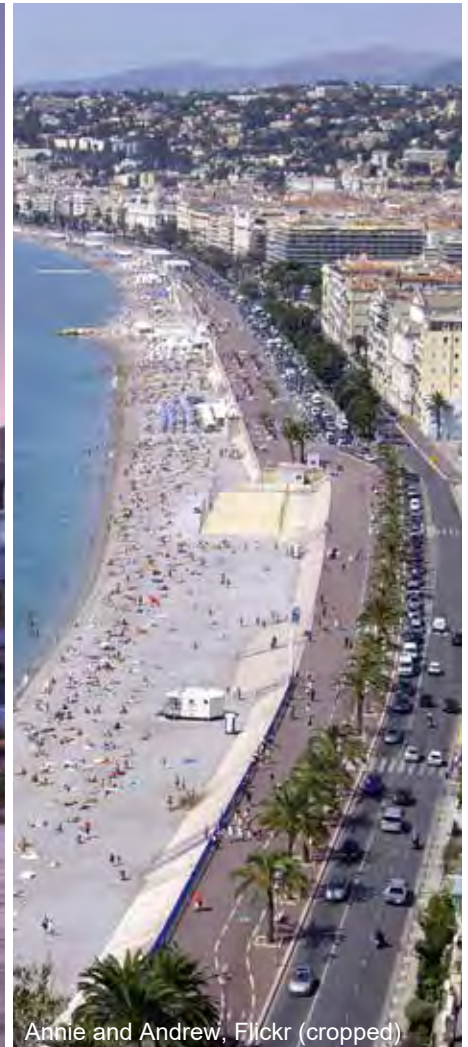


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Regulating Coastal Zones

International Perspectives on Land
Management Instruments

CHAPTER 12 - GREECE



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CHAPTER 12: GREECE

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Overview

Greece has the longest coastline of all states on the Mediterranean Sea and the third longest coastline of the countries in this book – after Australia and the USA. Given their attractiveness for a range of uses, Greek coastal areas have increasingly been subject to intensive pressures from human activities, including tourism, recreation, vacation homes, fisheries and aquaculture. These pressures threaten coastal ecosystems and natural resources, while also generating conflicts between incompatible land uses. The sheer length of Greece's coastline, together with its centralized system of governance and a fragile economy, have challenged coastal zone management. Greece has not yet ratified the Mediterranean Integrated Coastal Zone Management (ICZM) Protocol and its coastal setback falls short of the standard set by that document. In addition, authorities must contend with past widespread illegal development. More recently, various measures taken during the economic crisis period (2010-2018) in order to boost the Greek economy have added additional layers of complexity. This chapter delves into these challenges at a time when the Greek public is gradually becoming more aware of the value of the coastal area as both an environmental and economic resource.

The Greek regulatory context changes relatively rapidly. This chapter presents the state of play and data to August 2018.

1. The context: introduction to the coastal issues in Greece

At 13,676 kilometres (World Factbook, n.d.), the Greek coastline makes up almost one third of the total coastline along the Mediterranean basin¹ (Figure 12.1). Almost half of this coastal zone is located in continental Greece, with the remaining half dispersed among Greece's 3,000 islands (or 9,800, if islets are included). This extensive resource is a key element of the Greek landscape: About 33% of the Greek population resides in coastal areas within 1-2 km of the coast (YPEN – Ministry of Environment and Energy, 2018, p.234). Located in the coastal zone are: (a) the country's largest urban centers, among which Athens and Thessaloniki, (b) 80% of national industrial activity, (c) 90% of tourism and recreation activities, (d) 35% of the country's farmland, (e) the country's fisheries and aquaculture, and (f) an important part of the country's infrastructure, among which ports, airports, roads, power and telecommunication networks (YPEN, 2018, p.234). Additionally, Greek coastal areas are characterized by a rich biological and cultural diversity: natural habitats and habitats of species (YPECHODE, 2006), coastal forests and forest lands, archaeological sites, monuments and historic settlements.

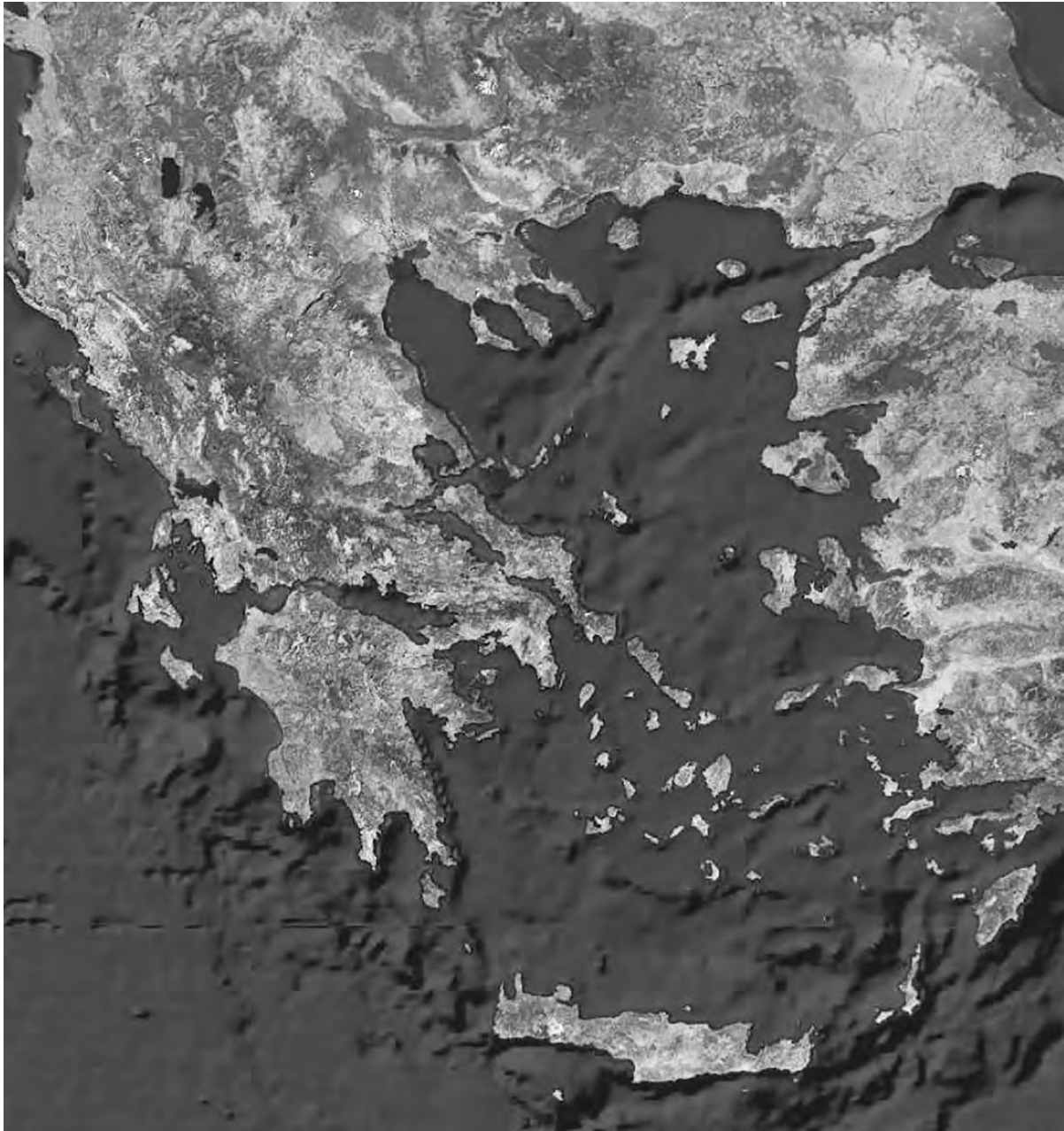


Figure 12.1: Satellite map of Greece. The longest coastline on the Mediterranean Sea.
Source: NASA

Greek administrative structure

To understand Greece's coastal laws and policies, it is necessary to appreciate its administrative structure. There are three levels of governance in Greece (central, regional and local) but four key administrative bodies:

- ***Central/State/National Government***
- ***Decentralized administrations*** are agencies of the national government established in 2011 under a then new administrative structure (Law 3852/2010, which defines the administrative structure of Greece). They are responsible for State audit and executive

tasks. There are 7 decentralized administrations, all of which are on the coast: *Attica; Thessaly-Mainland Greece; Epirus – Western Macedonia; Peloponnese, Western Greece and Ionian Islands; Macedonia-Thrace; Aegean; and Crete.*

- **Regions** (periféreies) are governed by a regional governor and a regional council popularly elected every 5 years. There are 13 regions which are then divided further into regional units (perifereiakés enótites), usually but not always corresponding with the former prefectures. Among the 13 Regions, 12 qualify as coastal.
- **Municipalities** (dímoi) are governed by a mayor and a municipal council, elected every 5 years. The municipalities are further subdivided into municipal units.

Within the central government, but at a decentralized level, an important group of administrative bodies which play a key role in coastal zone management in Greece are the Regional Directorates of Public Property (RDPPs). The RDPPs are regional arms of the Ministry of Finance, which manages public land. By Presidential Decree (142/2017), the RDPPs are the responsible authorities for the protection and management of the Greek coast (Article 105). We will discuss their role in greater detail below.

