Marine Spatial Planning in Hellas; Recent Facts and Perspectives

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Key words: Marine Spatial Planning, Marine Policy, Greece, Maritime, Coastal.

SUMMARY

In the era of globalization, of over-population and of environmental risks, the sea is a vast field available for a plethora of uses, such as transportation, food and energy resources, strategy and defence, recreation, etc. As a result of these anthropogenic activities, the conflicts among the uses at the sea should be managed properly. In this framework, marine spatial planning (MSP) is dedicated to the protection and the management of the marine environment and its ultimate goal is to achieve economic, environmental and social objectives.
Several countries have already been involved to MSP' procedure, while European Union had made remarkable steps for the approach of MSP through its integrated maritime policy. Hellas, as it is surrounded by sea, has vital interest on the marine environment and is heavily depended on it. In its case, the existed good practices and the legislation of European Union could be used as guidance, after the creation of the appropriate legal and governmental background that is necessary for a marine spatial planning procedure.
This article aims to present an overview of marine policy in Hellas, and all the steps that have been realised to this direction during the last few years. After a brief overview of the international experience, the expected difficulties and the anticipated benefits of a likely implementation of MSP in Hellas are going to be displayed. The potential implication and significant role of surveying engineers, the geopolitics hindrances and the priority of marine spatial policy among the policies of the country (being for six years in recession) will be discussed.

ΠΕΡΙΛΗΨΗ

Αυτό το άρθρο έχει ως στόχο να παρουσιάσει μια επισκόπηση της πολιτικής για το θαλάσσιο χωροταξικό σχεδιασμό (ΘΧΣ) στην Ελλάδα, και όλα τα σχετικά βήματα που έχουν λάβει χώρα προς αυτή την κατεύθυνση, κυρίως κατά τα τελευταία 5-10 χρόνια. Μετά από μια σύντομη επισκόπηση της διεθνούς εμπειρίας, θα φωτιστούν οι αναμενόμενες δυσκολίες και οφέλη από την πιθανή εφαρμογή του ΘΧΣ στην Ελλάδα. Επίσης, συζητούνται: ο ρόλος των τοπογράφων μηχανικών στο ΘΧΣ, τα γεωπολιτικά προβλήματα και η προτεραιότητα της θαλάσσιας χωροταξικής πολιτικής μεταξύ των άλλων πολιτικών ενός κράτους που βρίσκεται σε ύφεση τα τελευταία έξι χρόνια.

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1. INTRODUCTION

1.1. The Marine Environment

The history of the world shows a preference of settlements to zones near "The oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals".[1] (Mumford 1961, UN 2014). In parallel, the Greek historian and author Thucydides (460-398 BC) wrote that "it is great the state that controls the sea", in order to emphasize the critical worth of the hydrosphere.[2]

Marine environment contains unique species of fauna and flora and many exceptional habitats and ecosystems exist there. (MarineBio 2011, IMO 2014). Sea, seabed and sea subsoil included, attracts people for thousands of years, for reasons such as navigation[3] and fishing. Oceans can provide many resources, statistically much more than the territorial part of the Earth can, such as renewable goods (marine animals for food, seaweed, water, medicines etc.), non-renewable goods (oil and gas, sand and gravel, marine minerals) and renewable services (biological regulation, protected areas, atmospheric and climate regulation, nutrient cycling etc.). Also, lately, great importance has given to tidal, wave and wind resources, for their potential contribution to energy production. (Ehler & Douvere 2009).

Hydrosphere and lithosphere are quite dissimilar. The size of each regime, the elevation levels (mean and maximum high in the land and depth in the oceans) and the totally contrasting stability status of each of them are among the most well-known differences between the two spheres. Furthermore, the marine features show an essential variation, from the regions near the land (where the coastal characteristics are dominant) up to the high seas (horizontal distinction). Additionally, analogous variation occurs vertically; from the sea surface till the seabed, along the pelagic and benthic zones. (Grant Gross 1977, Ingmanson & Wallace 1985, Kiousopoulos 2012). Such differences are related to the dynamic nature and the three-dimensional character of marine environment; both of them drive to obvious (technical) difficulties, concerning the identification of marine planning units, the acquisition of data and the planning process, in general.

