



FEDERAZIONE DEL MARE

CENSIS

**THE THIRD MARITIME  
ECONOMY REPORT  
2006**

ECONOMIC GROWTH, HUMAN RESOURCES  
AND ENVIROMENTAL PROTECTION  
IN THE ITALIAN MARITIME CLUSTER

**Abstract**

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## INTRODUCTION

*Founded in May 1994, the Federazione del Mare – Italian Maritime Cluster - today brings together a large part of the maritime organisations – AIDIM (maritime law), ANCIP (port-operators), ANIA (insurance), ASSOPORTI (port administration), ASSONAVE (shipbuilding), ASSORIMORCHIATORI (port towage) CONFITARMA and FEDARLINEA (merchant shipping), FEDERAGENTI (maritime agency and brokerage), FEDEPILOTI (port pilotage), FEDERPESCA (fishing navigation), IPSEMA (maritime welfare), RINA (certification and classification), TMCR (promotion of coastal shipping) and UCINA (leisure-boating industry) – with the purpose of representing the maritime world in a unified manner, so as to increase awareness of its role as a factor of development, while highlighting its shared values, culture and interests, which also arise from constant contact with international activities.*

The most significant product of the Federazione del Mare in 2006 was the 3<sup>rd</sup> *Maritime Economy Report*, presented in the month of June.

The Report analyses the economic and social impact of the Italian Maritime Cluster, viewed in terms of its main productive and institutional components.

The Report also addresses the topics of training and the environment.

With regard to training, an attempt is made, for the first time in Italy, to outline in a unified and fully integrated manner what is being done to improve the preparation of



young people who dedicate themselves to professions connected with the sea, whether onboard or on land.

As for the environment, the Report points to the best practices that have been implemented in the different maritime sectors for the purpose of combining in a constructive manner development with respect for the environment.

In more general terms, a particular interest is found regarding the interrelations between the new European maritime policy – as illustrated in the recently presented Green Book – and the activities of the Federazione del Mare.

In fact, the need for an all-encompassing, synergistic, across-the-board approach to maritime issues – something the Federazione has been supporting since its founding in 1994 – is now being acknowledged and encouraged at the highest levels of both the European Community and Italy.

The approach in question calls on the Federazione del Mare to achieve a more compact, stronger form of integration between the federated organisations, extending beyond the areas that have been addressed to date, though always with undiminished respect for the specific expertise and prerogatives of the individual sectors.

## 1.1. All the value of the Italian maritime system

For some time now, the Italian economy has registered phases of limited expansion, or even drops in the growth rate. The system of maritime activities, on the other hand, continues to post what could be considered an *anti-cyclical* performance: fishing activities have progressively increased, in terms of production, while the manufacturing components (naval construction and repair, plus the construction of leisure vessels) show a marked capacity to withstand the turbulence and the clear-cut rise in the level of competition on their markets, at the same time as the tertiary sectors (maritime transport, the movement of cargo, the logistical cycle of cargo between the land and the sea, technical-nautical services, financial services and specialised insurance services) have increased their standards of quality, innovated the various components of their offerings (especially with regard to activities involving port operations and logistics) and raised their levels of efficiency.

It is this capacity to support the transformations made necessary by a globalised economy, as well as the reorganisation of production processes inside the industrial framework, together with processes of logistics and transport, that demonstrates the marked modernity of the Italian maritime cluster, whose highly original model of development accounts for 2.7% of the national GDP, while involving 1.6% of total employment (**tab. 1**).

**Table 1 – Main economic aggregates of the maritime cluster \*. Figures for 2004**

	Absolute figures	% of total for Italy
GDP, not including duplications (million of current euro)	36,518	2.7
Intermediate costs and gross fixed investments (millions of current euro)	11,616	4.4
Exports (millions of current euro)	14,088	4.7
CIF imports (millions of current euro)	4,046	1.4
Total labour units (direct, upstream and downstream)	394,950	1.6