Overview of the Greek legal framework for coastal zone management

As early as 1940, the Greek state recognised the need to protect and manage coastal areas by legal means, and introduced special coastal legislation in the form of an Emergency Law² (2344/1940 – henceforth, the ‘1940 coastal law’). The 1940 coastal law addressed the definition, delimitation, use and protection of the “Seashore” and the “Beach”, as integral parts of the country’s public domain. This law remained in force until 2001, when it was replaced by Law 2971/2001 on “Seashore, Beach and other provisions” (the ‘2001 coastal law’).

Besides the 2001 coastal law, topics relevant to coastal zone management appear in other laws, including laws addressing protected areas and nature conservation, water, regional and town planning, fishing, ports and marinas.

The backbone for all domestic legislation for environmental protection, management and planning is the Greek Constitution (1975, most recently amended in 2008). The Constitution stipulates that protection of the natural and cultural environments is a duty of the State (Article 24). To that end, the State has developed a special set of national rules for environmental protection and planning regulation, which cover, *inter alia*, the coast as an environmental asset and an economic good. The need for such rules was reinforced by Greece’s entry (in 1981) into the European Community and its consequent obligation to adopt Community objectives and policies for environmental protection. Indeed, more than 200 EU environmental directives have been incorporated into Greek law since 1981, covering both traditional environmental themes (e.g. protection of species, water and air quality) and new areas of environmental interest, such as climate change, resource efficiency and biodiversity protection. Under the dual requirements of constitutional rules and Community legislation,

several additional pieces of domestic environmental legislation have been enacted since 1975. The legislation affects – or should affect – both the general and special planning frameworks at the national and regional levels, land use regulation at the local level and environmental impact assessments and licensing at the site level.

Greece’s recent environmental and planning legislation provides a framework and vision for integrated coastal zone protection and management. For example, L. 3937/2011 on the “Preservation of Biodiversity and Other Provisions” (henceforth, ‘the 2011 biodiversity law’), includes several provisions specific to the coast, while L. 4546/2018 on the “Incorporation into Greek law of the Directive 2014/89/EU on maritime spatial planning” (henceforth, ‘the 2018 maritime spatial planning law’) provides, for the first time, for an integrated management of the coastal zone through maritime spatial planning. Although Greece has not yet ratified the Protocol on Integrated Coastal Zone Management (ICZM Protocol, which it signed in 2008), many of its objectives and principles have been substantially introduced into Greek law through recent legislation on maritime spatial planning. Past and future challenges relate to the systematic implementation of the relevant legislation.

Significantly, tensions between recent provisions and “old-type” legislation, which focused on the administration of the coastal public domain (including the 2001 coastal law), could potentially undermine the capacity of the regulatory system to address complex coastal policy issues. Moreover, the lack of resolution on some issues generates significant gaps between policy, regulation and implementation. A new approach is needed to secure a better balance between coastal zone preservation and development. In this chapter, we hope to contribute to the ongoing debate on the way forward for Greek coastal zone management.

Finally, we note that planning legislation plays an important role in coastal zone management, as outlined in detail at section 4 of this chapter. The most recent Greek planning legislation is Law 4447/2016 on Spatial and Urban Planning (henceforth the 2016 planning law).

2. Definition and delineation of the coastal zone in Greece

Defining the coastal zone, or specific elements within the zone, is essential to understand the property rights implications of coastal law and policy. But in Greece, the legal definitions and associated procedures which were used to define areas of the coastal zone, until recently, did not provide certainty regarding the precise location of boundaries, leading to disputes and delayed implementation.

Definition of the coastal zone: from the 2001 coastal law to 2018 maritime spatial planning law

Until recently, the notion of a ‘coastal zone’ in Greece remained a vague geographical concept, without explicit recognition in national legislation. Under both the 1940 and 2001 coastal laws, there was no definition of the coastal zone, but the ‘Seashore’ and the ‘Beach’ were defined. The following definitions are provided at Article 1 of the 2001 law:

The term **‘Seashore’** (“aigialos” in Greek) refers to the area of the coast which might be reached by waves in their highest point (excluding unusual storm events). The ‘Seashore’ also serves to define the shoreline – the line between land and sea. The shoreline is located at the ‘Seashore’ boundary defined by the “usual maximum winter wave run-up”.

This definition of the ‘Seashore’ originates from an 1837 law on the Greek public domain. The use of the ‘maximum’ wave run up might imply that the Seashore could move as high tides get higher. As we see in other countries in this book, such a reliance on nature is not unusual. However, the Greek definition is based on the word “usual” maximum wave run-up, which could evoke an expectation for the responsible body to set some limits, by calculating what constitutes the “usual”, within determined periods of time. Nevertheless, the Greek authorities did not attempt to make a quantitative determination of what is “usual” until they enacted the 2001 coastal law. Prior to that time, deep uncertainty was created regarding the legal status of landholders, investors and government authorities with interests on the coast (Alterman et al., 2016). The impacts of this uncertainty have been far-reaching: As will be discussed in detail below, the legal definition of the Seashore also determines the legal ownership of the land, as the Seashore is public land; thus, many thousands of stakeholders have been affected.

The **‘Beach’** (“paralia” in Greek) is defined as a zone adjacent to the Seashore, with a width of “up to 50 metres”. This zone is essentially a buffer zone between land and sea. The precise width of the Beach is to be decided on a case-by-case basis, with consideration of local conditions and existing development patterns. The Beach zone is usually defined as “open space” in spatial plans, but may be used for roads, pedestrian and bicycle routes. Yet there is no legal requirement that the Beach be demarcated and in many cases, it is not. Where a Beach area has been defined, private property plots begin at the outer boundary of the Beach. Both the Seashore and the Beach are part of the Greek public domain, while their public use is, according to the law, permitted as-of-right. The use of the Seashore and Beach is discussed below.

The 2001 coastal law also defines the concept of the **‘old Seashore zone’**; the area of land between the previously identified (historical, 19th Century) shoreline and the newly identified shoreline. This definition pertains to locations where the sea has receded and the shoreline has shifted towards the sea. In other words, where the coastal zone has been extended by additional land which was previously under the sea. Some of the locations where this occurs have very high land values, therefore there are significant property rights issues associated with the change. The old Seashore belongs to the State (but as private domain) and is registered as public property (Article 2). Beyond the definitions we have mentioned here, the 2001 coastal law does not define a broader ‘coastal zone’.

A different, more comprehensive, approach to the notion of the coastal zone can be found in the 2011 biodiversity law. According to this law, the **‘Coastal Zone’** is defined as:

“Terrestrial and aquatic sections on either side of the shoreline in which the interaction between the marine and terrestrial part acquires the form of complex systems of ecological elements and resources composed of biotic and abiotic components coexisting and interacting with human communities and relevant socio-economic activities. The coastal zone may include natural formations or small islands in their entirety” (Article 2 par. 12).

The same law introduces the notion of a **‘Critical Coastal Zone’**, which is defined as:

“The part of the coastal zone in which marine and terrestrial parts meet and interact... [and in which] are included geomorphological formations, areas consisting of corrosion materials from nearby areas or carried by wind, characteristic flora or land eroded at a rate that is a danger to anthropogenic facilities or activities”.

These definitions reflect a more comprehensive approach to the demarcation of the Greek coastal zone, based on ecological, biological and climatic criteria. They imply that the coastal zone may cover a wider area than the land within the ‘Seashore’ and the ‘Beach’, but these two zones are the minimum basic components. These definitions come in the wake of decisions of the Greek Council of State, which has accepted that the coasts are vulnerable ecosystems (CoS 978/2005) requiring increased protection (CoS 1500/2000) and are suitable only for minor development (CoS 1340/2007, 1790/1999, 1129/1999, 3344/1999). Both definitions, however, appear to apply only under the 2011 biodiversity law and thus do not provide a broader legal basis for coastal protection and management.

The EU Directive on maritime spatial planning (2014/89/EU) suggests that EU members take into account land-sea interactions when establishing and implementing maritime spatial planning. As such, the recent 2018 maritime spatial planning law (introduced above) opted for a unique spatial planning and management system for marine and coastal areas. The new law, besides transposing the definitions on maritime spatial planning deriving from the relevant directive into Greek law, introduced additional definitions for the coastal zone and integrated coastal zone management.

According to this law, the **‘Coastal Zone’** is defined as:

“the geomorphological area on either side of the shoreline in which the interaction between the marine and terrestrial segments takes the form of complex systems of ecological elements and resources composed of biotic and abiotic components coexisting and interacting with human communities and relevant socio-economic activities” (Article 3 par. 5).

The same law introduces the notion of “**Integrated Coastal Zone Management**”, which is defined as:

“a dynamic process for the sustainable management and use of coastal zones, taking into account the vulnerable nature of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the marine orientation of certain activities and uses and their impacts on the maritime and land sections” (Article 3 par. 6).

The introductory report of this law states that “*sea and coastal areas are not two distinct zones but a "whole" that needs to be addressed through a specific methodological approach and particular management practices*”, and “*the understanding and treatment of the land-sea interactions is vital for sustainable management and development of coastal areas, and for the coherent planning of land and sea activities*”.

