



# **Policies for the replanning of urban coastal areas. The case of Athens. Comparisons with Hamburg**

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## **Abstract**

This paper focuses on the replanning of coastal urban areas, using as a case study the sea front of Athens overlooking the Saronic Bay. After a short presentation of the basic characteristics and of the main spatial problems of the above zone, this work concentrates on a wide range of goals and policies which have led to regulatory arrangements and to the implementation of specific interventions. In the above framework, urban planning actions (Regulatory Plan, urban planning projects, special arrangements for land use in the coastal zone, etc.), interventions for the preparation of the Olympic Games 2004 (infrastructure, sports facilities, alterations in the area), as well as approved arrangements for the post-Olympic utilisation of the relative infrastructure are investigated and evaluated. There will also be an attempt to make comparative references to specific points in the policies, planning and interventions, concerning the riverside zone of Hamburg, as well as the case of the Hafensity project, so as to draw out conclusions concerning the relationship between forwarded policies and their spatial effects.

## **1. The issue of replanning and management of coastal urban regions**

### **1.1 The wider European perspective and basic policy directions**

Sea front has always been a special morphological and functional feature of the cities. The need for replanning and regeneration of these zones arose in the decade of 1960 as a result of the abandonment of the old port facilities. The reasons mainly lie in the changes in the technology of the commodities management (increase of the workload, unitisation of the cargoes through the use of containers etc) which led to a demand for larger surfaces and enhanced connection with the transportation networks (Norcliffe et. al. 1996, Whittaker 1975). In Europe, much earlier than in the USA, the need for the re-use of the abandoned port zones has been recognised (West 1989), a fact that led to efforts of replanning and enhancement with new functions. Gradually the interventions expanded to the total of the urban sea river fronts, together with any area that connected the water with the urban net and consequently with the urban activities.

The relevant efforts made could be categorized in two periods depending on their content and their basic characteristics (Vallega 2001): during the first period, from mid 1960ies to the beginning of 1990ies, the relevant programmes of replanning and redeveloping the coastal front, are characterised by endogenously formed targets which mainly concern the ensuring of economic return in relation to workplaces and income. During the second period, the principles of sustainable development appear as the basic element of the relevant policies and programmes and the development of the water-front becomes part of an "Integrated Management of Coastal Areas" as imposed by the Local Agenda 21 (Chapter 17) (EC, 1997). That was necessary as gradually the strategic significance of the coastal areas is recognised and the pressure they are put under in order to develop beyond their existing capacity increases.

Nowadays, urban sea / river fronts still host activities connected with sea transportation but they can at the same time dynamically develop activities of residence, leisure / tourism, culture and research (Vallega, 2001: p.396). Having also in mind the fact that the need for contact with water and activities exploiting its aesthetic and symbolic value increases, the interest in urban water-fronts is also going to increase leading to an intensification of the relevant development pressures concerning mainly consumption rather than productive oriented activities (Norcliffe et. al. 1996).

## 1.2 Relative interventions

Most of the examples of interventions on coastal zones can be found in cases in which port facilities were abandoned. Some first attempt was recorded during the decade of 1960 in Baltimore (Vallega 2001), with replanning of the old port and the development of tertiary sector activities. Many European cities follow and there are some major capitals among them. In London, the reuse of the port zone in the eastern part of the city is related with a project of removal from the “city”, the traditional services centre, in combination with leisure and culture activities. In Barcelona, the planning of the development of the Olympic facilities mainly aimed at the reconnection of the city with the sea through a series of replanning and new infrastructures along the sea front, while the planning of the EXPO in 1998 in the case of Lisbon also functioned in the same way (Alden & Pires 1996). Integrated interventions on the water front of a city can result in significant improvement in the features of the urban environment, in the life - quality of the residents and in the reinforcement of the cities as destinations of urban tourism (Gospodini 2001). Any probable problems, are related among others, with the following sectors (Snoeren 2003): lack of coastal management vision and limited understanding of coastal processes, inadequate involvement of stakeholders, inappropriate and uncoordinated sectoral legislation/policy, lack of administrative coordination and lack of support from higher administrative levels concerning local initiatives.