Nowadays, the sea level rise seems to be the foremost in progress environmental risk. The suspended marine environment sustainability is not only connected with climate change, but with the loss of biodiversity, the over-exploitation of resources, acidification of seawater, waste disposal, pollution caused by ship-based operational discharges etc. Simultaneously, as a consequence of anthropogenic activities, the ability of the ocean to provide the necessary

[1] This definition of maritime domain, according to the Dictionary of Military and Associated Terms, US Department of Defense (2014), is widely accepted by dictionaries and glossaries.

[2] In Greek: "Μέγα το της θαλάσσης κράτος"; dictum that is attributed to Pericles (leader of Athens), during the Peloponnesian War, between the city-states of Athens and Sparta, 431-404 BC. (Thucydides, History of the Peloponnesian War, book 1).

[3] Corbett & Winebrake (2008) underline that "Marine transportation is an integral, if sometimes less publicly visible, part of the global economy".

ecosystem services is hampered by conflicts like: a) conflicts among human uses and b) conflicts between human uses and the marine environment. (Ehler & Douvere 2009).

1.2. The Meaning of the Term

As environmental management focuses mainly on the lithosphere (Worldwatch Institute 2004, Douvere et.al 2006, Goudie 2006, Reed 2009), a deep care about the marine space is not yet fully incorporated. The same happens with spatial planning that is linked to the efforts of the public sector to influence the distribution of people and activities in spaces of various scales.[4]
In this context, **marine spatial planning** (MSP) has a rather short history, having its first appearance around 1980. It was launched as an effort for the protection and the management of the marine environment, associated with the allocation of maritime uses. It determines the most suitable areas for the development of man-made (economic) activities at the sea, in order to reduce the potential conflicts among them and to use marine resources in a more sustainable way. Furthermore, marine spatial planning contributes to environmental protection and to the maintenance of critical services of the marine ecosystems. Its strategic goal is to achieve economic, environmental, social and security goals, within a horizon of 10-20 years. (Ehler & Douvere 2009).
More precisely, IOC (2010a) describes MSP as "a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that usually have been specified through a political process". According to a parallel approach (NOAA 2009), "coastal and marine spatial planning is a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analysing current and anticipated uses of ocean, coastal, and Great Lakes areas". Respectively, the responsible for the environment government department of United Kingdom (DEFRA) defines MSP as "a strategic plan for regulating, managing and protecting the marine environment that addresses the multiple, cumulative and potentially conflicting uses of the sea". (Tyldesley et al. 2004).
More recently, European Union outlines MSP as "a process of public authorities of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives". (EC 2010). Additionally, EU recognises 'Integrated Maritime Policy' as the "Union policy with the aim to foster coordinated and coherent decision-making to maximise the sustainable development, economic growth and social cohesion of Member-States, in particular with regard to coastal, insular and outermost regions in the Union, as well as maritime sectors, through coherent maritime-related policies and relevant international cooperation". (EC 2013).
According to all previous definitions, it is possible to recognize the following fundamental factors of any Marine Spatial Planning procedure:

- The **integrated ecosystems' approach**, in a way to avoid the sectoral hindrances.
- **The long-term, future-oriented process**.

[4] According to the European Regional/Spatial Planning Charter ('Torremolinos Charter', adopted by the Council of Europe / Conference of Ministers responsible for Regional Planning, 1983), "Regional/spatial planning gives geographical expression to the economic, social, cultural and ecological policies of society. It is at the same time a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards a balanced regional development and the physical organisation of space according to an overall strategy".

- The potential combination **with coastal areas management**, as: "changes, at any point, in any part of those coastal systems, can generate chain reactions far from their point of origin, and possibly in a totally different system, whose environmental conditions will be subsequently altered". (UNEP/PAP 2010).
- The involvement of **geopolitics**, as MSP copes with huge surfaces of the Earth and its implementation depends on each state's sovereignty.