Delineation of the shoreline and coastal zone

By 2001, following several decades in which market forces, rather than planning, drove development decisions in the coastal zone, there was a new approach for the demarcation of the shoreline: Authorities sought to define a permanent or quasi-permanent line. The official procedure for the delineation of the Seashore/shoreline was thus introduced by the 2001 coastal law (Article 4). That procedure involved the appointment of a committee to identify, on site, features of the landscape that would indicate the location of the “usual maximum winter wave run-up”. The process could be initiated either by the relevant state authority (*ex officio* procedure) or following a request from an interested party, such as a landowner. However, even though a Joint Ministerial Decision was issued in 2005 (Government Gazette 595 B/2005) particularizing in detail the set of criteria to be taken into account for the delineation of the Greek shoreline, the completion of the process was delayed for several years. Furthermore, the delineation was undertaken on a case-by-case basis in what was a resource-intensive process. Thus, by April 2014, only 8% of Greece’s shoreline had been officially delineated and ratified (Ministry of Finance, 2014). Areas experiencing high pressure for residential and tourism development, such as Attica and Cyclades, were amongst the regions with the highest percentage of demarcated Seashores and Beaches (Karousos, 2010, p.41).

Given the difficulties of that method, as well as pressure from foreign institutions (troika³) to speed up the delineation process, a new administrative procedure for delineating the coast was adopted in 2014, through amendments to the 2001 coastal law. The new fast track procedure was completed in 2018.

The procedure was based on photo interpretation of orthophotomaps which depict a zone at least 300m from the shoreline (hereinafter referred to as "basemaps"). According to this procedure, key environmental features were identified on the basemaps, to delineate a

“preliminary Seashore” line⁴. The orthophotomaps marked with this line, were then sent to the relevant national government agencies (Regional Directorates of Public Property – RDPPs and Hellenic National Defence General Staff – HNDGS) for approval. In areas where the Seashore had not previously been delineated, the RDPPs were required to check the “preliminary Seashore” line against coastal conditions, using criteria established in the aforementioned 2005 Ministerial Decision (including geomorphology, maximum wave run up, ecosystems and more) and then make a proposal for the final demarcation of the Seashore, due by end of June 2018. The maps were then approved by regional committees and ratified by the relevant decentralized administration. The new procedure resulted in a geoindex and a map with the delineated shoreline across the country⁵.

Following the completed delineation process, any party who contests the delineated Seashore can request a re-delineation of the Seashore and the Beach (Article 7A of the 2001 coastal law).

3. Legal status of the coastal zone in Greece

We noted above that the ‘Seashore’ and ‘Beach’ have long been defined as part of the Greek public domain. The coastal law of 2001 reinforces this designation, specifying that these areas constitute properties for public use and are owned by the State. The State is responsible for their protection and management (Article 2 para. 1).

On designation of these zones, private property rights are deemed to have been expropriated. Where private land, beyond the shoreline, is included within the Seashore and thus expropriated, affected landowners receive compensation in accordance with the general legislation on compulsory acquisition. But those whose land is expropriated for the ‘Beach’ receive compensation through a more demanding procedure related to the implementation of town plans. This can be a long, drawn-out process. In addition, any increase in the value of the relevant land, if resulting from improvements made following its declaration as ‘Beach’, is not taken into account in the calculation of due compensation (2001 coastal law, Article 7 para. 4).

Land use in the coastal public domain

In keeping with the purpose of the coastal public domain as a natural open space, permanent construction is prohibited on ‘Seashore’ and ‘Beach’ areas (2001 coastal law, Article 13). The land may be used for environmental and cultural purposes (e.g. protection of archaeological sites and monuments), or for other uses in the public interest, provided such uses do not undermine the public designation of the land and do not damage the natural landscape. The law also allows concessions on both the Seashore and the Beach for works that serve commercial, industrial, transportation and port purposes or other purposes in the public interest (2001 coastal law, Article 14).

Temporary uses, such as those associated with bathing (sunbeds, parasols) or other recreational purposes (e.g. playgrounds, kiosks, Beach bars), are an important feature of public use of the coastal zone. As such, the Ministry of Finance may concede to individuals or to private and public legal entities (including municipalities), the right to use the Seashore and the Beach for such temporary uses. These rights of use are known as “concessions”. In protected areas, such as the sites belonging to the European network “Natura 2000”, the consent of the Ministry of the Environment is required before any concessions can be granted. The municipalities set the cost for “concessions” for temporary use, and the revenue generated through the process is an important component of their budgets.

Notably, the Ministry of Finance has delegated significant powers regarding the development and use of public property to two public enterprises with large portfolios of coastal real estate assets, namely the Public Properties Company (ETAD) and the Hellenic Republic Asset Development Fund (TAIPED). The former manages a large portfolio of approximately 70,000 titles of properties owned by the Greek state, among which over 2,000 plots are located in coastal areas. The latter was founded in 2011 as part of the country’s Medium Term Fiscal Strategy, with the aim of promoting the country’s privatization program. However, its role in land development has been weakened in recent years, and its real estate portfolio, including coastal properties, has been drastically reduced since 2016. Indeed, in that year, both ETAD and TAIPED became direct subsidiaries of the “Hellenic Corporation of Assets and Participations S.A.”, a public company created in order to (a) contribute resources for the implementation of Greece’s investment policy and to make investments that contribute to strengthening the development of the Greek economy; and (b) contribute to reducing the financial obligations of the Hellenic Republic.

Coastal setback rules

In our discussion of rules for coastal setbacks, we first note that no construction is permitted on the ‘Beach’, as defined above. As such, where the Beach has been delineated, it plays the role of a *de facto* setback zone. But, as we have noted, a ‘Beach’ zone is optional to define. The coastal setback we now turn to discuss is beyond the Seashore and Beach zones.

The coastal setback zone widths defined by Greek legislation are well below the standard minimum 100 metres set by the ICZM Protocol. In coastal areas lying outside town plans (and outside settlements which existed before 1923), new development must be set back at least 30 metres from the shoreline (the boundary of the Seashore; Law Decree 439/1970, Article 1). Even this modest setback rule does not apply to (a) Industrial uses which must be located on the coast; (b) Significant hotel and tourism-related services (which are not further defined in the law) and (c) public works and port and marina works. In these cases, the law provides for the issuance of special case-specific Ministerial decisions which expound the reasons for exemption. We note that while some exemptions may be necessary for the public good, this long list of exemptions undermines the essence of the very public purpose of the

setback regulations. This problem of exemptions appears repeatedly in the Greek legislation, as we will see below.

Apart from these general provisions, Greece has adopted special rules for tourism and recreation facilities developed on the 'Seashore' or 'Beach', through the 2013 tourism law (L. 4179/2013, Article 5 para. 3). According to this law, all tourist accommodation located in large-scale tourist resorts have a setback rule of at least 50 metres from the shoreline, while non-tourist buildings located in these resorts (e.g. holiday homes, recreation complexes and sports facilities), which are maximum 7.5 metres high, have a 30-metre coastal setback requirement. The setback distances for tourist resorts may be further reduced when the total façade of the land plot is at least 100 meters in length along (parallel to) the Beach. In this case, restaurants, recreation areas, restrooms, sports facilities and playgrounds included in the resorts may be developed at the outer edge of the Beach, or when the Beach is not defined, at a mere 10-metre distance from the Seashore/shoreline, so long as they are no taller than 3.5 metres (Article 5 para. 4 of the 2013 tourism law).

Right of public access

Greek legislation explicitly requires provision of free access for the public to and along the 'Seashore' and the 'Beach' (2001 coastal law, Article 2 par. 3 & 4). The law stipulates (Article 15 par. 3) that any 'concessions' for use or works on the 'Seashore' or 'Beach' should ensure and not impede public access to these areas, with limited exceptions (e.g. security, public health). Authorities may not grant exclusive use (where access is barred to the public) of the 'Seashore' or 'Beach', unless required for reasons of national defence, public safety (e.g. during construction works), or protection of antiquities (Article 15 par. 4).

The notion of an open and accessible coast preceded the 2001 coastal law and is certainly reflected in other laws applicable today. For example, the 1983 urban planning law (1337/1983) prohibits the erection of fences within 500m of the shoreline (Article 23), to protect the coast and ensure access. Yet this prohibition is not absolute: A Presidential Decree (236/1984 A. 95) was published specifically to identify how the fencing prohibition is to be used and includes a long list of land uses that are exempt. The decree takes a broad stance on uses which should be protected for the benefit of the public. Among exempted uses are several kinds of agricultural installations and farms, hotels and other tourist facilities, industrial installations and mines, military installations, big transport infrastructure (airports, ports etc.), schools, hospitals and other buildings of social character, sports facilities, prisons, monasteries, cemeteries, natural monuments and archaeological sites. In view of the large number of exceptions listed in the Presidential Decree, the 500-metre fencing prohibition has been substantially undermined and it is questionable whether it serves a meaningful purpose in its diminished form.