The “Integrated Coastal Zone Management” (ICZM) approach is a continuous process which provides a flexible framework to integrate socioeconomic development and environment concerns and it can also allow the development of synergies among plans, programmes and actions among all the sectors and at all spatial levels and it has to include mechanisms of monitoring and assessment (YPEXODE, 2003). ICZM principles can be summarized as follows (Snoeren 2003):

- a broad overall & long term perspective: thematic & geographic
- adaptive management: adjustment to new problems, knowledge
- local specificity & involvement of all parties concerned
- working with natural processes & use of a combination of instruments
- support and involvement of all relevant administrative bodies

Although many different policies have been proposed for ICZM to be implemented, it still lacks a broader framework which could promote an integrated management perspective for coastal zones. Some barriers to ICZM realization are still present, such as bureaucratic inertia, opposition to changes, conflicts coming from multiple interests, overlapping of local, regional and national competencies and difficulties of cooperation among different bodies (YPEXODE 2003).

All in all, it is a general observation that in coastal areas special attention should be paid to the adaptation of the waterfront redevelopment, to the context of urban fabric needs and functions and to the relation of the coastal area to its hinterland and the whole region.

## 2. Case studies

### 2.1 The Athens case: The Management of the replanning process of the urban coastal zone towards the Saronic gulf.

#### 2.1.1 Main characteristics and spatial problems

The compact urban complex of Athens was extended in an exceptionally intense way during the previous decades and has now occupied the total coastal zone in the southern part of the Basin (with a total length of approximately 20 km). The study of the recent history of the urban development of the Athens Metropolitan Region leads to the conclusion that both the two coastal areas of Attica have been developed in an extensively unorganised way. In the eastern area, significant pressures for further urbanisation and suburbanisation (both for seasonal and permanent residence) can be observed, while in the south-western coast, pressures for urban land uses which couldn't be located elsewhere in the Athenian Basin (marinas, airport, athletic facilities, night clubs, deposition of garbage, etc) can be confirmed. (Serraos, Skortsis, 2003) (Fig. 1, 2).

Today the city seeks to “regain” the coastal zone of the Saronic Gulf, however the situation is already negatively shaped and in most cases in an irreversible way. Two very important choices/interventions, which were implemented in the Attica region during the last decade, have shaped the current transient status that characterise it. The first one was the transfer of the airport from the Ellinikon district to the Mesogeia / Spata area (in the eastern part of the Attica prefecture) and the release of the area the former airport occupied. The second one was the decision on the installation of many of the Olympic sites in the coastal area which begins from Faliron SEF (“Peace and Friendship” basketball stadium) and reaches the Ellinikon area. Considering all these factors we can conclude that planning for the coastal zone cannot be characterized as an easy task,, however it is a challenging issue both for the central institutions of planning, and for the representatives of the Local Administration. Through their actions and initiatives they can both contribute substantially to the improvement of the quality of life in the urban environment (Serraos, Skortsis 2003).



Fig 1. (left) Aerial view over the southeastern Athenian coastal zone. The main coastal road (Posidonos avenue) builds an important obstacle for the citizen's access to the coastal area. In the middle the Alimos Marine can be seen, one of the biggest in the Mediterranean, while in the back lies the Faliron Olympic pole.

Fig 2. (right) Aerial view over the Alimos Marine and the urban front of the residential areas. High population densities and lack of open public space are two of the main characteristics.

One of the most interesting characteristics of the coastal area is the significant local differentiations regarding its geomorphology as well as other functional elements. For practical reasons the whole coastal area can be separated in three parts with distinguishable characteristics. These parts are the urban forehead of Piraeus (harbour and Peiraiki Peninsula), the central urban coast of Athens (Falirikos Ormos), as well as the so-called suburban coast (the remaining coast area up to Vouliagmeni district) (ORSA, Study on the marine forehead of Urban Athens Complex ORSA, [www.minenv.gr](http://www.minenv.gr)).