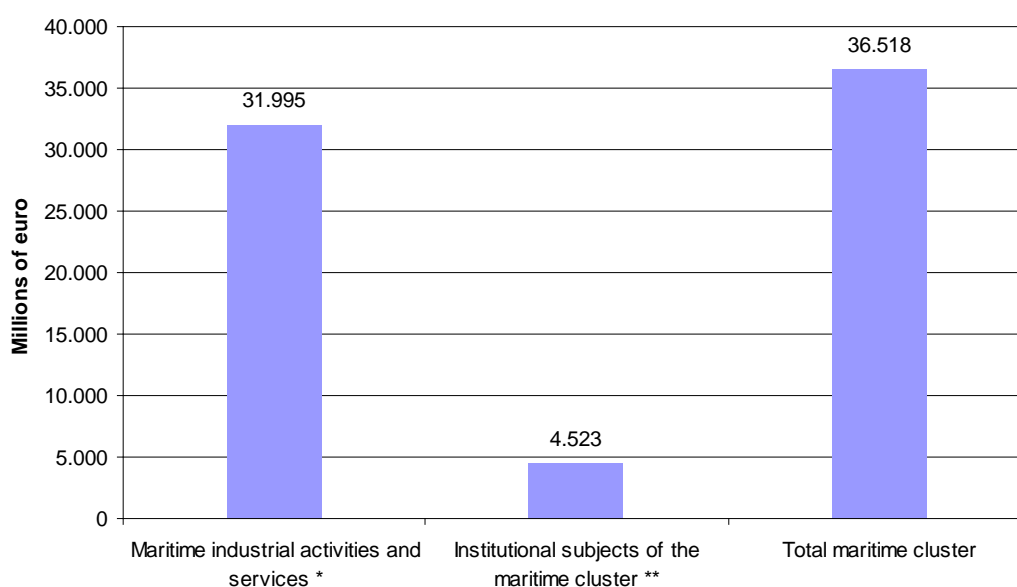
(\*) The cluster includes industrial and service activities, as well as institutional subjects, plus the wealth generated by the tourist activities tied to leisure boating

Fonte: Censis processing of data from Istat, Assonave, Ucina, Ipsema, Rina and Assoportori

Taken altogether, the sectors of maritime transport, plus activities involving port logistics and assistance in transport, together with naval construction, the construction of leisure boats, fishing activities, the Italian Navy, the harbourmasters' offices, the port authorities and Ipsema, generate 36.5 billion euro (**fig. 1**). What is more, the cluster sets in motion spending of more than 11.6 billion euro on intermediate consumption and gross fixed investments, equal to 4.2% of the investments registered in Italy, clear-cut evidence of its capacity to mobilise and utilise the noteworthy economic resources necessary for the direct performance of the activities typical of each sector, with a multiplying effect that benefits the entire national system of production.

PLEASE NOTE: in the following figures, commas ( , ) and dots ( . ) as specifying thousands and decimals in English language are inverted according to Italian usage.

**Fig - 1 - GDP of the Italian maritime cluster, figures in millions of current euro.  
Data for 2004**



\* Includes the following sectors: maritime transport, activities of port logistics and services assisting maritime transport, naval construction and the construction of leisure vessels (plus the ancillary economic activity tied to nautical tourism) and fishing.

\*\* Includes: the Italian Navy, the harbourmasters' offices, the port authorities and the Ipsema.

Source: Censis processing of data from Istat, Assonave, Ucina, Ipsema and Assoport

The estimate of the GDP<sup>(1)</sup> of each sector for the year 2004 (**fig. 2**) points to noteworthy differences within the maritime cluster. Maritime transport, with a GDP of 15.684 billion euro, currently accounts for 53% of all the wealth generated by the maritime manufacturing and tertiary activities considered herein, showing itself to be closely connected to port activities and operations involving assistance to the transport system, whose gross domestic product amounts to 4.467 billion euro. The gross domestic product of naval construction and fishing are equal to respective figures of 2.510 and 4.436 billion euro. Finally, the contribution of leisure boating, not including the ancillary economic activity generated by nautical tourism, was 2.443 billion euro, to which the amount generated by tourism, equal to 4.6 billion, must be added. Figures at lower levels, but still of note, characterise the institutional sectors, such as the Italian Navy, which registers a GDP of more than 2 billion euro, together with interesting levels of productivity.