Despite its limited applicability, the fencing prohibition has drawn several disputes, probably because it touches directly on private property rights issues. The topic has even reached the

Greek Council of State twice. In a ruling from 1992 (CoS 3521-22/1992, plenary session), the court held that the prohibition complies with the protection of the environment required under Article 24 of the Greek Constitution, without violating the constitutional right of ownership, since it applies only to areas not designated for residential use (outside approved city plans and outside existing settlements). The Court further found that, given the exemptions listed in Presidential Decree 236/1984, fencing is allowed for a wide range of uses and, therefore, the ban is enacted in very few cases – and even in these cases, fencing is permitted if landowners are growing trees or crops on the property. Under these conditions, the Court concluded, the law neither violates the core of the property or its intended use, nor harms the opportunity for exclusive use (when permitted). Thus, the court considered that the law is compatible with the provisions of the Greek Constitution regarding property protection.

In 1970, the same law which set a compulsory 30 metre coastal setback (L.D 439/1970) also provided for expropriation of land to be used for the construction of access roads to the coast. The minimum width required for such access roads is 10m. Building on this provision, the 1983 urban planning law provides for authorities to create public access routes to the Beach and Seashore, through expropriation of private property (Article 24). It also allows authorities to expropriate and demolish existing enclosures blocking access to the coast; to remove existing buildings on the shore and transfer ownership to local authorities or to public benefit organizations until demolition. Beriatos & Papageorgiou (2010) note that at the time of their approval, the access road provisions were seen to be in the public interest and to satisfy “the sense of public justice”. However, such access roads are not common and those which were established have not been effectively monitored to keep them open and safe for use.

Overall, the specific requirements for the provision of access roads and prohibition of fencing are poorly enforced. In many areas, the public cannot access the sea due to continuous rows of private properties and hotels which lead to a *de facto* privatization of the shore. Poor administrative responsiveness and local clientelism, along with poor reception and even opposition from property owners to the access laws, are among the main factors that have led to this situation.

4. Planning policies and tools for coastal protection and development

Beyond the public domain and the rather narrow setback zone, the regulation of coastal development in Greece relies on the country’s general planning legislation. Existing planning instruments can be utilized to achieve coastal protection and development goals. For example, planning law (the 2016 planning law) provides explicitly for the possibility of adopting special strategic guidance, at the national level for coastal, areas and islands. In addition, special guidelines and regulations for coastal areas may be included in regional and local spatial plans.

Reliance on local planning means that there are disparities across municipalities. It also means that there is room for positive local initiatives in coastal zone planning. There is,

however, a concern amongst Greek scholars that general planning legislation might not be adequate to ensure effective coastal protection and management (Papapetropoulos, 2004; Beriatos & Papageorgiou, 2010). These scholars suggest that general planning schemes at the national and regional levels do not clearly distinguish between coastal and other areas and that the special planning schemes adopted to date are oriented towards the formulation of criteria for the siting of sectoral activities, such as tourism, aquacultures and wind parks, rather than taking a holistic view. There is also concern regarding regulatory planning at the local scale, which, beyond some specific local setback limitations and land-use restrictions, remains limited in scope and does not address integrated coastal zone management. On the other hand, there is no evidence that special coastal planning legislation could ensure a better balance between development and conservation goals in the Greek coastal zone, or better outcomes in terms of coastal protection and management.

Strategic planning guidance for coastal protection and development

Greek authorities have adopted several sectoral strategic plans since the 1990s. Most recently, in 2008-2009, the national government approved the country's first national strategic spatial plan – the General Framework Plan – and three Special Framework Plans (dealing with Renewable Energy Sources, Industry and Tourism respectively). Each of these plans contains specific provisions for coastal areas, but these provisions are very general and there may be cases in which the various policies contradict each other. There is no measure in place to prioritize or coordinate policies for the benefit of the coastal zone.

The General Framework Plan (2008), generally promotes the protection of coastal resources, and increased co-ordination on coastal matters between responsible authorities at the national, regional and local levels (Article 9). It stipulates that authorities should avoid siting or approving large-scale installations near the Beach (assuming, of course, that the relevant installations do not require proximity to the sea for effective operation). The Plan refers to the application of principles of integrated coastal zone management in designing policy measures and regulation for coastal areas. In referring to implementation of its general guidelines, the Plan explicitly states that there is a need to adopt a Special Framework Plan for coastal areas and islands.

Despite that statement, there is no adopted Framework Plan for the coastal zone. The authorities prepared multiple versions of such a draft Framework Plan over several years, beginning in the late 1990s. A version of the draft Plan from 2003 proposed a 100-metre setback provision, which was later dropped. Another version, from 2009, responded to the ICZM Protocol to the Barcelona Convention, by redefining and reclassifying the coastal zone beyond the definitions found in the 2001 coastal law. The new definition included both terrestrial and marine elements and the Plan divided the coastal area into critical, dynamic and other/transitional zones. Each zone was subject to different land use and development provisions (Beriatos & Papageorgiou, 2010). However, in the late 2000s, tourist and renewable energy investors became increasingly vocal and were successful in shifting

national planning priorities in a more sectoral direction (Giannakourou, 2011, p.37). Thus, the Special Framework Plan for coastal areas and islands was abandoned, while the Special Framework Plans for Renewable Energy Sources, Industry and Tourism were approved in 2008-2009. As a result, strategic guidance for coastal protection and management is still limited to the mostly general policies found in the General Framework Plan.

The Special Framework Plan for Tourism (approved in 2009, amended in 2013) was annulled by the Council of State in 2015 for technical legal reasons.

The new provisions on maritime and coastal spatial plans

The 2018 maritime spatial planning law (discussed above) introduced two new categories of strategic spatial plans directly related to maritime and coastal areas: a) the National Maritime Spatial Strategy, which identifies the strategic guidelines for maritime areas and coastal zones at the national level and indicates the priorities for the preparation of Maritime Spatial Plans in individual spatial units; b) Maritime Spatial Plans, which apply to marine and coastal spatial units of sub-regional, regional or interregional character. Both documents are approved after consultation with the public and the relevant authorities, while Maritime Spatial Plans must, in addition, first be submitted for a strategic environmental assessment.

One of the most important issues arising regarding maritime spatial planning is its relationship with terrestrial spatial planning. In this respect, the 2018 maritime spatial planning law provides (at Article 15) that, when preparing and approving the National Maritime Spatial Strategy and the Maritime Spatial Plans, authorities must take into account the guidelines of existing terrestrial spatial plans. These requirements cannot, however, avoid all potential tensions between terrestrial and maritime spatial plans. Such potential tensions were the key cause of public concern which emerged during the consultation period for the draft law; both from some of the country's main economic and social partners, such as the Hellenic Industries Association, and from relevant scientific organizations, such as the state's statutory planning laws and plans are excluded from the scope of the Maritime Spatial Planning Directive. As such, we see the choice of the Greek legislator to include coastal zones in maritime spatial plans as a typical case of "gold-plating" (over-implementation).

Regulatory planning and coastal zone management

There is no planning regulation which specifically address coastal zone management. Land use regulation is undertaken by local authorities (with oversight from the national government), through Local Spatial Plans (Article 7 of L. 4447/2016). Each Local Spatial Plan applies to the entire area of a municipality and defines detailed rules for land use and development. These plans categorize land, using standardized categories. Since 2016, coastal areas may be classified either as protected areas or as areas of land-use control.

At the time of writing, no Local Spatial Plan has been approved since the 2016 amendment to planning legislation which introduced the above classifications. As such, there is no evidence as to how these classifications are used in practice.

Special planning laws and the coastal zone

Apart from general planning legislation, several special planning regimes have been established since 2010 in order to promote private investments or to facilitate privatization of public properties. These regimes introduce special substantive and procedural rules for the development of private or public assets.

The law on Strategic Investments (L. 3894/2010), generally known in Greece as Fast Track law, was one of the first statutes passed after the beginning of the sovereign debt crisis in 2009. This law was intended to facilitate strategic investments – that is, investments which have a significant positive impact on the national economy in the long term. To promote such investments, the Fast Track law (L. 3894/2010, as amended by L. 4146/2013) introduced Special Spatial Development Plans for Strategic Investments (ESCHASEs), along with special land use and building rules and licensing procedures. Authorities may adopt ESCCHASEs to override other relevant plans through definition of specific uses which are permitted to facilitate development. They may grant rights of use on the ‘Seashore’ or ‘Beach’ or permission for Seashore and shoreline infrastructure. Thus, the potential effects on the coastal zone are considerable. Yet, the authorities may not adopt such plans without oversight: ESCCHASEs can only be approved by Presidential Decrees following review by the Council of State.

ESCHASEs are based on the model of Special Spatial Development Plans of Public Estates (ESCHADAs) introduced by Law 3986/2011 (Urgent Measures for the Implementation of the Medium-Term Fiscal Strategy) in view of the privatization of State-owned public properties. These new planning tools were positively received by the Council of State, which, during 2013-2017, gave a “green light” to ten draft Presidential Decrees approving eight ESCHADAs and two ESCCHASEs respectively, nine of which concern beachfront land plots. The approval of these plans by the Council of State indicates that, despite the fears initially expressed by various actors that prioritizing investment will adversely compromise environmental protection, both ESCHADAs and ESCCHASEs have been prepared in full compliance with EU and Greek environmental law and meet the required environmental and planning standards (e.g. CoS 3874/2014 plenary session, CoS 1704/2017 plenary session).