2. MARINE SPATIAL PLANNING AROUND THE WORLD

2.1. Related Past Activities

The international interest in the sea has been increased gradually; from the era of Roman law, according to which the sea belongs to the **common**, up to the more recent innovating uses of the hydrosphere. During the last 50 years, the development of **Regional Seas Program**, which has been launched in 1974 (afterwards the UN Conference on the Human Environment, Stockholm, 1972) is considered to be a remarkable landmark. (UNEP 2011). It aims at the preservation, conservation and sustainable development of marine flora and fauna, under the umbrella of UNEP. A complex system of Conventions, Protocols and Action Plans has been produced, which is still in use for marine regions, worldwide.
A very specific case of convention is the currently in use **United Nations Convention on the Law of the Sea** (UNCLOS II). It tends to restrain the arbitrariness that is accomplished and it could be harmful for the future of the seas. It has been signed in 1982 and came into force in 1994, twelve months after the adoption of the sixtieth nation (Hellas ratified it on 21 July 1995). (UN 2013). It is very important as it offers several tools that can help in the reasonable choice of a study area for MSP's implementation.
At local level, the after WWII urgent and limitless demand of coastal land drove to environmental degradation and to many conflicts among the human activities. In this framework, **Integrated Coastal Zone Management** (ICZM) seems to be a convenient multidisciplinary umbrella that is trying to establish a long-term collaboration among all potential stakeholders involved in coastal areas' planning and management, "using an integrated approach, regarding all aspects of the coastal zone, including geographical and political boundaries, in an attempt to achieve sustainability". (Clark 1996, EEA 2006, Goudie 2006, UNFPA 2007, UNEP-PAP/RAC, 2012). ICZM owes its origins to UN Conference on Environment and Development (Rio de Janeiro, 1992, see: Agenda 21, Chapter 17).

2.2. Institutional and National Activities

The previously displayed "prehistoric" actions have driven United Nations and especially UNESCO to be involved in marine spatial planning (MSP), through IOC (Intergovernmental Oceanographic Commission). The more remarkable latest landmark of this involvement is a guide, written by Ehler & Douvere (2009). It uses an explicit **step by step approach** and offers the capability of complete comprehension of MSP notion, with the ecosystem as reference unit. Even if there are several alternative proposals, with different number of steps (COS 2011), the core of this approach is widely accepted.