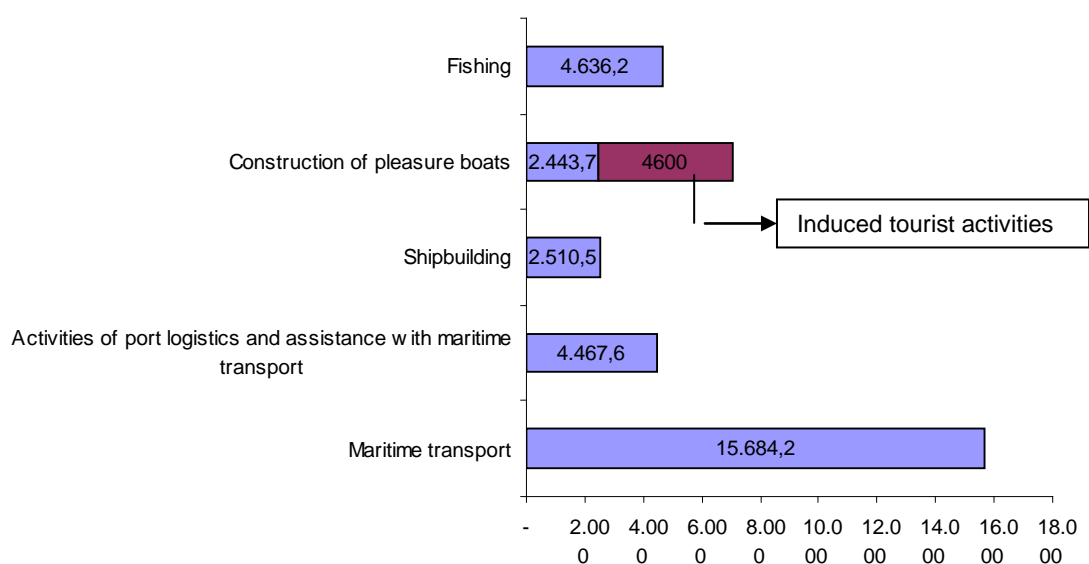
A cross-analysis of the gross domestic product of industrial maritime activities and services with the figures for a number of economic branches (**fig. 3**) further highlights the undeniable importance, in absolute terms, of the Italian maritime cluster.

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(1) Calculated as the value of goods and services produced at base prices and at current values, after deducting the value of imports.

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**Fig. 2 - GDP of the industrial and service sectors\* of the maritime cluster**



\* The data refer to the following sectors: maritime transport, activities of port logistics and assistance with maritime transport, naval construction and leisure boating (including the resulting tourist activities), plus fishing.

The excellent economic-production performance registered in recent years by the different segments of the cluster, together with the noteworthy levels of employment that set them apart, place productivity at elevated figures, among the highest in Italy. The capacity of maritime industrial and service activities to absorb elements of the workforce proves considerable: the number of workers directly employed in 2004 totalled 122,386 units, in addition to which there were 106,927 units employed upstream of maritime operations and 104,297 units downstream, including 68,394 associated with ancillary activities tied to pleasure boating (**tab. 2**).

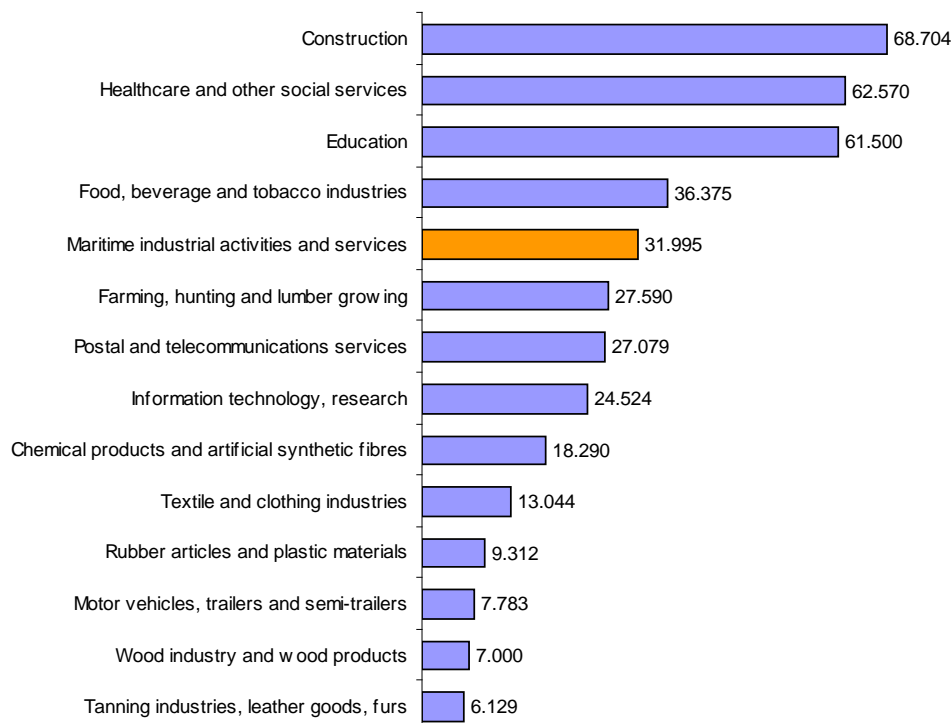
Looking at maritime industrial and service activities as a whole, the value added per labour unit is 101,000 euro (**fig. 4**).