The successful implementation of these planning tools led, in 2016, to the expansion of their scope through the country’s general planning legislation. The 2016 planning law introduced a plan type similar to ESCHADAs and ESCCHASEs – Special Spatial Plans (Article 8). These plans provide “tailor-made” and timely planning responses to large-scale or important development proposals in various designated zones, including coastal zones.

5. Compliance and Enforcement

Illegal development, including on the Seashore and the Beach, is a major issue in Greece. Although there are no official figures regarding the extent of illegal development in the Greek coastal zone, it is estimated that the rate is higher on the coast compared with the rest of the country⁶. Examples include houses, port and tourism facilities, berths and jetties.

Attempting to reign in this phenomenon, the 2001 coastal law stipulates that any illegal construction on the Seashore or Beach (once they are defined and have been expropriated, as described above) must be demolished, regardless of construction date, only excluding protected cultural heritage (Article 27). The RDPP (Regional Directorate of Public Property) may issue a demolition notice in such cases, and owners or developers may be subject to criminal charges or fines. Demolition notices may not be withdrawn, except under certain circumstances, including hardship to the property owner, or in cases where there is ample access to the coast and the illegal building does not obstruct this access (Administrative Court of Appeal of Piraeus/Suspension Commission 8/2013, Administrative Court of Thessaloniki/Suspension Commission 33/2017).

The national government's ability to apply enforcement measures on the 'Beach' or 'Seashore' is obviously dependent on those zones being delineated. Considering the difficulties and delays that Greece has encountered in the past in relation to demarcation (described above), it is not surprising that the issue of enforcement in the extensive areas where the Seashore has not been delineated has come before the Council of State. The court held that in such cases, the responsible authorities should carry out an assessment of the limits of the 'Seashore' prior to either issuing building permits (CoS 3483/2003, 377-378/2002), or determining cases of exemption from demolition (CoS 680/2002). The Council of State has also ruled that where a building permit was issued prior to the demarcation of the Seashore, the RDPP may not issue a demolition notice, unless the government withdraws the relevant building permit on the basis of the public interest (e.g. CoS 3354/2014, 3622/2014). Regarding withdrawal of building permits, the Council of State has ruled that the government must weigh its decision in light of the time lapsed since the building permit was issued and that the property rights acquired *in bona fide* (CoS 3354/2014).

Setting aside the issue of demarcation, even in cases where enforcement measures against illegal development can be fully justified, they are rarely implemented. There are several reasons for this failure, including a lack of funds and limited human resources in the decentralized administrations, who were responsible until 2017. In 2017, Law 4495/2017 conveyed the responsibility of demolition to the Regional Directorates of Development Control ("Regional Observatories"). However, the latter have not yet been enacted, due to a delay in issuing a required Presidential Act (Article 5). But the key issue is likely a lack of political will. This, along with lack of financial and material means, as well as poor administrative capacity and limited human resources in the responsible public authorities, led to poor results regarding enforcement against illegal development in the coastal zone.

However, as a result of the 2018 Attica wildfires, which primarily affected the densely populated coastal village Mati of Attica in July 2018 and caused the death of 102 people (European Parliament, 2018), the Government announced its intention to demolish 700 illegal constructions in the coastal zone of Attica. To this end, it issued an Act of Legislative Content (Government Gazette 149A/2018) for the demolition of all unauthorized enclosures which prohibit access to the coast.

In the past, another key factor in the failure of authorities to implement enforcement measures was the absence of a monitoring and control authority for illegal development at the national level (Economic and Social Council of Greece, 2008, p.28), to counter issues arising out of local clientelism. In 2010, following the 2009 Attica wildfires in Mount Parnitha, this issue came to light and a Special Inspectorate Agency for Demolition of Illegal Construction (EYEKA) was then established within the Ministry of the Environment (L.3818/2010, Article 7; L.4014/2011, Article 28). EYEKA's initial tasks included the demolition of illegal construction – either by its own means or by private operators in cooperation with the decentralized administrations. Subsequent amendments to the legislation on illegal construction, as well as on the organizational structure of the Ministry of Environment, diminished EYEKA's powers regarding the demolition of illegal constructions and coordination, and implementation of demolition was left to the decentralized administrations. However, the tragic events of the 2018 Attica wildfires, which were the second-deadliest wildfire in the 21st century, led the Greek government to reassign responsibilities for demolition of unauthorized developments on the Seashore and Beach, back to EYEKA (now in the Ministry of Environment and Energy).

Greece recently paid a heavy price for the enforcement problems encountered in the past: Among the 102 people who lost their lives during the 2018 Attica wildfires, 26 of these deaths were tragically caused by people being trapped on land with illegal enclosures which prohibited access to the sea (BBC, 2018). Whether the political and administrative system will be adequately shaken by this tragedy to induce meaningful change, remains to be seen.

6. Integration and coordination

Several Greek governmental bodies and agencies are involved in different administrative stages of coastal protection and management, with overlapping jurisdiction (Table 12.1). The resulting administrative landscape is fragmented and extremely complex, giving rise to potential tensions and even power struggles between various public authorities. The system prioritizes sectoral policies and activities as opposed to integrated coastal zone management. Parallel coastal jurisdictions and responsibilities lead to red-tape, delays and inefficiency.

To date, integration across these ministries has been limited. This has been recognised by the OECD (2011, p.26), which has noted that the Greek central administration lacks the management, oversight and co-ordination initiatives to support effective implementation and long-term management of policy measures. In cases where co-ordination does happen, it is

usually ad hoc, based on initiatives introduced by individuals and not supported by the existing management structures.

Table 12.1: Main fields of responsibility in the coastal zone

	Demarcation	Concessions	Planning	Protection (env. and public domain)	Granting permits (building & env.)	Imposition of sanctions
Ministry of Finance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ministry of Environment & Energy (YPEN)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ministry of Shipping and Insular Policy			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ministry of Economy and Development		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Ministry of Tourism		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Ministry of Culture & Sports		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ministry of Interior Affairs				<input checked="" type="checkbox"/>		
Decentralized administration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Regions						<input checked="" type="checkbox"/>
Local authorities		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hellenic Coast Guard				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Hellenic Police				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

* Concessions are regulated by Articles 13 and 14 of L. 2971/2001. See also CoS 646/2015 for related responsibilities of the Ministry of the Environment.

Yet in recent years, the national government has taken steps to create institutional coordination mechanisms for the implementation of EU-related policies and laws in the maritime domain, which also affects coastal zones. For example, the National Committee of Maritime Environmental Strategy (L.3983/2011, Article 18) was established when the EU Marine Strategy Framework Directive was adopted into Greek law in 2011. In addition, another cross-sectoral Committee has been formed for the implementation of the EU Integrated Maritime Policy and the coordination of the responsible national authorities (Law 4150/2013, Article 1). The Committee is chaired by the Secretary General of the Ministry of Shipping and includes representatives from several other ministries (Foreign Affairs, Finance, National Defence, Environment & Energy, Development & Tourism, Culture & Sports, Education, Research & Religious Affairs, Agriculture & Foods and Citizen Protection). Nevertheless, it is also worth noting that the authority responsible for the implementation of the Maritime Spatial Planning Directive (2014/89/EU) is the Minister of Environment and Energy itself (2018 maritime spatial planning law, Article 14). In addition, both the Ministries of Environment and Shipping are the responsible authorities for the implementation of the Barcelona Convention and its Protocols by law (Article 3 of L. 855/1978).

On the whole, in line with the Recommendation of the European Parliament and the Council concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC), Greek authorities have identified integrated coastal zone management as a matter which requires coordination of administrative bodies at national, regional and local level. Further work and instruments are required to establish more coordinated processes.

The potential negative effects of this complex administrative structure of responsibilities came sharply into focus during the 2018 Attica wildfires: The lack of coordination among the Hellenic Coast Guard, the Hellenic Police, the Hellenic Fire Department, the Regional and local authorities, as well as the Secretary General for Civil Protection, led to the failure to make a decision to evacuate the coastal settlement of Mati by sea. Port boats reached the coast after a long delay, when Mati residents had already arrived there on their own initiative, attempting to save themselves from the flames.

7. Public participation and access to justice

There are no special provisions in Greek law for public participation on matters associated with coastal zone management. Yet the public can be involved in coastal protection and development decisions through standard public consultation procedures found in planning and environmental legislation.

The public can participate in coastal plan-making and in environmental permitting, by submitting, in writing, their positions on any Strategic Environmental Assessment (SEA; required by Law 4447/2016) or Environmental Impact Assessment (EIA; required by Law 4014/2011 for projects with potential significant impact on the environment). These procedures are also open to submissions from organizations representing universities,

professional chambers (e.g. the Technical Chamber of Greece), and NGOs dealing with environmental and cultural issues. However, the authorities generally comply only with the minimum legal requirements, without attempting to foster productive dialogue (European Commission - MRAG, 2008, p.10-12).