In the area of Piraeus, one of the main characteristics that can be observed is the change of its character with the gradual reformation of the harbour areas, the abandonment of the big and old industrial-craft-based facilities and finally the attraction of new activities which will occupy the related released areas. The second unit that includes the Faliro Bay, is an ecologically sensitive area, which includes the estuaries of the Kifisos and Ilisos rivers and where the main aim is set on the creation of a new urban coastal front for Athens. For the third unit, from Faliron Bay up to Vouliagmeni, the main objective is to define and to ensure the fine balance between the maintenance and re-establishment of the complex natural coastal environment and the development of recreational activities. Especially the second and third units are characterized by incompatible uses and extreme burdening through urban activities, devalorisation of the natural and anthropogenic environment and of the landscape, significant pressures of economic interests and restriction of the public, open character of the area. Additional disadvantage for these areas is the problematic circulation and access to the coastal forehead, because of the coastal Poseidonos avenue which constitutes an obstacle for the direct access of the residents to the sea (Fig. 1). Finally we also could point out the absence of an effective management due to the parallel action of many and different state, local and private institutions on various levels and the absence of a single coordinating institution. (Aravandinos, Serraos, 2005)

## 2.1.2. Goals, policies and planning issues

### a) Official overall planning

The Organisation of Regulating Planning of Athens (ORPA) holds the main responsibility for the mapping out of a general policy for the land organisation of the Capital city and for a more specialised policy for the management of its coastal areas. Within this framework, the main objectives and directives for the planning are directed by the Regulating Planning of Athens (RPA, 1999). In this plan what is mainly emphasised is the need for "upgrading the natural and anthropogenic environment of the wider region of Athens" and, among other issues, the efforts that are required for the "protection of the landscape, the coasts and the special areas of natural beauties". More specifically, a series of directives and measures are stated with regard to the coasts focusing mainly in their "protection by the spread of the built-up use and fences", as well as for their integration in a single network with other free areas and recreation areas, through the shaping of pedestrian streets and bicycle ways. In this frame, the coastal area of the Saronic Gulf is destined for development of "areas of recreation and cultural equipment". (RSA, 1999)

Respectively, the recent or older General Urban Plans (GUP) of coastal municipalities (P. Faliron, Alimos, Greek and Glyfada) set the basic directives that concern, among other things, the land uses and the hierarchy of some of them (e.g. centres), as well as the hierarchy of the road network. Especially now, that all these plans and



