

Legal Reforms in Land Management Aspects to Support the Construction and the Continuing Use of the Olympic Infrastructure An Example of Good Practice in Greece

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SUMMARY

The 2004 Olympic Games have left major legacies in land management in reformed legal procedures and land policy principles in Greece. These refer to all general infrastructure improvements, but mainly to the development of the new Olympic infrastructure which in the post-Olympic era should be used for a variety of athletic, cultural and trade activities. A serious land-use regulation and procedural reform took place during the preparation period prior to the Olympic Games 2004 in Greece. Due to that reform, and to the overall spirit of political cooperation and coordination in land-related activities and construction projects, Greece managed to organize one of the most successful Games in recent history. General Infrastructure projects whose construction had been pending for several decades were finished on time and most of the long standing problems were dealt with successfully.

Despite the fact that all previous governments had tried to make it legally valid, to be prepared for the post-Olympic era, until recently land policy in Greece did not allow “mixed land use” in such installations. Several Olympic installations had been planned to continue operations with identical land use (such as convention, athletic, tourist) after the Olympics, creating thus an oversupply in specific infrastructure, while other land uses (such as thematic parks, academies for applied arts, and commercial use) important to the Attica region and to the other Olympic cities either were not planned at all or they were included in the plans without specific scientific study.

This paper makes a thorough systematic research of such land management issues and specific legal reforms, which had to be dealt with both for the construction and the development of the Olympic infrastructure. A comparison is made of these reformed procedures to the traditional procedures followed for the development of land in Greece, and the benefits of “event-led” development are shown. A similar research is made for the necessary additional specific legal reforms which after discussion and documentation by the Hellenic Parliament were included in the post-Olympic governmental action plan for the sustainable future use of this infrastructure. The conclusions of the above research are given together with suggestions to be considered by the planners of future Olympic Games.

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1. INTRODUCTION

The Olympic Games (OG) are considered to be a major international athletic, financial and social event. The successful organization of the 2004 OG brought Greece, a small country, into the center of global attention. Organizing the Games was characterized as the country's golden national opportunity. The general international approval regarding the success of the Games proved that Greece has developed the necessary capabilities and mechanisms to meet the emerging needs and challenges of a rapidly developing society. Much of the success was achieved due to a joint effort, unity among Greek politicians, accord within the Greek people, and an exemplary operation by the city of Athens administration during the period of the Games. The 2004 OG have left major material and intangible legacies. The material legacies include the improvement of all national general infrastructure and the specific Olympic installations, which through the necessary decisions and legal reforms can now serve multiple athletic, cultural, and commercial activity. They have created value not only to the installations themselves but also to the real estate within the broader surrounding areas (Zentelis, Labropoulos, 2004). The intangible legacies include the improved international reputation of the country, the updating and globalization of the Olympic spirit within the contemporary international scene, the introduction of general ideas like the integration of the Olympic culture into Hellenic general education, the general nation-wide feelings of confidence and optimism, and the introduction of volunteerism for the common benefit. Perhaps the most important outstanding legacy is the experience and know-how in technical, administrative, financial and legal issues related to land management and development.

Event-led development should be accompanied by tangible social and economic benefits of similar significance in order to balance the large financial expenditures and the necessary legal, social and political reforms (Potsiou, Zentelis 2005). From a surveyor's perspective, the organizing of this event is one of the best examples of the need for good practice in developing effective and less time-consuming procedures in land management issues and in land expropriation, building permit procedures, land-use regulations and land-use conversion procedures. It shows clearly how the organizing of such a major event within a fixed period of time can have a beneficial impact on land development and economic growth of the host country.

2. LEGISLATION GOVERNING SPATIAL PLANNING AND LAND DEVELOPMENT IN GREECE

Spatial and urban planning is considered to be the fundamental tool for decision making to define strategy for land development and to secure economic growth, social stability, environmental protection and quality of life. It is ruled by a unified legislative framework and regulations that are the basic tools, together with the Hellenic land administration system, aiming to create sustainable settlements which will be well integrated into the natural environment and the cultural heritage of each area.

Law 360/1976 and Law 2742/1999 with its amendments constitute the basic legal framework that rules the procedures for applying land policy and spatial planning in Greece. Despite the long effort and several administrative reforms the procedures of applying spatial planning are still costly and time-consuming. This process for the definition of zoning regulations at regional level included:

- decision by a multi-ministerial Committee for the Coordination of Governmental Policy in the Field of Spatial Planning and Sustainable Development,
 - decision/approval by the National Council for Spatial Planning and Sustainable Development,
 - compilation of General Regional Framework for Spatial Planning and Sustainable Development, for each one of the 13 administrative Prefectures of Greece; Figure 1 shows by example the Regional Development Plan for the Prefecture of “Sterea Hellas”,
 - compilation of Special Framework for the Spatial Planning and Sustainable Development.
- These General and Special Framework for Spatial Planning and Sustainable Development define in a general manner the land use zoning in the Prefecture.