**Tab. 2 - Labour units in the industrial and service activities of the maritime cluster. Data for 2004**

	Direct labour units	Labour units upstream and downstream	Total labour units
Maritime transport	26,300	60,006	86,306
Activities of port logistics and assistance with maritime transport	26,048	17,487	43,534
Shipbuilding	12,033	14,747	26,780
Pleasure boating (with related tourism)	11,719	80,859	92,578
<i>Pleasure boating (without related tourism)</i>	<i>11,719</i>	<i>12,133</i>	<i>23,853</i>
Fishing	46,286	38,125	84,411
<b>Total</b>	<b>122,386</b>	<b>211,224</b>	<b>333,609</b>
<i>Total net of duplicated activities among sectors</i>			<i>318,484</i>

Source: Censis processing of data from Istat, Ucina and Assonave

**Fig. 3 – Gross Domestic Product at basis prices: comparison between maritime industrial activities and services\* and other economic sectors (billions of euro). Data for 2004**

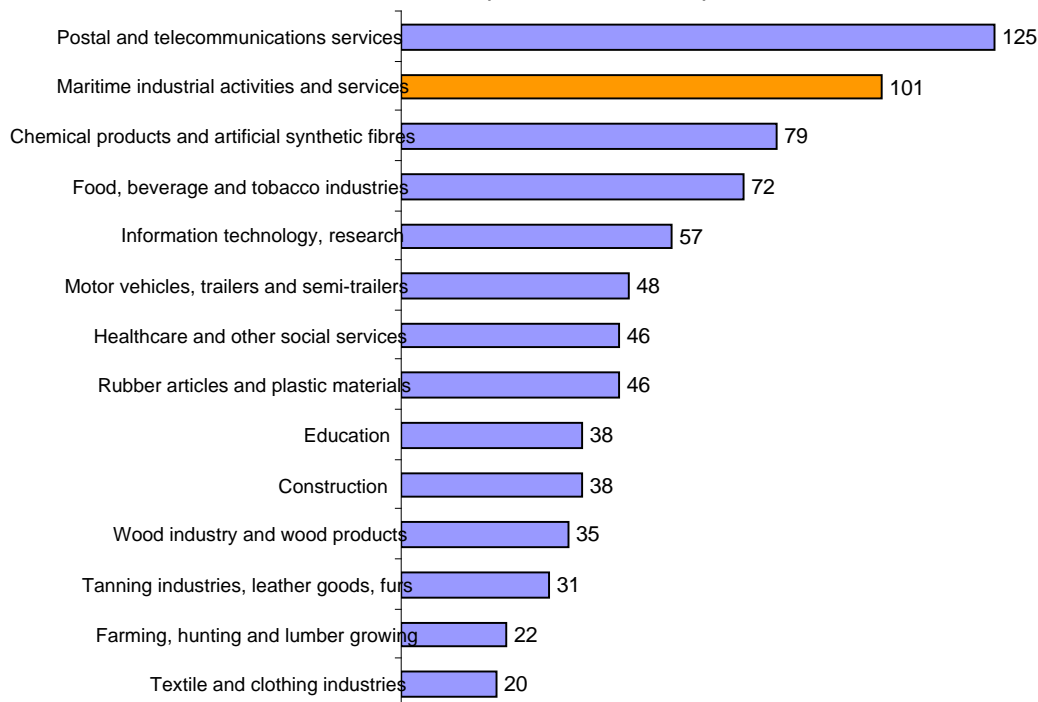


(\*) The data refer to the following sectors: maritime transport, activities of port logistics and assistance to maritime transport, naval construction, pleasure boating (including connected tourist activities) and fishing.