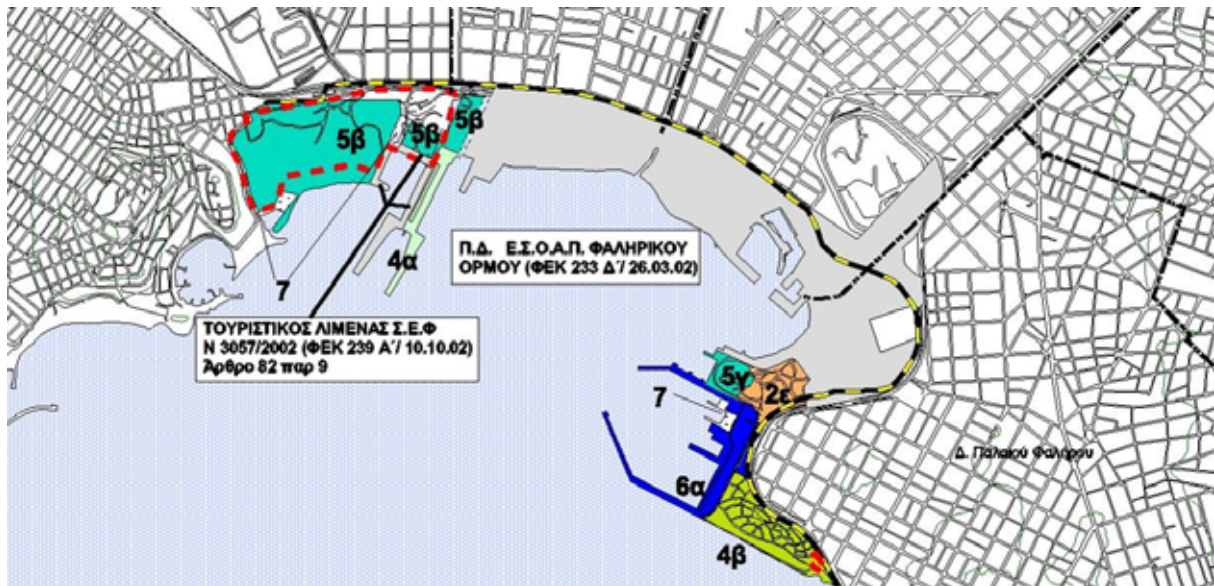


Fig 3. Regulations for the protection and the development of leisure, recreation, cultural and tourist activities in the coastal front of Athens (extract: Faliron Bay). 2ε: Rehabilitation of existing sport facilities, protection of natural and archaeological elements. 4α: Regional suburban green space, public spaces, pedestrian zones, parking areas. 4β: Regional suburban green space, recreation, culture, leisure activities. 5β: Metropolitan suburban green space, sport facilities. 5γ: National navy museum, navy heritage park. 6α: Marina. 7: Water sport facilities. Source: ORSA.



Fig. 4. Satellite View of the Faliron Bay Olympic sport facilities, the Olympic marine and the former Hippodrome area in the north-western part of the complex. The post-Olympic replanning and use of the whole complex, as well as the preservation of the public character of the open space still remain a crucial issue. The coastal road (Posidonos Avenue) acts as a barrier between the Athenian urban web and the coastal zone. Source: Google Earth).

interventions are to be implemented, it is of a great importance to preserve the public character and use of the coastal zones which is actually part of a wider net of public spaces and public functions in the city. The difficulties that official planning is facing, especially concerning the implementation of certain objective, and the lack of coordination among the representatives (with a confusing legislation concerning the powers that each one has), have an effect on the coastal urban areas. The GUP are proved to be inadequate to face the expansion and the conflict among the land uses and the change of the public character of the coastal area. For this reason there is an underlined need to create and establish specialised plans of urban synthesis with a dimension that includes the ideas of architecture and urban planning. (TEE, 2443: 8,9).

## **b) Selected segmental plans**

A more specific planning frame for the protection of the coastal area of Saronic Gulf and the regulation of the land uses, which specialises the objectives of RSA (ORSA, 1997), was enacted as a Presidential Decree (PD) (FEK 254 D 5.3.2004) (Fig 3). More specifically it aimed at the ecological reorganisation of the coastal area, at the safeguarding and enhancement of its natural elements, as well as at the boost of its public character.

The most important among the referred land use categories, concerning the area investigated in this paper, are the following (ORSA 2002) (Fig 3): ●Re-establishment of natural landscape and flora and fauna of Attica, ●Free swimming coasts, ●Rehabilitation of organised swimming coasts, ●Suburban green of regional character with leisure activities, public space, pedestrian walks etc, ●Suburban green of metropolitan character with relative uses, ●Marinas, ●Navy sports' facilities, ●Piscatorial shelters.

## **c) Special planning for the Olympic Games 2004 preparations**

In the frame of the preparation for the 2004 Olympic Games, Special Plans for a Comprehensive Spatial Development (ESOPAP) were approved (in addition to the above mentioned PD), which included the Olympic Pole of Faliron, as well as the area of Agios Kosmas, where the Olympic sailing centre was developed. Within this framework, a series of important Olympic facilities constructed including sport facilities as well as other urban infrastructure. For instance, the Olympic Pole of Faliron (Fig.4) included a new stadium for Tae Kwon Do, a half-open court for Beach Volley, a new pedestrian zone, called "Esplanada", which lead to the "square of water" in the centre of this area, a navy sports marina, open green spaces, etc.

The spatial development plans for the coastal area, worked up before 2004, included a range of interventions, in order to exploit the Olympic facilities in the long run so as to improve the quality of life in the wider coastal area, as well as in the Athens Basin in general. Among these regulations, which couldn't be completely realised until today, it is worth to mention the following: Ecological Park and flood-preventing protection works, transportation infrastructure that would improve the access to the coast (shift/demotion of the coastal avenue in Faliron, etc.), completion / improvement of the existing or the new constructed open / public / green spaces, completion of the pedestrian network along the coast, etc.

After the Games a new Law (3342/2005) was voted, which now determines on the one hand the uses allowed in the Olympic areas and on the other hand other required measures for their spatial exploitation. For instance, in the Olympic Pole of Faliron which includes the area of the old Hippodrome, additional cultural and urban uses are allowed and recently are being developed, besides for the athletic ones. In addition, a new public organisation entitled "Olympic Real Estates" was established, in order to manage the post Olympic uses and to exploit the Olympic areas.