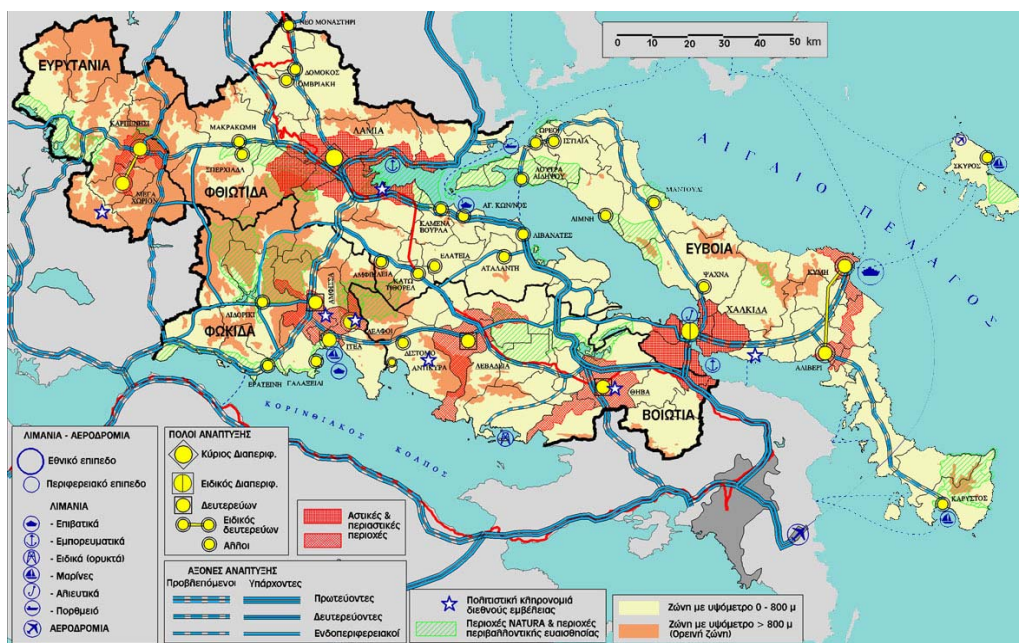


Figure 1. Regional Development Plan from the General Regional Framework for Spatial Planning and Sustainable Development of the Prefecture of “Sterea Hellas”

The Regional Framework for Spatial Planning and Sustainable Development for 12 of the 13 Prefectures of the country (except Attica) were legislated (and published in the Governmental Gazette) in the period October 2003 – February 2004, while currently the study for the «National Spatial Plan for the completion and enactment of the General Framework for Spatial Planning and Sustainable Development» is being compiled. So far none of the Regional Special Framework for the Spatial Planning and Sustainable Development for various sectors of activities e.g., coastal zone, tourism, etc., has been completed and ratified.

Attica and Thessaloniki, the two largest regions of Greece are governed by special spatial planning procedures. In particular, Law 1515/1985 with its amendments defines the Regulation Plan for the spatial planning of the greater area of Athens and in general for the Region of Attica. Through this law the responsible agency (Organization of Planning and Environmental Protection of Athens) was established for the spatial organization of Attica named “Strategic Spatial Plan”, the regional structure of the production sectors, the transportation system and other technical infrastructure, land policy and housing, zoning of specific interest or other special problems, and environmental monitoring and protection, etc. The relevant issues that refer to the greater area of Thessaloniki are ruled by Law 1561/1985. The National and Regional Spatial Plans and the environmental protection programs ratified by the above mentioned laws are completed, specialized, clarified and amended by Presidential Decrees which are published after a proposal by the Minister for the Environment, Physical Planning and Public Works.

Publication of such Presidential Decrees is a complicated and time-consuming administrative and legal procedure for which, first, a series of other ratifications and consultancies are needed by several agencies and legalized bodies, and second, the ratification by the Council of the State, the highest court of the state, is required.

Housing and urban planning and land development of urban areas larger than 2,000 inhabitants, including environmental protection, is defined by Laws 1337/1983 and 2508/1997 and their amendments and is accomplished in two stages. The first stage includes:

- compilation of the Planning and Environmental Protection plan , and
- compilation of the General Urban Plan for all urban and suburban areas and the plan for the spatial and housing organization of the “open city” for the non urban areas.

The second stage is the specialization and application of the first stage and it includes:

- compilation of the Urban Planning study and the Urban Planning Implementation Act, and
- ratification of the Urban Planning study by Presidential Decree and the Implementation Act by the Prefect.

For all the above mentioned reasons the ratification of an urban planning study may require 3 to 4 or more years until it is published in the Governmental Gazette. It is estimated that the total average time for the compilation and ratification of an urban planning study is approximately 8 years.

Construction permitting is also a long, complicated and time-consuming procedure in Greece, since it involves permitting from approximately 12 involved agencies.

2.1. Legislation Governing Obligatory Land and Real Property Expropriation in Greece

The most serious restriction in the ownership of land included in the legislation of the Hellenic public law is the power of the state to apply obligatory expropriation of land and private property; this is the taking of private ownership with monetary compensation for the benefit of the public. Some benefits are: agricultural reform and rural land consolidation, spatial planning and urban land consolidation, construction of public schools, construction of basic infrastructure (i.e., road network, railway), the protection of cultural heritage and archaeological sites, environmental protection (i.e., of the coastal zone), and transmission of electric power.

Due to the significance of this state power, the definition and the legal nature of obligatory expropriation of land are clearly described in the Constitution and distinguished from the other restrictions of ownership included into the Civil Code. The Hellenic Constitution protects the private ownership of land and real property, yet it would have been against the ideas and philosophy of social operation if this protection was absolutely inviolable without any exceptions. The Constitution brings the necessary balance between the private and the public interest by allowing, by exception and only after a full compensation, the loss of ownership by the individual citizen when this will benefit the benefit of the public interest. Obligatory expropriation is not an obligatory sale transaction through the private law, but a one-sided state act of the public law. Obligatory expropriation is an absolute non-personal act, valid against everybody who claims ownership on the real property which is under expropriation. Only the state has the right to put in effect an obligatory expropriation procedure for the benefit of the state, local authorities and municipalities, and other legal persons of private and/or public law.

Historically the basic legislation, Law 1731/1939 (with amendments) and Law 797/1971 determined the procedures for obligatory land expropriation such as the announcement, compilation, withdrawal, determination of compensation, and adjudication of rights (Badekas 2000). The basic prerequisites for an obligatory land expropriation are the:

- Proof of the existence of public benefit
- Determination of the public benefit through legislation
- Full compensation to the owner
- Determination of the amount of compensation by the civil courts.