The public may also contest planning and development decisions which result from the above processes. In accordance with the Aarhus Convention and European Directive 2003/4/EC on Public Access to Environmental Information), the Greek legal system must allow a broad range of individuals or associations to challenge land use plans, zoning regulations and planning and environmental decisions. The Council of State has recognized that a *locus standi* may be accepted for persons other than the landowner or operator (third parties) – including neighbouring residents, local authorities, environmental NGOs, local improvement associations etc. – if the decision might cause them injury. Examples of such injury in the context of the coastal zone include deterioration of the built or natural environment, increased risk of flooding, coastal erosion, or damage to health and livelihoods. Furthermore, in challenges of environmental decisions, including those concerning coastal areas, the Council of State has accepted standing not only for environmental NGOs, but also for associations of lawyers, which might be concerned with matters of general national or social interest, such as the Constitutional protection for the natural and cultural environments (e.g. CoS 646/2015, Cos 2320/2014, 2257/2014).

All parties with legal standing may petition the court for the annulment of a spatial plan, an environmental permit or any other permit concerned with the use and development of a coastal area.

8. Climate change issues

Climate change threats to Greece's coastal zone are primarily related to sea level rise and storm surge events. Both phenomena can amplify coastal erosion and coastal flooding and potentially significantly impact the built environment and coastal ecosystems.

A 2011 vulnerability assessment of Greece's coastal regions looked at the potential effects of sea level rises of between 0.2m to 2m by the year 2100 (BoG, 2011, p.156, 170; YPEN, 2018, p.137). A total of 21% of Greece's total coastline is classified as 'medium to high' vulnerability to sea level rise; most at-risk are the deltaic areas of many Greek rivers and gulfs (YPEN, 2018, p.236). The economic impacts of this climate change threat on Greece's shoreline are remarkable: the total cost of the impacts of sea level rise of just 0.5m by 2100 for Greece as a whole has been estimated at approximately 355 billion euros; in the scenario of a sea level rise of 1 metre, the total cost of impacts would increase to 650 billion euros. The present values of the estimated total costs of SLR impacts by 2100, discounted in the year 2010, using appropriate discount rates, result in costs of 145 billion euros and 265 billion euros, for SLR of 0.5m and 1m respectively. The total costs were calculated for five land uses (housing, tourism, wetlands, forestry and agriculture) (BoG, 2011, p.165).

Other climate phenomena of concern in coastal areas include the anticipated increase in storms and frequency of storm surges (IPCC, 2007) which, in turn, may cause flooding of coastal areas, destruction of coastal infrastructure, coastal erosion and intrusion of salt water in coastal habitats (BoG, 2011, p.160).

To understand the potential impact of climate change on Greece's shoreline, one must consider the rate at which coastal erosion has already occurred. The estimated proportion of total coastline which has already been impacted by erosion is over 30% (EUROSION, 2004, p.6), making Greece one of the most vulnerable countries among the 22 coastal EU Member States. Erosion is expected to increase in the immediate future, due to (a) the anticipated rise in mean sea level; (b) the intensification of extreme wave phenomena; and (c) the further reduction of river sediment discharge as a result of variations in rainfall and the construction of river management works (YPEN, 2018, p.235). The cost of the protection of Greece's coastline from coastal erosion has been estimated at 5.377 million euros for the period 1990-2020 (YPEKA, 2013, p.28). Furthermore, the cost of adaptation measures for the protection of coastal systems in the years 2025-2070, which would reduce the impacts of climate change by 60%- 70%, amount to a total of 3.946 million euros (YPEN, 2018, p.104).

Given the imminent threats of sea level rise and storm surge events, the implementation of a coordinated adaptation policy is required to ensure the protection of Greece's coastline. This has been recognized as an important policy issue in several domestic studies (YPEN, 2018; BoG, 2011), in line with the relevant EU Recommendation (2002/413/EC) and ICZM Protocol provisions. As foreshadowed by those studies, apart from the adoption of the National Adaptation Strategy, a comprehensive plan is required. Such a plan would involve elaboration of a coastal cadastre; the designation of high, medium and low risk zones depending on the characteristics of each coastal area; any engineering works required to stabilize the coastline; and setting up a permanent coastal monitoring system for each region (YPEN, 2018, p.50; BoG, 2011, p.173).

Greek government action on climate change

The Greek National Adaptation Strategy (NAS) for Climate Change was formally endorsed by the Greek Parliament in August 2016 (Law 4414/2016, Article 45), following initial drafting by the Athens Academy and the Bank of Greece and public consultation from the Ministry of Environment. Law 4414/2016 defines the Ministry of Energy & Environment (MEEN) as the responsible authority for national adaptation policy and foresees the process for revision of the NAS along a 10-year planning cycle.

The Greek NAS is an overarching policy document which should be implemented at regional level through Regional Adaptation Action Plans (RAAPs). As such, the law (Law 4414/2016, Article 43) sets the minimum technical specifications for drafting the RAAPs and provides for their preparation by the 13 Regional Authorities of Greece. RAAPs should be assessed and

reviewed, if needed, within a 7-year planning cycle. The content of RAAPs is specified in a Ministerial Decision (MD 11258/2017), which also requires Regional Authorities to perform a detailed assessment of potential climate change impacts; identify and map relevant climate-related risks and vulnerabilities; prioritize adaptation action; identify synergies with other policies and regional plans (e.g. land-use plans, water management and flood risk management plans); and integrate, as required, priority measures into regional planning. Each RAAP will define priority adaptation actions based on the unique context of each Region. The development of the 13 RAAPs is ongoing with several Regions being more advanced than others.

Law 4414/2016 also established (at Article 44) the National Climate Change Adaptation Committee (NCCAC), to act as the formal advisory body to YPEN at national level, for adaptation policy design and implementation. The NCCAC comprises representatives from all Ministries with sectoral roles in adaptation policy planning and in funding of adaptation actions, as well as representatives of other relevant stakeholder bodies and governmental authorities (Ministerial Decision 34768/2017).

In addition, climate change is addressed by some national strategic planning documents, the 2001 coastal law, River Basin Management Plans, Flood Management Plans and Marine Waters Management Plans. For example, the General Framework Plan (GFP) suggests avoiding the siting of large-scale installations near the Beach, while the Special Framework Plan for Industry discourages the siting of industrial installations within 350 meters from the Seashore (Articles 2 and 4). The majority of Spatial Plans date back to 2009. Several of these Spatial Plans are being, or will be, revised. In addition, the 2001 coastal law (at Article 12) contains special provisions for the prevention of coastal erosion, albeit by simply allowing technical works which prevent further erosion. Hard engineering structures used in Greece to protect the coast from erosion include seawalls, groynes, breakwaters, revetments, flood embankments, placement of gabions and rock armouring.

The Greek government has also prepared (or is preparing) several plans and strategies in accordance with EU directives. These include the River Basin Management Plans 2016-2021 for 14 territorial districts, within the framework of the EU Water Framework Directive, the Flood Management Plans as well as the Marine Waters Management Plans. In addition, Maritime Spatial Plans, an important tool for climate change adaptation in the coastal zone, are expected to be prepared by 2021, following the recent transposition of the 2014/89/EU Directive into domestic law.

Despite the significant progress made in last years, there is still room for further improvement with regard to policy coordination, development and dissemination of good practice, and most importantly, capacity building. In September 2017 the Ministry of Environment and Energy (YPEN) submitted a proposal for an 8-year period EU project (2017 LIFE Climate Action) which includes actions to a) coordinate cross-regional and enhance national-regional-local

adaptation action; b) build capacity at national and regional stakeholders; c) support cross-regional cooperation and transnational cooperation with countries from the Balkans and the wider Mediterranean area; d) develop and operate a National Adaptation Knowledge Hub; e) develop and test methodologies to monitor the progress achieved in the implementation of the NAS and RAAPs; and f) assess the existing level of mainstreaming and integration of climate change adaptation priorities to other sectors at national level. The National Centre for Environment and Sustainable Development, along with YPEN, will take over the training, information sharing and monitoring activities after the end of the project.

All the above are expected to contribute to a better awareness, at the local level, of the climate change issues and challenges, but this remains to be seen. In a 2016 EU research project, partners interviewed several municipalities along the Greek coast. There was little evidence that information or national policies on climate change have trickled down to local awareness or action (Alterman et al., 2016).

9. Fiscal aspects of Greek coastal regulation: types and scope of compensation mechanisms

We have noted above that according to the 2001 coastal law (L. 2971/2001), land identified as part of the ‘Seashore’ or ‘Beach’ may be expropriated, if it was not publicly owned prior to demarcation. Compensation for land expropriated for ‘Seashore’ is granted according to standard expropriation legislation, while compensation for expropriation of ‘Beach’ land is determined through the local planning process.