Source: Censis processing of data from Istat, Ucina and Assonave



**Fig. 4. - Value added per direct labour unit: comparison between maritime industrial activities and services\* and other economic sectors (in thousands of euro). Data for 2004**



(\*) The data refer to the following sectors: maritime transport, activities of port logistics and assistance with maritime transport, naval construction, pleasure boating (including associated tourist activities) and fishing.

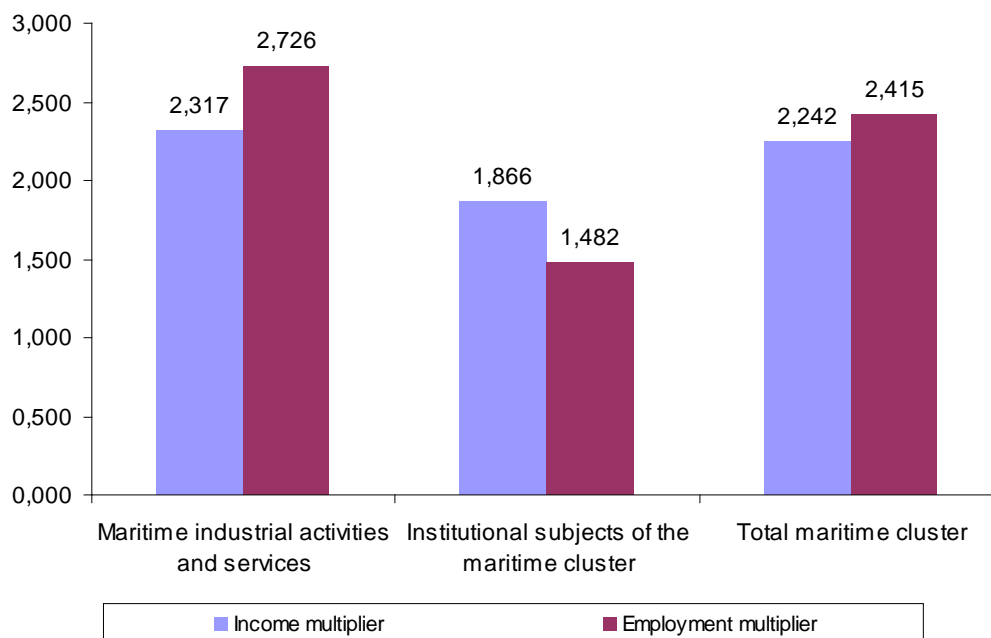
Source: Censis processing of data from Istat, Assonave, Ucina, Ipsema and Assoport

There are also noteworthy multiplying effects in terms of income and employment, thanks to the existing ties between the components of the cluster (which increasingly resembles an industrial chain, in which each sector takes part in a broader production process) and between the cluster itself and additional sectors upstream and downstream of maritime activities (**fig. 5**). At present:

- 100 euro of additional demand for goods and services generate 224 euro of income in the national economic system;
- 100 new labour units operating in the maritime cluster trigger the creation of 241 labour units in the national economy.

PLEASE NOTE: in the following figures, commas (,) and dots (.) as specifying thousands and decimals in English language are inverted according to Italian usage.

Fig. 5 - Multipliers of income and employment in the Italian maritime cluster. Data for 2004



Source: Censis processing of data from Istat, Assonave and Ipsema.

What is more, the industrial and service activities, taken as a whole, register a greater multiplying capacity than that of institutional subjects.

## 1.2. Modernity and flexibility of a network system

The maritime cluster, viewed in its entirety, proves to be modern in nature, given the central role it increasingly plays in the country's productive structure, as well as the internal differentiations and, last but not least, the capacity to serve as the driving force behind a system of *highly flexible networks of business and trade*.

The last few years – characterised by a marked expansion in the economic weight of the maritime system and the importance of the seaborne transport of imported and exported cargo, as compared to other modes of trade – have given the cluster a role of

10

central economic importance that appears all the more evident when analysed in parallel with the deindustrialisation trends registered by the country over the last 15 years.