During recent decades an unreasonable frustration caused by innumerable and conflicting legislation regarding the application of obligatory expropriation became a common reaction among Greek citizens, lawyers and legislators. Some of the causes are:

- The insufficient understanding in the field despite the broad need for obligatory land expropriation in practice
- The failure of attempts to make a systematic legislative reform in 1976 and 1983
- The frequency of random amendments made to the existing regulations, decrees, etc, by the responsible administration, intended to overcome weaknesses for an integrated and systematic approach to providing services, and

- The frequent change of legislation without analytical or persuasive reasoning that proves lack of general principles in the field (Choromidis 2000).

Land expropriation often involves judicial procedures which create long delays and frustration to both sides. These facts have made land expropriation procedures a costly and time-consuming process with considerable delays in the courts. The traditional procedures do not always create the necessary legal security, and thus create serious delays in land development, in the delivery time of the public works, the absorption of available financial budgets, etc. Recently, due to the harmonization efforts with the European Law, there is progress in reforming ideas that had been of broad application for many decades in Greece.

The OG, due to their temporary character, cannot justify a permanent expropriation of private ownership as such. Consequently, the use of obligatory land expropriation for this purpose would not have been an easy task if required to follow the existing legislative framework.

3. LAW AND PROCEDURAL REFORMS FOR THE CONSTRUCTION AND OPERATION OF THE OLYMPIC INSTALLATIONS

It was obvious that it was impossible for the existing Hellenic institutional/legislative framework (spatial and urban planning procedures, obligatory land expropriation, building permitting procedures, and commercial real estate operating permitting procedures) to complete the construction and operation of the Olympic installations within the fixed time limit.

For this reason the Hellenic government chose to skip the traditional legislative procedures and adopt more flexible methods. These were intended to be legally valid while providing ways for achieving immediate results.

The total number of the Olympic installations that were sited and constructed in various areas within the Hellenic jurisdiction was 38. For the construction of these installations the land had to be acquired first, the land-use restrictions and building regulations had to be defined and the necessary construction and operational permits had to be acquired. Thirty four of the installations are sited within the greater area of the Prefecture of Attica and the remaining four in the related large cities of Greece (Figure 2).

The Hellenic government decided that for the total procedures needed for:

- spatial and urban planning and siting of the Olympic installations,
- obligatory expropriations for the necessary land acquisition,
- construction/ building permits,
- operational permits.

All relevant regulations should be ratified by the Hellenic Parliament through related laws and legislative regulations. A more detailed research made by the authors of this paper follows.

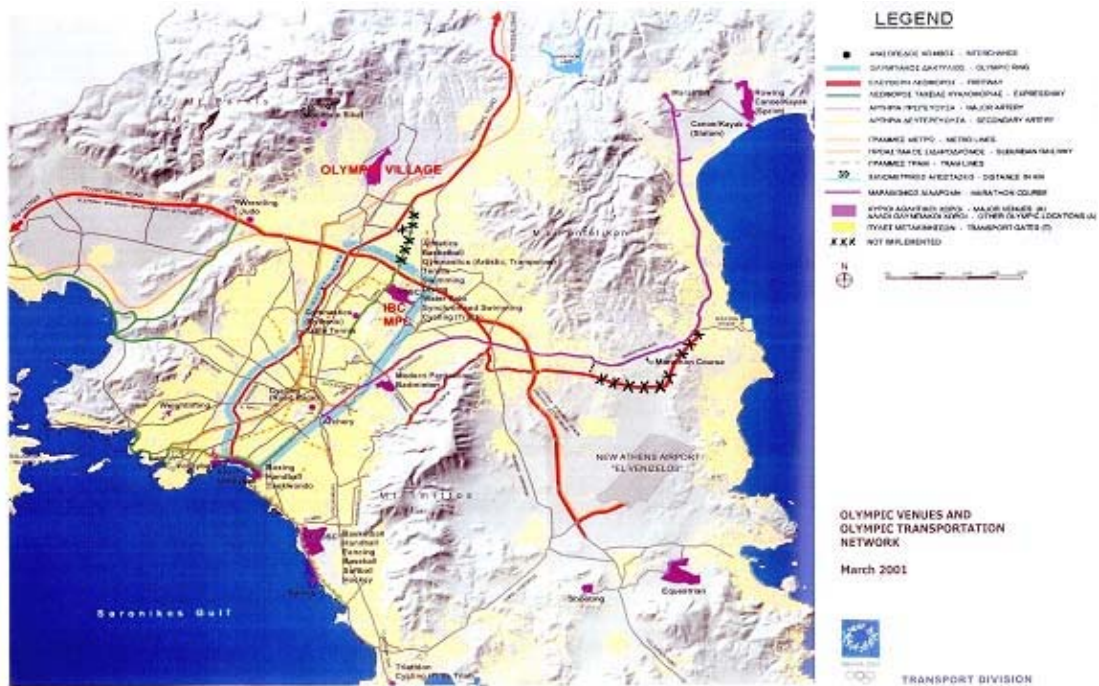


Figure 2. Olympic venues and Olympic transportation network

3.1. Spatial and Urban-Planning Regulations and Restrictions for the Construction and Operation of the Olympic Installations

Through the above mentioned process a legislative regulatory framework was created. Most of these regulations, such as Laws 2598/1998, 2730/1999, 2741/1999, 2819/2000, 2833/2000, 2882/2001, 2912/2001, 2947/2001, 3010/2002, 3057/2002, 3207/2003 and 3254/2004 refer to the pre-Olympic era for the accomplishment of the necessary constructions and their operation for the organization of the OG. Law 3342/2005 refers to the permitted land-use for the Olympic installations in the post-Olympic era. A description of these laws follows:

- a. By the Law 2598/1998 the “National Committee and the Organizing Committee of the Olympic Games-Athens 2004” were established and their operational procedures were defined,
- b. By the Law 2819/2000 the private company “Olympic Village 2004 SA” was established,
- c. By the Laws 2730/1999, 2833/2000, 2947/2001 the Olympic installations were sited and the building regulations and restrictions for those constructions were ratified,
- d. By the Laws 2741/1999, 2882/2001, 2912/2001, 3010/2002, 3057/2002 and 3207/2003 the regulations about the Olympic legislation were completed, amended, and updated, and
- e. By the Law 3254/2004 the framework was defined for the procedures for issuing the operation permits for the installations, the traffic regulations during the OG, etc.