In Europe, up to 2006, European Union was not officially referring to a holistic maritime approach, as marine spatial planning is. In 2008, the Directive 2008/56/EC 'framework for community action in the field of marine environmental policy', widely known as: "Marine Strategy Framework Directive" has launched. After defining marine regions or sub-regions covered by EU' sovereignty or jurisdiction, this guide oblige Member-States to follow duties such as: a) the evaluation of environmental situation of marine waters, b) determination of the good environmental situation of their marine waters and c) fixing of environmental objectives and indicators. Additionally, Member-States should: define their protected marine areas, enact monitoring programmes of the environmental situation of their waters, operate related programmes and take the necessary measures, in order to accomplish or to preserve the good environmental situation for the marine environment, by 2020 the latest. (EC 2008a).
More recently, during 2013, EC circulated a 'proposal for a Directive' that tries to establish a common framework for both: marine spatial planning and integrated coastal management. The concept is to formulate "a systematic, coordinated, inclusive and trans-boundary approach to integrated maritime governance". In this framework, it obliges the Member-States to establish processes that cover "the full cycle of problem identification, information collection, planning, decision-making, management, monitoring of implementation, and stakeholder participation" without supporting sectorial policy targets, but aiming "coherence of management across sea basins, through trans-boundary cooperation in the same marine region or sub-region and related coastal zone and appropriate data collection and exchange". (EC 2013).
According to the same EU's document, maritime spatial plans and integrated coastal management strategies shall contribute to: a) securing the energy supply, b) promoting the development of maritime transport, c) fostering the sustainable development and growth of the fisheries and aquaculture sector, d) ensuring the preservation, protection and improvement of the environment and e) ensuring climate resilient coastal and marine areas. (EC 2013). This proposal is probably going to take its final form as a Directive during April of 2014. (Damanaki 2014).
Beyond the institutional (EU included) approaches, many coastal states have established marine spatial plans. It is widely adopted that **Australia** is the pioneer in MSP. Its planning activity started around 1980, in a way to protect from degradation the Great Barrier Reef Marine Park. Afterwards (early 2000), at national level, the basic choice was the separation of marine waters around the country into five marine zones. In this framework, the term '**marine bioregionalization**' was introduced. (IOC 2010b).
Canada, Belgium (very informative is the related report of 2005 under the title: 'Towards a spatial structure plan for sustainable management of the sea', edited by Prof. Dr. F. Maes), United Kingdom (with a quite recent comprehensive legal approach, the 'Marine and Coastal Access Act', 2009), China, Norway, Germany, the Netherlands, France, Poland, USA and other coastal countries implemented MSP, as well, focusing on legislation or/and governmental programs. (EC 2008b, Ehler & Douvere 2010, IOC 2010b).
Beyond the previously mentioned countries, UNEP has also published national reports about marine spatial planning for some countries, like Italy, Albania, Bosnia and Herzegovina, Croatia, Montenegro, and Slovenia. (UNEP 2007). Additionally, Douvere et.al (2006) illustrated related efforts in Denmark (in common with Germany and the Netherlands), Ecuador, Finland and New Zealand.

2.3. The Current Situation

Presently, marine spatial planning is a rather evolving process, which has not yet fully determined its components. In most cases, the implementation of MSP is accomplished at local level, but there are cases that it accomplished at national level, as in Australia. When a sea is under the sovereign of more than one states (e.g. North Sea, in Europe), a common marine spatial planning process is the suggested approach.
The development of MSP usually begins through the enactment of legislation; either explicitly for MSP or for environmental management or for marine management. The majority of states firstly develop certain programs or plans and afterwards determine marine zones. This zoning helps in the differentiation of areas, in accordance with marine uses, since each area has different needs, possibilities and perspectives.
Until 2014, twelve countries are supposed to have produced about 60 marine spatial plans, at the national (exclusive economic zone), sub–national (territorial sea) and state or provincial levels. (Ehler & Douvere 2010). In the majority of these marine spatial plans, the **ecosystems approach** seems to be the dominant one, but also, the countries act in their own ways.
The up to date developments in marine spatial planning provide practical lessons in favour of how marine spatial planning should be undertaken in the future. In this direction, Douvere et.al (2006) have recorded the following 5 **key findings and lessons** from the European experience on marine spatial planning: "continuity", "international cooperation", "comprehensive legal framework", "adaption of principles, procedures and processes from land use planning" and "stakeholders' involvement".
Beyond the key findings and good practices, many decision support tools have been developed ('BTM', 'coastal resilence', 'MGET', 'open ocean map' etc.) in order to help regional planners and managers of marine spatial planning. (Bolanou 2013). The last ones are of great importance for surveying engineers, as they handle with maps, GIS, elaboration of satellite images and many other similar topographic issues.