The maritime system's multifaceted nature – a result of the combination of production activities tied to manufacturing (shipbuilding and pleasure boating) and services (activities of transport, port management services, services performed by terminal operators and maritime agents, technical-nautical services and services of control, performance testing and certification) – has proven to be its *efficient configuration*, capable of creating profitability and maintaining the growth of production and employment at elevated levels. Also worthy of note are the marked correlations that exist:

- between maritime activities carried out on the market (maritime transport, services tied to the port cycle, shipbuilding, nautical production and fishing) and those performed by subjects with a role of control, direct administration or insurance of the working activities, such as: the Italian Navy, the harbourmaster's offices, the port authorities and the Ipsema. These last guarantee an infrastructural context in which industrial and tertiary maritime activities can develop;
- between the cluster and additional sectors, often characterised by a high level of value added, such as the banking and financial system, as well as the insurance system. The major investment programs of ship-owning companies, together with the construction of large cruise ships, a sector in which Italian shipbuilders are meeting with success, has come to require a financial contribution so specialised and significant – given the elevated level of the initial investment – that commitments on the part of major banking groups are necessary. A noteworthy contribution is made by the insurance system (which participates through the Ania in the Federazione del Mare), for which the maritime cluster constitutes an important market area. In fact, the Italian maritime system acquires more than 250 million of euro of insurance services (2% of the intermediary purchases), demonstrating the importance of this type of service in the proper performance of maritime activities.

And there can be no ignoring a further, highly significant aspect of the cluster: namely the fact that it contains a system of *intrinsically flexible networks* that take on different forms, ranging from production districts to transport routes.

In a number of sectors, such as naval construction and pleasure boating, *the network enterprise* or, to an even greater extent, the industrial district, constitutes an efficient production model in which the coordination between different companies located in the same territorial area makes possible the activation of informal networks of knowledge, the circulation of professional figures and the birth of new business initiatives; La Spezia, Viareggio and Massa Carrara, as well as the coastal area between Gaeta and the Argentario district, are full-fledged pleasure-boating districts. But even commercial ports constitute the centre of gravity of networks of extremely different activities and professional resources. Business networks normally result in the acceleration of growth, with a multiplying effect on income, which is why they are supported with specially targeted policies and initiatives.

A second aspect to be taken into account is the fact that commercial port activities and maritime transport operators generate and operate within an extensive system of networks consisting of routes. Today, these present multiple forms, consisting of:

- energy networks, through transport carried out by oil tankers, dry bulk carriers and gas and chemical tankers;
- networks of key raw materials for industry; to provide only a few examples, 41% of the value of minerals for metallurgy, 41% of metallurgical products and 53% of raw minerals and construction materials are imported by sea;
- networks of high value added products, by means of containers and Ro-Ro ferries;
- passenger transport networks: in 2004, more than 40 million passengers passed through Italian ports.

One of the main advantages of this network system is its flexibility and capacity for rapid extension and adjustment to the ongoing development of cargo trade, something that cannot be accomplished, to the same extent, by land-based transportation infrastructures; it is for these simple motives, as well as the need to preserve the regulatory, tax-related and social-security conditions that allow Italian ships to be competitive, that investments should be increased in all those processes and factors able to increase the strength and efficiency of maritime transport and ports, key logistical junctures for the country.

### 1.3. Ripple effect

Operating under a network logic, with noteworthy interconnections between sectors and operators that are often very different from one another, the Italian maritime system triggers economic processes which, at times, have a wide-ranging effect, influencing each other. Based on the large volume of data collected, it can be stated that the maritime cluster is capable of generating:

- a) *effects on income*, by making a noteworthy contribution to the Italian GDP; an apt example is the fact that 100 euro of additional demand for the goods or services of the maritime cluster generates 224 euro of new income in the national economic system;
- b) *the development of financial circuits*, thanks to the fact that the maritime cluster has the configuration of an investment-intensive macro-sector, in which the financial and insurance systems play a noteworthy role, contributing to its development. The services of monetary and financial brokering drawn on by the industrial and service activities of the cluster total 494 million euro, equal to 1.7% of the production value. The value of the insurance services total 250 million euro;
- c) *contributions to development of the labour factor*, with a wide variety of professional figures and a noteworthy impact on employment, both direct and indirect, registered in the sectors upstream and downstream of the production processes;
- d) *processes supporting the opening up of the country to international trade*, taking into consideration that the vast majority of the quantities of goods imported and exported to and from our country are transported by sea, and that the cluster generates a noteworthy portion of total Italian exports;
- e) *a modernisation of the national supply of logistics*, thanks to the role played by maritime transport operators (the transport of individuals and the distribution of merchandise) and to the role of Italy's system of commercial ports and port authorities, currently engaged in activities of investment and modernisation of the services offered, with an impact of decided relevance on both employment and the territorial area where each port is found;