Appendix 2 presents a list of the legislation referred to in this paper with a brief description of each.

There was a requirement that athletic installations built according to the technical specifications of the Games should be available for training for a two-month period prior to the Games. To achieve this goal it was decided that 60 of the existing athletic installations, all over the country and especially in the cities where the new Olympic installations were sited, should be modified, adjusted and improved according to the new specifications and be used as training sites.

Responsible agencies for the spatial siting of the Olympic installations were the Deputy Ministry of Sports (which is under the responsibility of the Ministry of Culture) and the Secretariat General of Sports.

3.2. Construction/Building Permits for the Olympic Installations

For the excavations and construction of the new Olympic installations, the renovation of the existing installations which were also integrated into the list of Olympic installations, the demolition of the old buildings and for the construction of additional auxiliary and supportive installations which were selected to be the training sites, the issuing of relevant building/construction permits was necessary. According to the urban planning legislation and procedures obtaining building permits normally requires several stages of controls from twelve land related agencies e.g., forest-land agency, archaeological service, etc. It is estimated that the average time for the compilation of the design and static study, the submission of all related documents and the issuing of the construction permission may require a period of 2-3 years (Potsiou, Ioannidis 2006). It is obvious that the issuing of these permits for all the Olympic installations, renovations, demolitions, etc, would have been a complicated and time-consuming procedure. In addition, this task would have been an extra work load to the urban planning offices in all areas where the Olympic installations were sited, thus giving an extra delay to the everyday land development needs in these areas.

To overcome this difficulty, the Hellenic government decided by Law 2730/1999 to give the responsibility to the Direction of OKK (Building Construction and Structural Regulation) located at the headquarters of the Ministry for the Environment Physical Planning and Public Works for the issuing of all construction permits for the Olympic installations. Two Ministerial decisions defined the necessary documents that should be submitted, and the procedure to be followed for issuing the construction permits. Based on this framework 133 construction permits were issued for all the Olympic installations and the accompanying and auxiliary buildings and constructions.

Two agencies were given responsibility for supervising the construction of the Olympic installations: the Ministry for the Environment Physical Planning and Public Works for 5 installations: Faliro, Hellinikon, Ag. Kosmas, Schinias, and Galatsi, and the Secretariat General of Sports for all the rest. The construction of the Olympic installations was contracted to the Private Sector (Hellenic Association of Consulting Firms, 2004).

3.3. Obligatory Expropriation for Land Acquisition to Build the Olympic Installations

Especially for land expropriation purposes for the organization of the OG new laws were created such as Law 2598/1998, Law 2730/1999, and their several amendments in the following years by the Laws 2741/1999, 2819/2000, 2947/2001, 2992/2002, and 3057/2002. Law 2730/1999 has upgraded the organization of the OG to a “national opportunity to satisfy long-term needs of public interest, such as the spatial and urban reform of the broader area of Athens, the protection of natural and cultural heritage, and the creation of athletic, social, and tourist infrastructure”. For better documentation of the long term needs the “public interest/benefit” criterion was used not only for justifying land expropriation but also for the general concept of the organization of the OG and the possibility to satisfy even longer term social needs which will extend into the post Olympic era.

The objectives of this new Law 2730/1999 were:

- to guarantee the systematic and homogenous approach of the Olympic infrastructure regarding the spatial, environmental, and urban planning issues,
- to improve the organizational and coordination capacity of the responsible agencies and to enable them to carry out their projects within scheduled deadlines,
- to accelerate the procedures both for the acquisition of the necessary land and especially to avoid the problems which might arise through the existing legislation and its practical application, and for the construction of the Olympic installations.

When the state decides to expropriate privately owned real estate it puts into effect perhaps the most severe measure against private ownership. This demands a detailed documentation regarding the purpose of expropriating the real estate, but also regarding the need for expropriating the total area under consideration. In some cases the Council of the State (the highest Court) has decided that the reasoning was not fully documented (Decision of the Council of the State 534/2002). In some other cases the land under expropriation was part of a privately owned forest-land (the “forest-land” designation is a special restriction on the use of land). In this case the expropriation was permitted but the change of land-use was only allowed on a very small part of the estate.

The normal procedures that are followed for any kind of development in Greece which demand the acquisition of several permits from various involved agencies were not followed through in other cases. These expropriations and constructions were considered to serve the public benefit, to be urgent and to be of major importance. Neither cadastral tables nor cadastral maps were compiled prior to the expropriation as the existing legislation demands, and the procedures for the information of the public were not followed. To the contrary, more simple methods were used such as the compilation of simple survey plans of the area under expropriation listing the current owners without any specific research, and publication of the governmental decision for the expropriation. The traditional deadlines for acquisition of the land were not followed and the compensation amount was not decided or delivered according to the traditional long procedures.

For the temporary use of real estate that belonged to the state, local authorities, churches, monasteries and universities land expropriation was not necessary. The only commitment of

the state was to pay for any damage or permanent change of the constructions and to give back the real estates to the original owners after the closing of the OG.