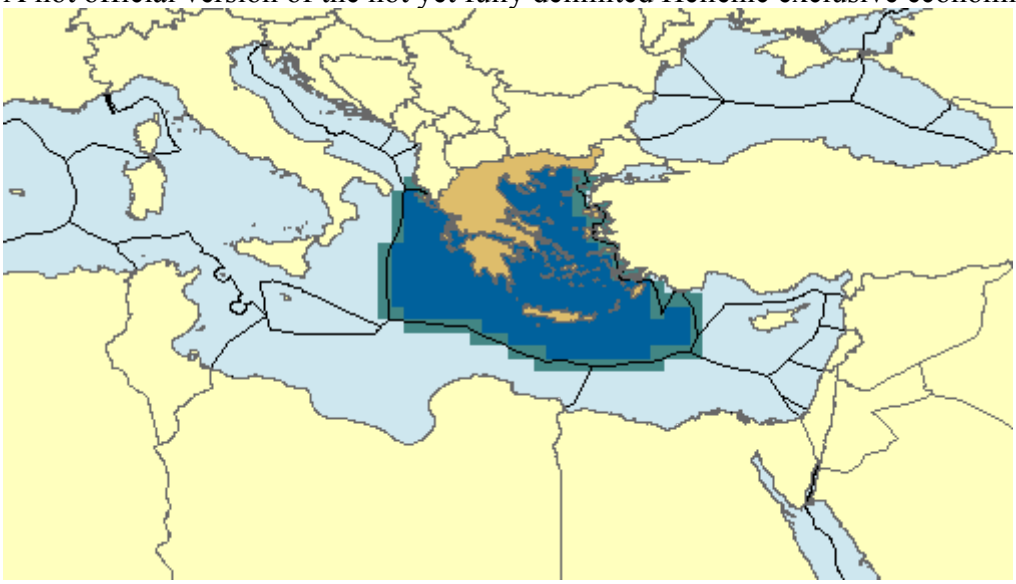
3. MARINE SPATIAL PLANNING IN HELLAS

3.1. Hellas; an Overview

Hellas (Greece) is a maritime nation that, beyond its coastline of more than 15,000 kilometres and of more than 3000 islands, has strong historic and cultural links to the (Mediterranean) sea and its marine resources. Simultaneously, it is a rather mountainous country in the south end of the Balkan Peninsula, at the south-east edge of Europe. Its area extends to a little more than 130.000 sq. km. and its population exceeds 11 million of people. The total islands' surface corresponds to the 18,8% of the country, while the equivalent population corresponds to about 15% of the Hellenes, according to the Hellenic Statistical Authority.
Geographic patterns vary widely. According to the CORINE project results, 37,5% of the Hellenic territory belongs to a 10 km coastal zone, while according to a recent research project, it is calculated that about the 80% of its population (2001) could be supposed that lives in a rather narrow coastal zone, 10 Km from the coastline. (Kiousopoulos 2008).

Its coastal ecosystems and landscape are under severe pressure due to: tourism development, intensive agriculture, uncontrolled urban expansion etc. In Hellas, as in the rest of the Mediterranean basin, the process of coastal overdevelopment has been ongoing for several decades. It leads almost inevitably to an artificial land cover of the natural environment, whether by new constructions or by restructuring the old ones. (UNEP/MAP 1996).
In the international context, Hellas has common marine boundaries with Albania, Italy, Libya, Egypt, Cyprus and Turkey. Until nowadays (2014), Hellenic territorial waters extend up to six miles and official delimitation of the Hellenic Economic Exclusive Zone is not yet fulfilled.[5]

Figure 1.
A not official version of the not yet fully delimited Hellenic exclusive economic zone (EEZ).



Source: *Sea Around US* Project & PEW, 2014

The origin of Hellenic spatial planning was the declaration included in the 1975' Hellenic Constitution concerning the state's obligation for protection of natural and cultural environment.[6] Much more later, in 1999, a law for physical planning was approved by the Hellenic Parliament (L. 2742/1999), which was in line with the simultaneously launched document "European Spatial Development Perspective" (EC 1999), aiming at the encouragement of a balanced and sustainable development of the European Union territory.
On the other hand, there is a general lack of coordination between physical planning and socio-economic development. Furthermore, the not yet fully integrated national cadastral information system is a very essential constraint towards the implementation of an integrated land use policy. It is notable that the first national spatial plan has been legitimately approved

[5] With Italy there is an agreement (1977) that focuses on the continental shelf. A similar goal is active with Turkey (that has not signed UNCLOS II), since many years. Old initiatives with Egypt (2006) and Albania (2009) could be said that are still active. Huge hindrances are not visible concerning delimitation EEZ with Cyprus; while, on the other hand, Libya has critical oppositions to UNCLOS II implementation, in general. (Rozakis 2013). (see Figure 1).

