however, followed, six years later, by a new deep crisis that originated in the sector energy supply.

In order to limit the progressive weakening of the national industry, measures were launched in these years aimed at facilitating purchases from Italian shipyards, with the subsequent limits imposed by law on purchases from foreign shipyards to Italian shipowners.

An attempt was therefore made to maintain and consolidate Italy's role as producer and exporter of finished or semi-finished products created in large factories (metallurgical or metalworking) and importer of raw materials and energy (mostly oil).

In this interpretative and programmatic framework, the maritime sector, armament and port services in particular, were conceived more as a service asset to the manufacturing vocation of the country than as a sectoral cluster capable of creating value, absorbing employment, contribute to modernization by becoming itself the driver of innovation and growth.

However, that may be, the global trend of maritime activities, after having disposed of the slag from the two oil crises of the 1970's, started again by also driving the national sector. The volumes of goods transported by sea have started to run again, confirming the resilient nature of maritime transport and the role of the ship in the movement of goods. The share of goods imported into our country through naval mode with over 173 million tons still represents 65.8% of the total (it was slightly less than 80% in 1989).

An important moment of discontinuity in the scenario of sea transport is certainly identifiable in the standardization of cargo loading thanks to the introduction, on a large scale, of the container. The container, conceived already in the fifties, began to assert itself in the following decade, completely transforming the port activity, up to that moment with a strong labor-intensive character. Thanks to the containers, costs and loading-unloading times were drastically reduced and the enhancement of the intermodal dimension began. By the late 1970s, the container had become the inevitable reference for many types of goods and the world fleet was rapidly adapting to this mode of transport.

Today maritime trade is clearly moving towards a model characterized by important economies of scale. The shipping business is mainly concentrated around the largest shipping companies

It is now evident that commercial ports all over the world are called upon to reorganize their spaces and their forms to encourage participation in that dominant slice of the market which is the movement of containers. In Europe, the only ones capable of approaching the handling standards of Asian ports are the ports of Northern Europe (the so-called Northern range, formed by the ports of Le Havre, Rotterdam, Bremen and Hamburg). On the other hand, until now the Italian ports have suffered from the absence of a clear port hierarchy, capable of conveying the transshipment functions in a single port around which to organize the traffic. Only recently, with the recently approved National Plan of Logistics and Port, the country seems to have taken this path, discouraging micro-competition and instead stimulating coordination with the introduction of "port systems".

Italy has only marginally entered the overall maritime transport model which is re-proposing itself even after the recent world economic crisis. The Italian flag fleet, for example, ranks first in the world for Ro-ro ships, fifth for special chemical tankers, and fifteenth for those for oil products and dry bulk goods. A fleet which, however, in recent decades has maintained a good level of replacement of naval units. As of 2016, most of the ships in the Italian fleet (44.2% of the total) are between 5 and 9 years of age. In essence, what can be emphasized also with reference to maritime activities, is the continuing "molecular character" of Italian development, which marks the difference to the directions taken by the market and global maritime trade. And at the same time, the country's historical difficulty in governing a truly integrated transport policy. The development by proliferation of economic subjects and the aggravated localism, with a congenital aversion to the hierarchical organization of the territorial functions at national level, have not allowed Italy to re-establish its ancient leadership on freight traffic in the Mediterranean. On the contrary, the race for container traffic has seen other competitors excel they have demonstrated more resoluteness and timeliness in allocating funds to modernize the ports designated as hub hubs (Spain, for example) or to even create them from scratch (as in Tunisia, Morocco or Egypt). On the positive side, it must be reiterated that the proliferation of subjects remains an indicator of wealth and dynamism, and the terrain on which this particularity is spent is that of added value and niche markets. In this regard, the Italian maritime cluster began to autonomously give shape to its evolutionary needs already in the early 1980's.

Approaching the present day, the maritime production and logistic system continues to interpret its social role with the specialized specialization and the supervision of the dimension of quality, perceiving in this the only mode capable of making it competitive on all markets. The successes of recent years - partly contained by the crisis - in the cruise industry, in particular transports (chemical and food products), are proof of this. Even the central decision maker is finally beginning to take note of it and play a positive role in this regard, showing awareness of the importance of enhancing the country's logistical role, in a context that is now globalized with all the main mass productions outsourced in the countries low labor costs.

Some important measures have been taken, but there is still much to be done to capitalize on the country's geographical advantage. The key concept is certainly the one that connects connections and intermodality. Applies to maritime transport, as well as for airport, road and rail development. But the control of this concept requires a unitary strategy for the maritime economy, which does not benefit from the current skills that are still too sectoralized.

The sea and its resources are fundamental for the Italian economy. There is, however, the need to create a more effective and structured governance system for the management of the commercial dynamics that develop in the maritime environment, in particular in the Enlarged Mediterranean, as an area of interest and action for the country. Given its geographical position in the heart of the Mediterranean Sea, Italy should assume a directing role in managing the resources. A fundamental first step that must be taken in this regard is to increase maritime awareness, first of all at the level of political

decision-makers and administrative officials, and secondly, towards the wider public in order to illustrate the economic and strategic potential of the sector and therefore create an accurate maritime culture.

Starting from this assumption and keeping in mind the needs expressed by the Italian maritime cluster, the way forward is to build an integrated governance system that manages the maritime environment and supports profitable use of its resources and the beneficial development of the blue economy. This structure should be created primarily at the national level through the creation of a governmental structure that puts in synergy all public and private components that operate directly or through secondary routes in the sea. The next step concerns the strengthening of the infrastructure supporting the sea economy. For example, ports as a fundamental crossroads for promoting trade and tourism by sea; and support to shipbuilding, evidently a sector of excellence and of great importance for the country.

Thanks to the presence of a fully integrated governance of the sea, Italy will then be able to present itself at the Brussels table in an evidently strengthened and leadership position. Furthermore, given that 13% of maritime goods traffic destined for the member countries of the European Union transits through Italian ports, Italy could truly become an ambassador and guide the European strategy in the Mediterranean Sea. Taking on this role would guarantee that Italy will not only to be able to influence the decision-making process within the Union on issues that impact the use of the resources of the Mare Nostrum, but also to help define the strategic lines of European maritime policy.

In conclusion, Italy should interpret and translate the requests of the maritime cluster, and, later, the positioning of this European governance in order to contribute considerably to the creation of policies aimed at the management of the Mediterranean. Only following a direction of this type the country will gain a central role in that sea management which, although permeated with challenges, is equally full of opportunities not yet fully exploited.

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