The effort to accelerate the process, and to skip all difficulties that might delay the procedure, made some Law experts skeptical in respect to the rights of the property owner and how well those rights were acknowledged, and which rights were significantly restricted. Examples of these rights are:

- the time defined by the traditional legislation and the means to be used to inform the owners,
- the very restricted deadlines given by the reformed specific OG legislation for any objections filed by the owners, and
- the procedure followed for the estimation of the amount for compensations.

The total direct cost for land expropriation due to the Olympics 2004 installations was estimated to be approximately 275 million Euros. The land expropriation cost for Attiki Odos road network was 813 million Euros.

3.4. Operational Permits for the Olympic Installations

At every Olympic installation other land-uses, besides the athletic uses, were planned and operated in parallel (see Appendix 1). For example the basic use of the Olympic Village was to house the athletes, yet several other land-uses such as shops, restaurants, doctors' offices, and exhibitions were included. The operational permit of each one of these uses, according to the Hellenic legislation, is governed by different specifications and procedures. The issuing of the relevant permits for such uses is controlled and published by the various responsible local agencies. The Hellenic government, aiming for a unified approach and quick results, defined by the Law 3254/2004 all the necessary specifications and procedures to be followed for issuing the operational permits of all Olympic installations by one single committee seated in Athens. The members of this committee were representatives from the related ministries and agencies; such as representative of the construction agency, the Ministry of Development, the Ministry for the Environment, Physical Planning and Public Works, Ministry of Public Order, Ministry of Health and Social Solidarity, the Fire Brigade, etc. Ministerial decisions defined the necessary documentation and its control for each Olympic installation, and the operational details for this committee.

4. GOVERNMENTAL INITIATIVES FOR THE POST-OLYMPIC SUSTAINABLE DEVELOPMENT OF THE OLYMPIC INSTALLATIONS

Until recently "mixed uses" in the Olympic installations during the post-Olympic era were not legally possible through the existing legislation despite the intentions of the government. Most of the Olympic installations were planned to continue to serve identical uses (conventional, athletic, tourist). Other uses were either not planned or were mentioned in a general form referring to all installations without any particular specialized study. Government decided to face these problems by the Law 3342/2005. By this law a specific agency, the General Secretariat for the Post-Olympic Development of the Olympic

Installations was established as a successor to the existing General Secretariat for the Olympic Games 2004 which was established by Law 2730/1999. This agency was responsible for issuing the post-Olympic land-use/operational permits. The post-Olympic operational permits procedures and regulations of Olympic installations specified in article 9, are governed by law 3342/2005 creating a field of economic security for the investor. Specific uses are defined and operations are cited for each installation separately. The “mixed uses” strategy was considered necessary in order to reduce the operational and maintenance costs, to maintain quality, to integrate disparate uses into the surrounding urban network, and to preserve their public character.

Appendix 1 is a product of the research made by the authors of this paper. It gives a list of the Olympic Installations and presents a comparison of land-uses, regarding the uses defined for each installation during the OG, the uses defined for each installation for the post-Olympic era, and the amendments made through the post-Olympic legislation.

Immediately after the OG, the government established a state-owned private company named “OLYMPIC REAL ESTATE SA” and transferred the ownership of all 38 Olympic installations to that company. This company is responsible for operating the facilities. Estimated maintenance and operational costs led to the decision that 17 out of the 38 installations are to be turned over to the private sector for operations. Two years after the completion of the OG operational plans and procedures for three (Goudi, Galatsi and the International Broadcasting Centre in Maroussi) out of the 17 facilities have been completed.

5. CONCLUSIONS

The research made by the authors of this paper indicates that the OG have a significant land development and construction impact in the hosting country. This in turn is dependant upon land management and development policies for efficiency and control.

Legal issues and procedures regarding land management play a critical role. In countries where land management procedures are costly and time-consuming specific legal and procedural reforms must be considered as high priority issues.

- Land management issues and development procedures related directly to the OG include:
- spatial planning for the location of the Olympic installations (permanent and temporary),
- additional spatial planning for the post-Olympic era
- land-use permitting and zoning issues,
- land-taking (expropriation) for performance sites,
- construction permitting,
- selection of contractors and contracting procedures for the construction of the installations,
- operational permitting during the OG,
- land-use permitting for the post-Olympic era, and
- selection of managers/operators and contracting procedures for post-Olympic use of the installations.

Deadlines and time constraints introduce urgency into the preparation for the OG; time delays increase costs due to inefficiency and inflation; construction projects rushed to completion nearly always introduce extra cost.

Land use policies should be reviewed and revised if necessary to allow for mixed-use zoning since the OG necessarily brings together athletic, commercial, residential and entertainment sites in close proximity.

Any nation who would host the OG should plan for a consolidation of responsibility and accountability among the many public agencies in a position to enact control. Consolidation of the permitting process is of vital importance. Enabling legislation should be considered which would provide for expediting land-takings while respecting land owners' rights. Construction projects cannot be expedited where construction permitting is weighted down by an unwieldy bureaucratic process. Legislation should be introduced which will produce a smooth and efficient process.

An important early (prior to the OG) consideration is how the Olympic sites and facilities will be used after the OG. In addition to legislation to allow for "mixed-use" development, legislation may also be required to allow for "parallel use" facilities, when structures may be built, for instance, as temporary housing for athletes during the OG with the intention that those structures will become rental or ownership housing after the completion of the OG.