[6] According to the Hellenic ministry for physical planning: "The concept of strategic physical planning was absent in all policies after the 2nd World War. Therefore, spatial development has been the result of various non-coordinated market forces and spatial policies". (MEPPPW 2002).

only in 2008. It focuses mainly to the territorial space and the only (spot) references to the marine environment are the following ones (Bolanou et.al 2011a):

- Maritime transportations and their nodes, the ports and related infrastructure.
- Fisheries and facilities of aquacultures.
- Marine protected areas in the framework of 'Natura 2000' (two National Marine Parks).
- Location of wind facilities in the offshore marine space and the uninhabited islands.
- Energy networks (electricity distribution, fuel pipes etc.) and their expansions across the seabed.

3.2. Marine Policy & Related Facts-Activities

A 3-year national program for coastal management (1979) could be considered as the origin of Hellenic **coastal policy**. The final outcome was a Decision about "guidelines and actions needed for the management of the coasts" that was published in the official gazette of the government. (O.G.G.551B΄/15.09.1981). Integrated management, broad compromise concerning public and private sector, active protection and restoration of the coastal resources, coordination of sectoral policies and people activation seem to be the targets of that non normative legislation. (Kiousopoulos 2008):

Later on, around 1990, many spatial projects were carried out. Most of them are related to islands and coastal areas. Unfortunately, none of these projects has been ever officially approved and enacted. During 1995, a wide public discussion about coastal management drove (only) to a rather academic ministerial report on ICZM in Hellas. Even if that effort failed to emerge the government willingness for a more thorough and specified coastal policy, two years later Hellas took part to the European Union demonstration program on integrated coastal zone management 1996-1999, with 6 demonstration projects (Athens, Epirus, Cyclades, Magnesia, Strymonikos, Kavala). (Kiousopoulos 2008).

On the other hand, and beyond coastal policy, the more important Hellenic landmarks in the framework of a supposed **marine spatial planning** are the following:

2002. The 'National Strategy for Sustainable Development' was declared by the Ministry in charge. It referred to 'Agricultural-Fishing' as one of the nine sectoral approaches, but no special reference to marine spatial planning occurred. During 2006, a revised version of the previous document was published. (MEPPPW 2002).

2011. Law 3983/2011, "National strategy for the protection and the management of marine environment. - Adoption of the Directive 2008/56/EC". (O.G.G.144A΄/17.06.2011). The law' specific objectives focused on:

- Taking measures to achieve and maintain good environmental status in the marine environment, up to 2020.
- Application of measures, e.g.: a) guarantee of protection, prevention of deterioration and restoration of marine ecosystems and b) prevention and reduction of depositions in the marine environment, aiming at the obliteration of pollution.
- Managing of human activities that should follow an ecosystem approach (ensuring that the total pressure of the activities will be compatible to levels, which ecosystems will be able to respond to anthropogenic impacts).
- Achieving cohesion of environmental parameters and ensuring the integration of the numerous policies (for the marine environment).