The overall estimation of the post Olympic planned interventions and regulations shows that they haven't yet been sufficiently associated to an integrated spatial plan, in order to reform the Olympic areas into attractive tourist / cultural poles and at the same time they haven't managed to attract or to develop activities with metropolitan and international importance in the Athens Basin,. In addition, the implementation of the required infrastructural and environmental projects isn't adequately ensured, which probably will cause significant problems, while attempting to utilise the eastern Athenian coastal area, in order to achieve an essential upgrade of the quality of life, but also a productive reorganisation, a support of employment, as well as a social cohesion in the wider Athens area.

## **2.2. Hamburg: Replanning of the river side zone**

### **2.2.1. Main characteristics and recent transformations**

Hamburg is one of the most important cities in Germany, while at the same time it constitutes a self-existent Confederate State. Its unique geographical position in the centre of northern Germany, as well as on the banks of the navigable river Elba singularizes Hamburg as an important hub in the international transport map. The harbour is the biggest in Germany and one of the most important in Europe. Despite the distance of about 100 kilometres, that separates the city from the North Sea, the "water" constitutes the main element of the city's character (Kropp, Niebuhr, 2006). The "opening" of the borders of the former eastern European countries, as well as the reunification of Germany, led to a dynamic demographic increase from 1,6 to 1,75 mill. inhabitants, providing the city with important political and economic profits (Bode/Lammers 1994). Hamburg is today the most intensely developing German metropolis, with a forecasting further growth up to 2020. The demographic structure is based on a multicultural society, with roughly 15% of foreigners.

### **2.2.2. Goals, policies and planning issues**

#### **a) Overall urban planning policies**

In 2002, the Senate of Hamburg formulated guidelines for future policies, entitled "Metropolis Hamburg - developing city", as a long-term strategic vision for the further growth of the city. Hamburg owes, according to this vision, to develop itself in a dynamic metropolis with international importance. Thus the city has to improve its



international projection / marketing, as well as to develop structures in order to attract enterprises and human potential. Basic conditions for the concretisation of the above vision are the reassurance of sufficient offer of ground for residence and enterprises, the improvement of the transportation infrastructures, as well as the guarantee of good quality of life (Freie und Hansestadt Hamburg, 2007).



Fig 5. Aerial drawing of the Hafencity project. Source: <http://www.hafencity.com>.



Fig 6. View of the new urban open space “Marco-Polo-Terrassen”. Source: <http://www.hafencity.com>.

This political vision has consequently a particular importance for the urban space and for the spatial development and requires its rehash in terms of a “Spatial Directorial Plan” (SDP) (Leitbild). The SDP owes to specialise and to particularise, in a time horizon of 15 years, the above political objectives. It constitutes substantially a binding frame of objectives and acts for the administration, as well as consequently a section between the programmatic level and the level of binding urban plans (eg space utilisation plans). A central field of actions constitutes the effort for “more city in the city” (exploitation of existing space reserves in the already dense structured urban web), with the main accent put on the action “Jump over the river Elba” (Sprung über die Elbe). Therefore, the epicenter of the future urban development is placed on a qualitative internal urban growth in the area around the river Elba and its urban banks.

Important developmental results for the entire city are expected through the realisation of this action, which becomes already gradually visible in the developing area of the “Hafencity” (Fig 5). In “Hafencity” Hamburg gains new urban space in a very central urban district, along the river Elba and in areas of a former central part of the harbour. Beyond the developmental dimension of this action, spaces for free time, recreation, green and natural life are also promoted in this area.

### **b) Special planning issues in the frame of the “Hafencity” project**

The predominance of containers as a basic mechanism in international transportation system was the main reason of the rapid increase of the need for new harbour stocking space, forcing the displacement of the transshipment works of the Hamburg harbour in new, modern facilities in the southern Elba region. This situation led to the unique opportunity for Hamburg to recover the area for the city centre in the mid-1990s, without affecting the

economic interests of the port. When “Hafencity” was formally established by the City Parliament Act of August 1997, Hamburg created the conditions for its return to the river Elbe.

The “Hafencity” project targets on the development of a new live urban space of a total built space of about 1,8 mill. m<sup>2</sup> with mixed uses of residence (5.500 new homes for 12.000 residents), offices, tourism /recreation, education, business and culture (40.000 workplaces), in an area of 155 ha.