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Appendix 1

	Olympic Installation	Olympic Use	Post-Olympic use
1	Schinias Olympic Rowing and Canoeing Center (SCH)	<p>Creation of a center with importance beyond the immediate area, where Olympic installations will be located together with auxiliary athletic installations.</p> <p>Environmental center for the protection, preservation, promotion and improvement of the ecology and the natural biotope of the area.</p> <p>Construction and operation of the Olympic Rowing and Canoeing Center on a parcel of 123 hectares.</p> <p>Use of the water areas for training in rowing and canoeing and/or organizing competitive events at national and international level in these sports.</p> <p>Controlled access by the public to the water areas, from specific access points, for specific numbers of visitors, during specific hours of the day.</p> <p>Forbidden activities:</p> <ul style="list-style-type: none"> - littering, noise-making, disturbance of fauna - use of power boats, swimming 	<p>Pre-Olympic legislation: Multi-functional use as a site that fulfils the criteria for environmentally friendly sports, tourism-recreation, social and cultural activity, and will serve the needs of the greater Athens area.</p> <p>Installations of special environmental infrastructure, which are harmonized with a balanced restoration and protection of the natural biotope of the area.</p> <p>Post-Olympic legislation: -</p>
2	<p>Hellinikon Olympic Complex</p> <p>Indoor Installations:</p> <ul style="list-style-type: none"> - Fencing Hall (HEF) - Basketball Center (HEL) <p>Open air Installations:</p> <ul style="list-style-type: none"> - Softball Stadium (SFB) - Baseball Center (BAS) - Hockey Center (HOC) <p>Canoe/Kayak Slalom Center (CAK)</p>	<p>Creation of a center with importance beyond the immediate area, where Olympic installations will be located together with auxiliary athletic installations</p> <p>Construction, on a parcel of 150 hectares, and operation of sports fields and warm-up areas and other auxiliary installations, necessary for the specific sports; also the public spectator areas for circulation and seating</p> <p>Construction of a figure-of-eight competition course for canoe and kayak with amphitheatric arch seating for 5000 spectators.</p>	<p>Pre-Olympic legislation: Multi-functional use of combined sites for athletic, tourism-recreation, social and cultural service of the greater Athens area.</p> <p>Permanent installation:</p> <ul style="list-style-type: none"> • Hockey field with seating capacity of 3.000 • Permanent indoor competition space of seating capacity of 8.000 • Multi-purpose space for events • The buildings which are incorporated in the complex and which operate as support facilities for the two indoor halls. <p>The public space - “central plaza” - will remain only to the extent that it will be integrated into the total future planning for the Hellenikon Metropolitan Park.</p> <p>The internal Olympic “Boulevard” and its parking facilities are temporary.</p> <p>Post-Olympic legislation: Permitted additional uses and operations:</p>

			<ul style="list-style-type: none"> • Canoe/Kayak Slalom Centre: for the Olympic installations: commercial shops for renting or sale of athletic goods, food service establishments, for the surrounding area: thematic park, water park • Basketball and Fencing: cultural events, commercial shops, food service establishments, exhibitions. • Softball, Baseball and Hockey; auxiliary installations for athletic purposes, cultural events, food service establishments.
3	Ano Liosia Attica Wrestling Indoor Hall (LIH)	Construction and operation of the “Olympic Wrestling Indoor Hall” on a parcel of about 6.5 hectares	<p>Pre-Olympic legislation: -A new decision for the ratification of the environmental regulations is needed for the post-Olympic use of the indoor hall and the other possible extensions e.g., parking</p> <p>Post-Olympic legislation: Planned facilities: - Schools and cultural academies - national archives for audio-visual content Permitted auxiliary uses and operations: - commercial uses, food service and recreation establishments - housing and hostels</p>
4	Galatsi Olympic Hall (GAL)	Construction and operation of the “Olympic Sports Indoor Hall for Table Tennis & Rhythmic Gymnastics” on a parcel of about 1hectare.	<p>Pre-Olympic legislation: Serve combined use of sports, tourism-recreation, social and cultural activities of the greater area of Athens. A new decision for ratification of the environmental regulations for the post-Olympic use of the indoor hall and possible other extensions e.g., parking.</p> <p>Post-Olympic legislation: Permitted additional uses and operations: - commercial shops, food service establishments - cultural events - thematic entertainment area</p>
5	Markopoulo Olympic Shooting Center (SHO)	Construction and operation on a parcel of 30.67 hectares. The parcel was granted by the Secretariat General of Sports exclusively for the construction of the shooting center but only for the time of the Olympics.	<p>Pre-Olympic legislation: -</p> <p>Post-Olympic legislation: Permitted uses: - Cultural events</p>

		When this event is completed the control of the parcel reverts to the original owners (Ministry of Agriculture) without the need for further transaction	- Commercial shops for sale of necessary goods for shooting - food service establishments, tourist lodging .
6	Markopoulo Olympic Equestrian Center (EQU) and new Race Track	Construction and operation on a parcel of 211.2 hectares, of the following: <ul style="list-style-type: none"> • Olympic Equestrian Centre • Race Track of Athens. Three zones are created: Zone 1: Includes the main entrance to the Equestrian Centre, the circumferential road and the pedestrian road. Temporary buildings are permitted along the pedestrian road. Zone 2: construction of the Equestrian Center which includes open air arenas with spectator seating, fields, parking, roads, squares. Hall with covered seating, indoor arena, restaurant, administration offices, indoor training fields, warm-up areas, stables, store houses, laboratories, veterinary clinic, staff housing, auxiliary buildings.. Zone 3: Area for the 4 th stage of the sport (Cross Country), similar to a park. Zone 4: area of the race track	Pre-Olympic legislation: Zone 1: there is no particular use for the post –Olympic era so the general use is valid. Zone 2: permitted use:construction of a horse museum, school for horseback ridding, and two refreshment stands. Zone 3: Park appropriate for cross country sport. Zone 4: construction of a hotel with particular construction regulations (excluded from post-Olympic uses are: night clubs, houses and casino) Post-Olympic legislation: Additional permitted uses: Zone 1: guard room with WC, ticket counters, golf field. No other special use. Zone 2: Equestrian Centre with open air arenas, fields, stables, store rooms, veterinary clinic, indoor arena, administration offices, horseback riding museum, relevant schools, shops for relevant sale, exhibitions, food service establishments, auction houses, restaurants, parking, hotel, helicopter field, golf field. Zone 3: Park with the possibility to become a golf field.
7	Goudi Olympic Complex (PCO)/ Modern Pentathlon Venue	Creation of a center with importance beyond the immediate area, where Olympic installations will be located together with auxiliary athletic installations. Environmental center for the protection, preservation, promotion and improvement of the ecology and the natural biotope of the area.	Pre-Olympic legislation: Serve combined use of sports, tourism-recreation, social and cultural activities of the greater area of Athens Post-Olympic legislation: Goudi installations are permanent. Additional permitted uses: - cultural events. - food service establishments - open air public congregation areas.
8	Nikaia Olympic Weightlifting Hall (NIH)	Construction and operation of the indoor Weightlifting Hall, hostel, parking areas, on a parcel 4.4 hectares.	Pre-Olympic legislation: no special post-Olympic use was planned. Post-Olympic legislation: Additional permitted uses:: - commercial shops, food service establishments. - offices, doctors examining rooms.