2011. Official approval of the Specific Framework for Spatial Planning for Sustainable **Aquaculture** and the related Strategic Environmental Impact Study. (Ministerial Decision, O.G.G.2505B΄/04.11.2011). It is another sectoral approach, in the era when integrated methodologies should be dominant.
2012. According to the updated Hellenic (normative) legislation concerning buildings (L. 4067/2012, O.G.G. 79A΄/9.4.12), urban design incorporates procedures in both: territorial **and marine** physical space.
2012. Ministerial Decision concerning the Establishment of the National Committee of Marine Environmental Strategy, according to the Law 3983/11 (O.G.G.189staff/11.04 2012). In this Committee, representatives of 8 ministries are participating. [7]
Beyond legislation (see above), very revealing are the results of the survey of the ministry's announcement (press releases) during the last four years; from April 2010 (almost the beginning of the Hellenic economic crisis) till nowadays (March 2014). Indeed, according to the official site of the Hellenic Ministry for the Environment, Energy and Climate Change, from the 117 posted announcements: 21 (18%) are dedicated to urban and regional planning and other 21 **(18%) to marine policy**; but the majority are devoted to hydrocarbons-pipelines-energy (58 announcements, 50%), while other 17 refer to supplementary issues. The more important announcements related to MSP are the following:
2010, July. Preliminary location of marine wind parks.
2012, August. Dissemination policy (web site included) from the administration body in charge (Special Secretary of Waters), in the context of the Directive 2008/56/E.C.' objectives. (O.G.G.2377B'/27.08.2012).
2012, August: Public discussion (dissemination process) concerning the implementation of the Directive for the Marine Strategy.
2013, August: Official speech of the Minister for Environment. Energy & Climate Change concerning "Blue Development along the Hellenic Marine Space".

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[7] The Hellenic public domain includes numerous administrative bodies, which are associated to marine environment issues, at various degree of involvement. The **Ministry for the Environment, Energy and Climate Change** is recognized as the main spatial planning oriented authority in Hellas. Till 2009 its name was Ministry for Environment Spatial Planning and Public Works. Till 1985 its name was Ministry of Spatial Planning, Settlements and Environment. It was established first in 1979.
Other public bodies (at ministerial level) involved into the marine environment' issues are listed below:

- Ministry for Foreign Affairs, which includes services for the maritime affairs in the framework of international relations. Beyond the determination of EEZ with the neighbouring states (see figure 1), this ministry cooperates with other governmental authorities in order to support to Hellene mariners in case of shipwreck, repatriation etc.
- Ministry for National Defence, with operational objectives. It incorporates Navy Hydrographic Service, with responsibility for the mapping of Hellenic marine space.
- Ministry for Development and Competitiveness, which is involved in investing procedure and as a result it is responsible for the potential uses of marine space.
- Ministry for Culture and Sport, which includes the Department of Underwater Antiquities.
- Ministry for Rural Development and Food, which includes Directorates for: a) Marine Fisheries, b) Aquaculture & Inland Waters and c) Fisheries Applications & Fisheries Production.
- Ministry of Marine Affairs and Aegean Sea; it incorporates the duties concerning maritime transport and Coast Guard.
- Ministry of Public Works, Transportation and Networks that is responsible for port infrastructures, operation and exploitation of ports, marine transportations etc.
- Ministry for Education and Religious Affairs, which supervises the researches concerning Hellenic marine space; the Hellenic Centre for Marine Research included.
- Ministry of Finance, Ministry of Interiors, Ministry of Tourism with minor but crucial involvement.

2013, October: Discussion at the Ministerial Committee in charge concerning diving parks in the Hellenic seas.
2013, November: The Minister in charge, G. Maniatis, announced (in the context of a conference devoted to "Blue Development") that the related Hellenic Strategic will be fulfilled in 5 steps-actions, as following: continuous monitoring for updating the objectives, training and measures, coordination of country strategies, monitoring the status of marine sub-regions and finally starting public dialogue to inform and sensitize the public.
2014, February: Ministerial announcement concerning the operational beginning of waterways in the Hellenic seas.
As a result of the previously mentioned facts, it is quite clear that no important initiatives have been undertaken in the direction of marine spatial planning in Hellas. It is characteristic that during the last decade a Special Framework (plan) for Physical Planning & Sustainable Development of Hellenic Coastal Areas failed many times to be officially approved. (Beriatos & Papageorgiou 2011).
It is well-known that nowadays Hellas confronts serious **financial problems** that act (or supposed that act) as barrier toward the establishment of a marine spatial planning process. At present, the dominant governmental goals are financial and many already legally approved planning procedures (e.g. criteria for investments location) have been sacrificed in the road toward economic growth. On the other hand, the Hellenic Government adopts "marine strategy and spatial planning" as one of the four objectives of its half-year Presidency of the European Union, during the first semester of 2014. It is a hopeful choice, but without clear perspective to be practically materialized for the sake of Hellenic MSP.
Last, but not least information, concerning the notion of MSP in Hellas is the fact that until 2008 no research paper had been written concerning marine spatial planning in Hellas. The first related paper was presented at the Conference 2008 of the Hellenic section of ERSA (European Regional Science Association). The author was George Voulgarakis (2008), Minister of Marine Affaires (sic) at that time. Three years later, the authors of the present paper followed with 3 "responses" (Bolanou et.al 2011a, Bolanou et.al 2011b, Kiousopoulos & Bolanou 2011) and Kiousopoulos (2012) followed with a paper published at a university journal. Almost simultaneously, Beriatos & Papageorgiou (2011) addressed to a spatial planning conference with the paper: 'Maritime and coastal spatial planning: The case of Greece and the Mediterranean'. Since then, no other academic efforts concerning the Hellenic marine spatial planning occurred.