Under the 2001 coastal law, there are no compensation rights for landowners for regulatory “takings” – land-use or development-control bans and restrictions which do not result in expropriation. Thus, landowners cannot claim compensation on the basis of any additional restrictions on land in the coastal zone, beyond that of actual expropriation. But in some cases, landowners consider that they have a right to compensation, hence this issue has repeatedly been the subject of legal action which reached the Council of State. The court has ruled that planning restrictions in the out-of-plan coastal areas (non-residential areas) are compatible with Article 17 of the Greek Constitution on the protection of private property and the First Additional Protocol of the European Convention of Human Rights (ECHR), since they do not eliminate all use or render property worthless in relation to its purpose (CoS 3758/2014). Furthermore, the court found that the regulations put in place to protect the environment are appropriate in light of that objective (CoS 2923/2011, 3511/2010). The court also ruled that when environmental protection measures result in substantial limitations on the use of property for its designated purpose, the owner can claim just compensation (with consideration of the extent, duration and intensity of the relevant “taking”) based on the principle of ‘equality before public burdens’ deriving from Article 4 (par. 5) of the Greek Constitution (CoS 5504/2012 par. 15, CoS 3431-2/2015 par. 5). Yet the absence of a compensation clause within the regulation which results in “regulatory takings”, does not affect the integrity or the legality of that regulation (CoS 3758/2014, 2923/2011).

At the same time, there are some environmental laws which recognize a right to compensation for owners whose land may be substantially affected by regulatory measures taken for nature conservation (Giannakourou & Balla, 2006), including coastal preservation areas. Specifically, Law 1650/1986 “On the protection of the environment” (Article 22, – the ‘1986 environment protection law’), as amended by the 2011 biodiversity law (Article 16), provides for affected landowners to claim compensation directly from the State if the restrictions imposed by those laws effectively nullify their development rights. This compensation mechanism relies on the issuance of a Presidential Decree, which would define the procedure and the substantive requirements for granting compensation (1986 environment law). Once issued, the Presidential Decree would allow compensation to be provided in the form of money or in kind, including land exchange (affected land goes to the State and landowners receive State land elsewhere), transfer of development rights, or subsidies or other financial aids for affected farmland. But to date, the Presidential Decree has not been issued. Despite this oversight, the Council of State has ruled that affected landowners can claim compensation directly before the court (CoS 1611/2006). Several such cases have since been heard and compensation has been granted (e.g. CoS 3432-3433/2015, 1478/2016).

The same 1986 environment protection law (Article 22, Para. 9) foreshadows the State issue of another Presidential Decree which would define economic incentives for the conservation of the natural environment and biodiversity. Such incentives would encourage individuals and local communities to contribute to the law’s conservation objectives. The State has not issued this Presidential Decree to date.

No preventive fiscal measures are provided to address coastal threats proactively. There are, however, special provisions in the general legislation for civil protection (L. 3013/2002), which would allow the State to introduce special compensation mechanisms in areas affected by natural disasters. Owners whose properties are damaged by, for example, sea level rise, cliff erosion or flash-flooding might then be granted loans for relocation or property restitution; or provided tax exemptions during the restitution period.

10. Overall assessment

Many eyes are directed at the Greek coasts: Those of the local population who rely on their country’s coasts for vacationing and income, as well as many of the millions of tourists from across the world who visit the Greek coasts annually. The exposure of the Greek coasts to the world is, thus, quite significant.

In this chapter, we have shown that the management and protection of the Greek coastal zone is hindered due to difficulties within a multitude of laws affecting the coastal zone and the frequently conflicting priorities of the government institutions which implement those laws. In addition, we have demonstrated that the governance system for coastal zone management is

“top-heavy”, with most powers held by the central government, and that there is a chronic lack of integration and coordination between the various responsible government bodies.

On the legal level, the key issue has been various difficulties with the definition and the delineation of coastal land. Prior to 2001 the definition was vague. Since 2001, a functional definition has been in place, but there are lingering challenges in the definition of private property rights; although these will now be greatly diminished given the new fast track delineation procedure. In addition, the definitions of ‘Seashore’ and ‘Beach’ are not adequate to represent the full ‘coastal zone’, which certainly reaches beyond those areas. The 2011 biodiversity law did include more extensive definitions of ‘coastal zone’ and ‘critical coastal zone’, but these are useful only in the implementation of that specific law. With the recent adoption of the 2018 maritime spatial planning law, there has been a shift. This law introduced a general definition for both the coastal zone and integrated coastal zone management, as well as special types of spatial plans for maritime and coastal areas. These spatial plans are expected to be approved by 2021, in line with the relevant provision of Directive 2014/89/EU.

On the institutional level, the main obstacle is divergent policy agendas – environmental protection and short-term economic gain. The focus of most government agencies is on limited sectoral interests and little effort is placed on promoting co-ordination between those interests and broader coastal management. Another key issue is Greece’s weak record of monitoring and control of illegal development practices, persisting over several decades. Both these matters might be resolved only by will of the central government. The private sector and civil society may also play a role in any reform, most likely through petitions to the court.

Key short-term challenges for coastal protection and management in Greece include the approval of maritime and coastal spatial plans by the end of 2021. In principle, the new planning instruments provided in the 2018 maritime spatial planning law can serve as a stimulus for Greek authorities to develop a more comprehensive approach to coastal protection and management. In addition, these plans may pave the way for the adoption of the ICZM principles in Greek law and practice.

Yet, the challenge for Greek coastal law and policy to become more effective and integrated goes well beyond the approval of these plans or the ratification of the ICZM Protocol. The adoption of a comprehensive and integrated coastal zone management approach amounts to a paradigm shift across the country. Evidence from the recent Attica wildfires has shown that, beyond environmental threats, lack of an integrated and coordinated approach for coastal protection and management can be a serious threat to the human life and property. However, whether and how these lessons will be appreciated by the country’s leaders and decision makers and Greek society as a whole, remains to be seen.

REFERENCES

- Alterman, R., Pellach, C. & Carmon, D. (2016). MARE NOSTRUM PROJECT Final Report: Legal-Institutional Instruments for Integrated Coastal Zone Management (ICZM) in the Mediterranean. Available at: http://marenostrumproject.eu/wp-content/uploads/2014/02/Mare_Nostrum_Project_Final_Report.pdf
- Argyriou, A. (2012). “The cartographic base map of country’s shoreline and its use for the determination of the preliminary Seashore”, *12th National Cartographic Conference*, Kozani 10-12 October 2012.
- Association of Greek Spatial Planning Engineers. (2018). Memorandum to the standing committee on production and trade of the Greek parliament for the consideration of the draft law: Incorporation of Directive 2014/89 / EU "establishing a framework for maritime spatial planning" and other provisions into the Greek legislation. 30/05/2018. Available at: http://www.chorotaxia.gr/ftp/2018/SEMPXPA_SN_thalassios_xwr_sxediasmos_.pdf
- Bank of Greece. (2011). *The environmental, economic and social impacts of climate change in Greece*, Athens: Bank of Greece. Available at: <http://www.bankofgreece.gr/BogEkdoseis/SEESOX%2002-2011.pdf>
- BBC. (2018). Greece wildfires: Dozens dead in Attica region. Article from 24 July 2018. Available at: <https://www.bbc.com/news/world-europe-44932366>
- Beriatos, E. & Papageorgiou, M. (2010). “Towards Sustainable Urbanization and Spatial Planning of the Coastal Zone in Greece and the Mediterranean Basin” in ISOCARP, *Sustainable planning of the coastal zone in Mediterranean*, 46th Congress Proceedings. Available at: http://www.isocarp.net/data/case_studies/1727.pdf.
- Economic and Social Council of Greece. (2007). Opinion no. 190 “Urban and Regional Planning”. Available at: http://www.oke.gr/opinion/op_190_07.pdf
- European Commission. (2017). “Adaptation preparedness scoreboard: Draft country fiche for Greece”, Directorate – General Climate Action, https://ec.europa.eu/clima/sites/clima/files/consultations/docs/0035/el_en.pdf
- European Commission. (2009). “White Paper: Adapting to climate change: Towards a European Framework for Action. Climate Change and Water, Coasts and Marine Issues”, Commission Staff Working Document, SEC (2009). 386, Brussels, Belgium. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2009:0386:FIN:EN:PDF>.
- European Commission – MRAG. (2008). “Legal aspects of maritime spatial planning. Final report to DG Maritime Affairs and Fisheries. Appendix F: Greece”. Available at: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/legal_aspects_ms_p_report_en.pdf.
- European Parliament. (2018). European Parliament resolution on July 2018 fires in Mati in the Attica region, Greece, and the EU’s response (2018/2847(RSP)). 11.9.2018. Available at: http://www.europarl.europa.eu/doceo/document/B-8-2018-0393_EN.html?redirect.