			<ul style="list-style-type: none"> - cultural events - hostels, - training center
9	<p>Faliron Olympic Complex: - Beach Volleyball Center (BVF) - Sports Pavillion / TAE KWON DO (FSP)</p>	<p>Zone A1: Permanent and temporary athletic installations and auxiliary buildings, open air parking areas. Zone A2: Permitted: construction of permanent and temporary athletic installations and auxiliary constructions, and open air parking for serving the Olympic Games 2004, the Para-Olympics and the testing events in 2003. To serve beach volley-ball, a permanent open air installation is created of a 10.000 seating capacity (6.000 seats are temporary) Zone B1 (marina): Permitted: Installations for the Nautical athletic center and light constructions for refreshment stands for the spectators and open air parking spaces. Zone B2: Installations for the Reception and Information center in Esplanada square, free space and green areas, walking areas and light temporary constructions for refreshment stands, restaurants and shops to serve the visitors Zone C1: Permitted: Permanent and temporary athletic installations (indoor fitness hall of multiple uses) and open air parking spaces Zone C2: Suggestion for an aviation museum construction.</p>	<p>Pre-Olympic legislation: Athletic and cultural installations, amphitheater of multiple uses of 4.000 seating capacity, soccer fields, tennis and basket ball fields, beach-volley and their accompanying installations and open air parking spaces. Zone A1: Ecological park and mild athletic installations with the necessary supporting constructions Zone B2: Esplanada Reception and Information Center, square, free space and green areas. Zώνη C2: the Olympic use remains Marina: Nautical sports center where the installations of nautical associations are sited, also the pre-existing associations of nautical scouts, and the fishermen, and open air parking space.</p> <p>Post-Olympic legislation: Additional permitted uses: Zone A2, B1, B2: Cultural and athletic uses, National Nautical Sports Center and installations of the above mentioned associations, supporting installations, marine supply facility, marine technical support facility, administration offices, store houses, doctor's office, toilets, food service establishments, commercial shops, open air congregation spaces, thematic park, indoor amphitheater of multiple uses, square and free common space, guard room with WC, open air parking, information desk including shops for sale of goods of frequent demand inside the pre-existing four stands. Zone C1: Convention center inside the indoor fitness hall, municipality athletic installations, green and walking areas, open air parking. Zone C2 Spaces for cultural uses. The area of the old horse race track is transformed into free space-urban green areas.</p>
10	<p>Agios Kosmas Olympic Sailing Center (AGK)</p>	<p>Zone I (Area with permanent installations): The construction of permanent installations is permitted to serve the Olympics and Para-Olympics 2004. Zone II (Area with permanent and temporary</p>	<p>Pre-Olympic legislation: Zone I : installation area for tourism-recreation and nautical sports use. In areas A and B it is permitted: hostels, commercial shops, restaurants, refreshment stands, congregation areas, cultural centers,</p>

		<p>installations): Construction of permanent installations is permitted to serve Olympics and Para-Olympics 2004 and testing events of 2002 and 2003.</p> <p>Zone III (Area with temporary installations): The construction of temporary establishments is permitted to serve the above events.</p>	<p>worship places, indoor and open air parking, gasoline stations, athletic installations, convention centers, helicopter landing pad, tourist harbors, commercial exhibition installations, etc.</p> <p>In area C the construction of buildings to serve the National Sailing Association and the local nautical sports teams is permitted</p> <p>Zone II : Area for a coastal park. In areas A and B open air cultural and athletic installations are permitted, changing, locker and shower rooms, toilets, and refreshment stands. Area C is for free space for the public where construction is forbidden.</p> <p>Post-Olympic legislation: Additional permitted uses: Zone I : In areas A and B all uses that had been commissioned during the period for the Olympics and all uses that are permitted in article 8 of the Presidential Decree 6/1987 (Governmental Gazette 166/D) except the hotel and the night club. Only the construction of 30 five stars rooms is permitted, of a total area of 1,400 m² to support the marina. In area C the gasoline station, refreshment stand, installations to support the marina and boats, store houses, guard rooms with WC are permitted. In area D only portable facilities for holding exhibitions and supporting the boats, and open air congregation areas are permitted. Zone II : In areas B and D open air cultural and athletic installations are permitted, also changing rooms and toilets, portable facilities for holding exhibitions and supporting the boat needs, refreshment stands, and open air congregation areas. In areas A and C no development of permanent construction is permitted.</p>
11	Main Press Center (MPC)	Construction of a building of 28.660 m ² total area (with additional underground area).	<p>Pre-Olympic legislation: the installations will be used by the Secretariat General of Sports</p> <p>Post-Olympic legislation: -</p>
12	International Broadcasting Centre (IBC)	Construction of a building of 68.695 m ² total area size (with additional underground).	<p>Pre-Olympic legislation: -</p>