- f) *contributions to maintaining the competitive strength of the entire national production system*; during phases of deindustrialisation, such as those recently registered in Italy, the current growth of the merchant and cruise navigation industries, as well as that of pleasure boating, together with the repositioning and making of new investments in merchant shipbuilding, provide an idea of the capacity of the cluster to contribute to the growth of the Country System; the increase in the percentage of the national GDP accounted for by the maritime cluster, from 2.4% to 2.7% between 2001 and 2004, is a tangible demonstration; at the same time, the marked correlations between industrial activities (shipbuilding, nautical operations, components, mechanics) and service operations (port logistics, transportation and auxiliary activities, the management of terminals, storage, the activities of port authorities, harbour masters' offices and the Italian Navy, to name only a few) point to a modern, efficient way of doing business, thanks to the tertiary component, which is generally capable of renewing itself very rapidly.

What is stated above throws renewed attention on the need to reinforce an all-encompassing policy enacted through different initiatives, differentiated objectives of development and a revival of investments in both the system hardware (tangible infrastructures) and the software, starting with the human capital. The Federazione del Mare and its member organisations have long been engaged in drawing up strategic guidelines and initiatives aimed at sensitive areas of the cluster; the government forces are responsible for guaranteeing continuity of the initiatives of key importance to maintaining the competitive strength of the Italian maritime system.

#### **1.4. A look at the future**

In light of the economic impact referred to up to this point, it is only natural that the question of the future course of the Italian maritime cluster should arise.

Looking at the short term, it is safe to say that there will be further growth, and that the role of the maritime system as a pivotal factor in the growth of the national economy shall be reinforced. Looking at the quantities of merchandise imported to and exported from Italy, respective levels of 63% and 46% travel by sea. Limiting the analysis to Italy's trade with countries outside of the European Union, the maritime mode plays an even more important role: more than 80% of the quantity of merchandise imported to Italy and 80% of the exports currently travel by sea, making the maritime transport sector a key system of carriers and giving ports the status of critical junctures in the network of trade of which Italy is a part. Italy ranks first among the countries of the 25-member European Union in terms of merchandise



imported from outside the EU by sea (with more than 206 million tons of merchandise, placing it far ahead of Spain, rated second, and of the United Kingdom, third on the list); giving that the merchandise, for the most part, consists of raw materials used by national enterprises, there can be no mistaking the key role which maritime transport services and port and retro-port infrastructures currently play in the country's production processes. Considering, for that matter, that the most reliable estimates point to increases of at least 40% in passenger and cargo traffic over the next ten years, compared to the current levels, in addition to which, during the same period, the movement of containers in the Mediterranean, in terms of Teu, shall rise by 75%, with the units of cargo moved by Ro-Ro also forecast to grow and estimates of demand for large-scale shipbuilding and pleasure craft pointing to further expansion, the future scenario of the Italian cluster can only be one of continued growth.

Naturally, in order to back similar expansive trends, the maritime system still has need of effective accompanying actions and of unified strategies that make the most of the elements of strength of its various protagonists and its human capital. The noteworthy contribution to the formation of the national GDP makes the maritime system a key asset; in order for this role to be reinforced, and for its multiplying effect on income and employment to be increased, new and significant investments, both tangible and intangible, must still be made, for the purpose of:

- completing the legislative framework and keeping it in line with European Community guidelines, which allow Italian ships to be competitive on international markets, so as to ensure that the share of the Italian fleet in the different sectors is increasingly sizeable, in particular as regards the Ro-Ro ships and the fleet that handles the flow of energy to the country (oil, coal and gas);
- reinforcing and improving infrastructures, both inside ports and as regards a more effective linking of port junctures with railway and roadway networks;
- favouring initiatives on port junctures of vital importance to the Italian country, with a particular focus on the new demands of container traffic and those of the Highways of the Sea (short sea shipping), with one objective being to guarantee the financial independence of port authorities;



- providing incentives for and sustain the presence of top-flight Italian shipbuilding and nautical production activities on the main foreign markets;
- supporting processes of technological innovation and research and development, currently of key importance in a number of sectors whose competitive advantage is based technology-intensive production activities (cruising, towing vessels, super yachts);
- activating focussed programs for the upgrading and growth of the skills of the multiple professional figures at the disposal of the maritime cluster;
- maintaining high levels of attention and awareness with regard to environmental concerns.