Additionally, great importance is attached to the restoration and rehabilitation of historical buildings, as well as on the planning of public space (parks, squares and riverside quays) (Fig 6). Except for the choice of the development area in the former harbour district, important innovations of the overall program are located also on the architectural formation, on the reinforcement of the residential use, on the intense contact with the element “water”, on the pioneer energy management, as well as on the realisation processes through cooperation forms between the municipality and the private sector.

The whole area of the “Hafencity” (masterplan Kees Christiaanse/ASTOC) is organised in individual sectors, depending on the characteristics and the combination of the land uses, the building density, the public or private character of the urban systems, the image of the public space. etc. Within this framework, the public space acquires a special importance as a binding element among these individual urban units, as well as, as an element for configuration of the identity of the entire area of “Hafencity”.

### 3. Conclusions

The discussion about the management and the formation of the coastal urban fronts is extremely apropos and it is of special scientific interest within the framework of contemporary urban planning. Coastal urban zones are characterized by a series of special features and apart from being usual receptions of basic urban functions they also play an influential role on the formation of a city profile and image. Thus in these areas we observe the appearance of strong competition and mixture of uses, while in many cases functions that were dominant for years (and today have passed in a transition or post-evolution stage), have left their prints on the buildings and on the profile of the coastal areas. Planning nowadays is invited to intervene suggesting new and attractive replanning policies (and this is where the issue of replanning comes up). Within this framework cases which appear to have not much in common (e.g. Athens – Hamburg) and even if they derive from totally different planning cultures, seem to find common characteristics and parallel structures particularly when it comes to the field of thought and exploration of the ways of facing issues related to their coastal / riverside fronts.

The planning of the Elva coastal urban region in the case of Hamburg, is connected with a wider bold policy which emphasizes on the development of the area (residential development, attraction of new economic activities in a wider region, etc). This is the framework in which a consistent and hierarchically structured planning of directions policy has developed, together with their specialization on the spatial level through the development of particular goals, specialized directions of action and further interventions. Special emphasis is at the same time given on the integrated management and the environmental upgrading of the region in relation with the ensuring of technical and social infrastructures of high quality. In the case of Athens, although many positive steps were taken towards complete planning during the last decades, the development of a multi-level and multi – thematic complex of inter-complementary directions, actions and further interventions / projects, would have so much to offer in order to make the coastal front of the Saronic gulf a viable, from an economic, social and environmental perspective, and a politically feasible planning.

In this way, a complete total of interventions, on the basis of a united and consistent strategy, could present specializations e.g. for the western unity (from Perama to Piraeus) with emphasis given on the economic reconstruction on the upgrading of the port-industry complex and on the enhancement of social cohesion, while for the eastern one (from Faliro to Voula) with emphasis given on the environmental upgrading, on the development of innovative activities of tourism, culture, sports and leisure combined with emphasis on the development of new dynamic branches and innovative activities. The following could be mentioned as more specific action directions:

- Protection and elevation of natural habitat and cultural characteristics
- Recovery of public space and its use by the citizens
- Completion of all the necessary technical and social infrastructures (including flood controls protection of the urban areas)
- Application of innovative approaches and recovery of the beaches, connection of the coastal zone with the neighbouring urban net through the appropriate management of the seaside road, energy self – sufficiency through the exploitation of Renewable Energy Sources self-sufficient management of water for irrigation, viable management of waste, electronic information / education etc.
- Maximization of the positive consequences on the productive activities and on the human resources of the wider area and reinforcement of social cohesion
- Constitution of an effective scheme of urban ruling in the region based on the cooperation of the local administration with the local organizations and university institutions concerned, promoting at the same time citizens’ participation.

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For the case of Hamburg information is used from the following internet sites:

- Freie und Hansestadt Hamburg: <http://www.hamburg.de/>
- Metropolitan region of Hamburg: <http://www.metropolregion.hamburg.de>
- Initiative «Metropole Hamburg – Wachsende Stadt: <http://www.wachsendestadt.hamburg.de>
- Wikipedia (Hamburg): <http://de.wikipedia.org/wiki/hamburg>

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