- EuroSION. (2004). Living with coastal erosion in Europe: Sediment and Space for Sustainability, Part II: Maps & Statistics, Available at: <http://www.euroSION.org/reports-online/part2.pdf>.
- Giannakourou, G. & Balla, E. (2006). "Planning Regulation, Property Protection and Regulatory Takings in the Greek Planning Law", *Global Law Studies Review*, Vol. 5, Issue 3, p. 535-558.
- Giannakourou, G. (2011). "Europeanization, Actor Constellations and Spatial Policy Change in Greece". In D. Stead & G. Cotella (Eds.). *Differential Europe: Domestic Actors and Their Role in Shaping Spatial Planning Systems*, *disP – The Planning Review*, 186 – 3/2011, p. 33 - 42.
- IPCC. (2007). "Climate change 2007: The physical science basis" Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, H.L. Miller. Cambridge, New York: Cambridge University Press.
- Karousos, G. (2010). *Comparison of Seashore delineation methods*, Thesis, School of Rural & Surveying Engineering, National Technical University of Athens, Greece. Available at <http://dspace.lib.ntua.gr/handle/123456789/3702>
- Ministry of Finance. (2014). Public Consultation on the Draft Law "Delineation, Management and Protection of the Seashore and the Beach", Available at <http://www.opengov.gr/minfin/?p=4692>
- OECD. (2010). *OECD Environmental Performance Reviews: Greece 2009*, Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264061330-en>
- OECD. (2011). *Greece: Review of the Central Administration*, OECD Public Governance Reviews, OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264102880-en>
- Papapetropoulos, A. (2004). Spatial planning of coastline and Beach. Theoretical and jurisprudential approaches, *Nomos & Physis*. Available at: http://www.nomosphysis.org.gr/articles.php?artid=3749&lang=1&catid=1#_ftnref51
- Papathanasopoulos, A. (2015). *Coastal Law. Seashore, Beach, Ports, Banks*, Athens: Nomorama.
- Policy Research Corporation (in association with MRAG). (2009). *The economics of climate change adaptation in EU coastal areas. Study done on behalf of the European Commission*, Brussels: European Commission. Available at: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/report_en.pdf (last accessed: August 2018). Greece's country report available http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/greece_climate_change_en.pdf
- Technical Chamber of Greece. (2009). *Update of the Business Plan of 2005 for the completion of the National Cadastre*, Athens: Greece. Available at: http://portal.tee.gr/portal/page/portal/TEE_HOME/news/TEE-ktimatologio-diepistimoniki.pdf
- World Factbook. (n.d.). Greece. Available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/gr.html> [Accessed September 2019]

- YO [Ministry of Finance]. (n.d.). Public Consultation on the draft law "Delimitation, management and protection of Seashore and Beach" (2001 coastal law) Available at: <http://www.opengov.gr/minfin/?p=4692> [Accessed September 2019]
- YPECHODE [Ministry of the Environment, Planning and Public Works]. (2006). *Report of Greece on coastal zone management*, Athens: YPECHODE.
- YPEKA [Ministry of Environment, Energy and Climate Change]. (2013). *Guidelines of Development Strategy for the Ministry of Environment, Energy & Climate Change competency Sectors*, Athens: Greece. Available at: <http://www.eysped.gr/el/Documents/120531%20CE%9A%CE%91%CE%A4%CE%95%CE%A5%CE%98%CE%A5%CE%9D%CE%A3%CE%95%CE%99%CE%A3%20%CE%A3%CE%A4%CE%A1%CE%91%CE%A4%CE%97%CE%93%CE%99%CE%9A%CE%97%CE%A3%20%CE%A0%CE%95%CE%A1%CE%99%CE%92%CE%91%CE%9B%CE%9B%CE%9F%CE%9D%20%CE%95%CE%9D%CE%95%CE%A1%CE%93%CE%95%CE%99%CE%91%20%CE%A4%CE%95%CE%9B%CE%99%CE%9A%CE%9F.pdf>
- YPEKA [Ministry of Environment, Energy and Climate Change]. (2014). *6th National Communication and 1st Biennial Report under the United Nations Framework Convention on Climate Change*, Athens, Greece. Available at: <http://www.ypeka.gr/Default.aspx?tabid=472&language=el-GR>
- YPEKA [Ministry of Environment, Energy and Climate Change]. (2014). Press Release from 29 December 2014. Available at: [http://www.ypeka.gr/Default.aspx?tabid=389&sni\[524\]=3458&locale=en-US&language=el-GR](http://www.ypeka.gr/Default.aspx?tabid=389&sni[524]=3458&locale=en-US&language=el-GR)
- YPEKA [Ministry of Environment, Energy and Climate Change]. (2015). National Adaptation Strategy for Climate Change. Available at: <http://www.ypeka.gr/LinkClick.aspx?fileticket=CoyXhegNBHQ%3D&tabid=232&language=el-GR>
- YPEN [Ministry of Environment and Energy]. (2018). *7th National Communication and 3rd Biennial Report under the United Nations Framework Convention on Climate Change*, Athens: Greece.

Legislation and associated documents

- Law 2344/1940 – “About the Seashore and the Beach” (the 1940 coastal law)
- Law Decree 439/1970 – Complementary Provisions for the Seashore
- Law 855/1978 – Ratification of the Barcelona Convention
- Law 1337/1983 – “Expansion of Town Plans, Residential Development and Other Provisions”
- Presidential Decree 236/1984 – “On the enclosures of land plots within a zone of 500 meters wide from the coast or from the banks of public lakes, in accordance with Article 23 par. 1 of Law 1337/83”
- Law 1650/1986 – “On the Protection of the Environment”
- Law 2971/2001 – “Seashore, Beach and other Provisions” (the 2001 coastal law)
- Ministerial Decision 1089532/8205/B0010

“Criteria for the demarcation of the Seashore and the Beach”, 2005.

Law 3422/2005 – “Ratification of the Aarhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice on Environmental Matters

Joint Ministerial Decision 11764/653/2006 – “Public access to public authorities for the provision of information on the environment, in accordance with the provisions of Directive 2003/4 / EC "on public access to environmental information and repealing Council Directive 90/313 / EEC".

Law 3818/2010 – “Protection of forests and forested lands of Attica Prefecture, the establishment of Special Secretariat for the Environmental and Energy Inspection and other provisions”

Law 3852/2010 – “New Architecture of 1st and 2nd tier Local Authorities and Decentralized Administration - Kallikrates Program”

Law 3894/2010 – “Acceleration and Transparency for the implementation of Strategic Investments” (the Fast Track law)

Law 3937/2011 – “Preservation of Biodiversity and Other Provisions”

Law 3986/2011 – “Urgent Measures for the Implementation of the Medium-Term Fiscal Strategy 2012-2015”

Law 4014/2011 – “Environmental licensing of works and activities, regulation of illegal constructions in connection with environmental stability and other provisions falling under the competence of the Ministry of Environment”

Law 4150/2013 – “Reorganisation of Ministry of Shipping and the Aegean and other Provisions”

EU Directive on maritime spatial planning (2014/89/EU)

Law 4447/2016 – “Spatial Planning, Sustainable Development and other provisions” (the 2016 planning law).

Law 4414/2016 – Law about Renewable Resources Energy and Climate Change

Law 4495/2017 – “Control and Development of the Built Environment and other provisions”

Law 4546/2018 – “Incorporation into Greek law of the Directive 2014/89/EU on maritime spatial planning”

Ministerial Decision 11258/2017– “Specification of the content of the Regional Plans for the Adaptation to Climate Change, in accordance with Article 43 of Law 4414/2016

Ministerial Decision 34768/4.8.2017 “Establishment and regulation of the operation of the National Council for Adaptation to Climate Change in accordance with article 44 of Law 4414/2016”

Act of Legislative Content of 10th August 2018 (Government Gazette 149A/10 August 2018)
Special Framework Plan for Industry (Government Gazette 151D/2009).

Council of State cases

CoS 3521-22/1992, plenary session

CoS 1129/1999

CoS 1790/1999

CoS 3344/1999

CoS 1500/2000
CoS 377-378/2002
CoS 680/2002
CoS 3483/2003
CoS 978/2005
CoS 1611/2006
CoS 1340/2007
CoS 3511/2010
CoS 2923/2011
CoS 5504/2012
CoS 2257/2014
Cos 2320/2014
CoS 3354/2014
CoS 3622/2014
CoS 3758/2014
CoS 3874/2014, plenary session
CoS 646/2015
CoS 3431-3433/2015
CoS 1478/2016
CoS 1704/2017, plenary session

Other cases

Administrative Court of Appeal of Piraeus (Suspension Commission) 8/2013
Administrative Court of Thessaloniki (Suspension Commission) 33/2017

Endnotes

¹ According to several sources, the combined Mediterranean coastline is 46,000 Km. See – http://www.unep.org/regionalseas/programmes/unpro/mediterranean/instruments/r_profile_med.pdf and <http://www.greenpeace.org/france/PageFiles/266559/marine-reserves-med.pdf>

² Emergency Laws were legislated during tumultuous periods, in which the Parliament did not operate, or did not operate normally (dictatorial periods, siege situations, etc).

³ The term ‘troika’ (or later ‘quadrate’) has been used to describe Greece’s international lenders during the sovereign debt crisis which hit the country in late 2009. The term refers to the EU Commission, the European Central Bank (ECB), the International Monetary Fund (IMF) and since 2015 the European Stability Mechanism (ESM).

⁴ The preliminary shoreline was delineated according to 9 thematic criteria (*vegetation borders, wave overtopping, top of ridge, construction borders, building borders, semi urban area, river mouth, closed saltmarsh, open saltmarsh*). See Argyriou A., 2012 and http://www.ktimatologio.gr/sites/en/infrastructureprojects/Pages/OgIHG7IKdDF38w6E_EN.aspx [Last Accessed: August 2018]

⁵ Geoindexed map available at <https://www1.gsis.gr/gsp/dhpe/publicgis/faces/homeShore> (last accessed September 2019)

⁶ Media estimates of the number of illegal developments on the Seashore and beach are up to 250,000 (<http://www.tovima.gr/politics/article/?aid=99279>, last accessed 19 August 2018)