			<p>Post-Olympic legislation: additional permitted uses</p> <ul style="list-style-type: none"> • Museum of Greek Olympic Games and International Museum of Classic Athletics • In the International Broadcasting Centre additional uses are permitted: commercial shops, restaurants and food service establishments, doctor offices.
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This Appendix includes all legislated uses for the Olympic installations except the pre-existing stadiums:

- OAKA Olympic Complex (Olympic Stadium, Indoor Hall, Aquatic Center, Velodrome, Tennis Center, Sponsors Hosting Center, Doping Control Laboratories, International Broadcasting Center, Main Press Center)
- SEF (Peace and Friendship Stadium)
- Karaiskaki Stadium, Piraeus
- Kaftantzogleio Stadium, Thessaloniki
- Pampeloponnisiako Stadium, Patras
- Pankritio Stadium, Heraklio
- Panthessaliko Stadium, Volos

Appendix 2: Legislation

	Law	Governmental Gazette	Title
1	1731/1939		About Obligatory Expropriations
2	797/1971	1/A	About Obligatory Expropriations
3	360/1976	151/A	About Physical Planning, and Environment, and Plans
4	1337/1983	33/A	Extension of Urban Plans, Housing Development and relevant regulations
5	1515/1985	18/A	Strategic Spatial Plan and Program for the Environmental Protection of Greater Athens Area
6	1561/1985	148/A	Strategic Spatial Plan and Program for the Environmental Protection of Greater Thessaloniki Area and other arrangements
7	2508/1997	124/A	Sustainable Housing Development of cities and settlements in Greece and other arrangements
8	2598/1998	66/A	Organization of the Olympic Games-Athens 2004
9	2730/1999	130/A	Planning, Integrated Development and Execution of Olympic Games and other arrangements
10	2741/1999	199/A	Single Agency for Food Quality Control, other arrangements related to issues of the Ministry of Development and other arrangements
11	2742/1999	207/A	Spatial Planning and Sustainable Development and other arrangements
12	2819/2000	84/A	Establishment of "Olympic Village 2004 SA" Company, Protection of Olympic Symbols and Flags and other Arrangements
13	2833/2000	150/A	Issues for the Protection of Olympic Games 2004 and other arrangements
14	2882/2001	17/A	Real Estate Obligatory Expropriation Code
15	2912/2001	94/A	Adjustment to the 94/56/EU of the European Council about the fundamental principles for accidents and events of civil Aviation- Empowerment of state supervision on civil aviation and other arrangements
16	2947/2001	228/A	Issues for the Olympic Hospitality, Construction Works for the Olympic Infrastructure

			and other arrangements
17	2985/2002	18/A	Adjustment of the Arrangements of Real Estate Obligatory Expropriation Code to the Hellenic Constitution
18	2990/2002	30/A	Ratification of the 21 st Dec 2001 Legislative Act About “Responsibility of the Court for obligatory expropriation cases, taxation and custom control regulations”
19	3010/2002	91/A	Harmonization of Law 1650/1986 according to Guidelines 97/11EU and 96/61 EU, boundary determination and regulations for streams and other arrangements
20	3057/2002	239/A	Amendment and Completion of Law 2725/1999, for regulating issues of the responsibility of the Ministry of Culture and other arrangements
21	3207/2003	302/A	Regulation of issues related to the Olympic Preparation and other arrangements
22	3254/2004	137/A	Regulation of issues for the Olympic and Para-Olympic Games 2004 and other arrangements
23	3342/2005	131/A	About the Sustainable Development and Social Value of the Olympic Installations, Permitting, Uses, Operation- Establishment, Organization and Operation of the General Secretariat for the Post-Olympic Development of the Olympic Installations

BIOGRAPHICAL NOTES

Chryssy POTSIUO

Dr. Surveying Engineer, Lecturer in Cadastre and Spatial Information Management, Lab. of Photogrammetry, School of Rural and Surveying Engineering, National Technical University of Athens (NTUA), Greece. She also works as a private surveying engineer and as a consultant mainly in cadastral, photogrammetric, and urban planning studies. Since 1986, she works at the Lab. of Photogrammetry of NTUA, teaching cadastre, photogrammetry, and cartography and participating in research programs. Cooperates actively with the Technical Chamber of Greece and the Hellenic Association of Surveying Engineers mainly for cadastre and land management issues. Elected bureau member of the Hellenic Society for Photogrammetry and Remote Sensing, and of the HellasGI.

1998-2001 chair of WG3.1 of FIG Com3 (organized the Athens 2000 Com3 annual meeting).

2001-2003, 2003-2005 elected member of the Bureau UN-ECE WPLA

Secretary General of the Organizing Committee for the FIG WW2004.

2004 elected incoming chair of FIG Com3 (2007-2010), chair of WG3.3 of Com3.

Gerasimos APOSTOLATOS

He has served at the Ministry for the Environment, Physical Planning and Public Works from 1965 to 2000 in various positions and from 1990 to 2000 as head of the Department of Survey Applications. He works as a private surveying engineer and as a consultant mainly in land, planning and permit issues. Since 2001 he cooperates with BUNG SA (Technical Advisor of the Government on the permit issue of the Olympic installations and their post-Olympic era use) and since 2004 he works as a technical advisor of the subsidiary of Greek Railways (GAIAOSE SA) on the exploitation of its real estate property.

Vice President of the Organizing Committee for the FIG WW2004.

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