CONCLUSION – DISCUSSION

Surrounded by the sea, Hellas (being in the European political and economic framework) has vital interests on the marine environment and heavily depends on it. But, even its long-standing maritime tradition, and even its location and the possession of thousands of islands, it is obvious that not a clear coastal policy neither a marine spatial planning procedure are yet established and fully implemented in Hellas.
All the related spatial issues in the marine environment have been confronted with the traditional but usually failing sectoral approaches. Hellenic administration has not yet recognized marine spatial planning as a crucial process in running integrated management in

the marine environment. The potential benefits are not yet widely accepted, even the obligation to follow the EU legislation concerning marine space. Some doubtless barriers could explain the absence of such an innovating policy, as the development of MSP in Hellas is, e.g. the lack of fully implemented: cadastre, spatial plans and integrated coastal policy.
On the other hand, the study area of MSP's implementation in Hellas seems to be a critical point. The answer to dilemmas like: 'territorial waters or exclusive economic zone' and 'local or national implementation' is not only a question of scale, but also a question of **geopolitics**. Hellas has not yet delimited its exclusive economic zone (EEZ) because of the existing realm with their neighbours. Indeed, the basic rule that neighboring states should cooperate to achieve an integrated and ecosystem based common marine spatial planning procedure seems to be a difficult goal in the Hellenic neighborhood, at present time.
At operational/methodological level, a potential trend is the marine spatial planning to be unified with integrated coastal zone management; as the international tendency is. (NOAA 2009, EC 2013). Consequently, it may be probable, in the near future, to speak for a Hellenic CMSP (coastal & marine spatial planning) instead of speaking for MSP. Furthermore, Kiousopoulos & Bolanou (2011) believe that the establishment of **ontology** concerning coastal and marine planning, probably emerging from the academic environment, could help in better understanding of all related aspects, in illustrating of potential MSP's benefits and simultaneously in supporting dissemination objectives. Later on, this ontology could sustain the development of marine decision support tools and connected methodologies.
In the previously described context, the potential role of **surveying engineers** is decisive. Their knowledge in positioning is unique. Their ability to supply all needed geographic data and maps transform them to a critical factor. The seabed mapping via modern methodology could be the core of this involvement. The "capture, storage, manipulation, analysis, management and presentation" of all the related databases (oceanographic data included) will provide the cartographic background with all needed geo-information that is necessary for the launching of a sustainable MSP initiative. In this perspective, many new tools for the sake of marine spatial planning procedure can be developed by surveying engineers.
Nowadays, the dominant objective for cost elimination drives irreversibly to the use of innovating but cheap methodologies; this is the current stimulus for the surveying engineers. In this framework, the society of Greek surveying engineers has to play a fundamental role, in parallel with planners/economists and biologists/environmentalists.

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In the past: field surveying engineering projects, architectural, urban and physical planning projects, in the context of his own private office. Also: freelancer journalist focusing on the spatial aspect of tourism.

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