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## Strategic Environmental Assessment As a Mechanism of Achieving Sustainability. The Case of Greece

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**46<sup>th</sup> Congress of the European Regional Science Association**  
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**and Regional Development**  
**Enlargement, Southern Europe and the Mediterranean**

**STRATEGIC ENVIRONMENTAL ASSESSMENT AS A  
MECHANISM OF ACHIEVING SUSTAINABILITY. THE CASE  
OF GREECE**

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**Abstract**

During the past few decades there appeared to be an important increase in the interest about the environmental issues, the sustainability and the better management of development, respecting the environmental resources. Strategic Environmental Assessment (SEA) of policies, plans and programmes, introduced by the European Commission and incorporated to the national legislation of the member states, is trying to achieve sustainable development always respecting the environment.

The role of SEA is closely connected to the idea of sustainability since it was recognized as a mechanism for the success of sustainable development. Strategic Environmental Assessment constitutes a motive and at the same time a challenge for all the EU member states in order to promote a more sustainable way of assessing the impacts of plans and programmes. Applying SEA to Greek programmes and plans, as well as to all the other countries of the EU the sustainability of the countries could be strengthened and confirmed.

**Key Words:** Sustainable Development, Strategic Environmental Assessment, Environmental Impacts, Environmental Evaluation, Environmental Impact Assessment

## **Introduction**

Recently there has appeared an increase in the interest for the environmental issues, the sustainability and the better management of the development always taking into account the environment. The new legislations, coming from national and international sources (i.e. EU), are related to rise of awareness on the environmental issues. The European Union, through its legislation, programmes and directives is affecting nowadays the relationship between the environment and the development (Glasson J. et al. 1994). Strategic Environmental Assessment (SEA) belongs to the field of the environmental protection and restoration within the European Union and is an important attempt of the European Union for the strategic environmental assessment of the impacts of the development plans and programmes within the European territory.

It is widely believed that SEA has the ability to influence the environmental and sustainable nature of the strategic decisions and to provide integrated and sustainable policies and planning frameworks in order to support the development processes of different projects. (Partidario M.R. 2000).

## **The need for Strategic Environmental Assessment of Policy, Plans and Programmes**

### **The SEA**

Sea is an international process for the environmental assessment, evaluation and management of the environmental impacts of human activities. In Europe the SEA was born in the '80. SEA is an attempt of incorporating the environmental issues into the development plans and programmes. It can also be considered as a process of supporting the evaluation process, especially when it is applied during the development or formalisation of a plan.

According to Therival R. et. al. (1992, p. 300) SEA is a formalised, systematic and comprehensive attempt for the evaluation of the environmental impacts of programmes, plans and policies with a written report which will refer to the results of the evaluation and the conclusions from the public participation, as well as the use of those actions mentioned above for the final form of the approval decision.

Even though the definition that Therival has introduced is very popular for the majority of the evaluators it is worthwhile to mention that since the international

scientific inquiry for the strategic environmental assessment has become so excessive new definitions on SEA have appeared and were attributed to different authors.

Sadler and Brooke (1998, p. 3) presented SEA as the only one among a great number of policy tools aiming to ensure the fact that the environmental thought are taken into consideration during the policy making. SEA should be applied in reference to and in accordance with other comparable tools, as well as there should be consensus with the related policy and the decision making processes.

Verheem and Tonk (2000, p. 177), define SEA as a structures, ex-ante process for the empowerment of the role of the environmental issues into the strategic decision making. Also, Sheate et al. (2001a, p. 7) characterizes SEA as a systematic attempt for the support of the decision for evaluation of the possible important environmental impacts from the possibilities that are offered in the development processes, the policy, plans and programmes, starting from previous possibility, including the written report and the public participation throughout the whole process.

### **The history of SEA**

SEA has emerged the last years as a term with its tools to aim to the integration of the environmental considerations for legislations, policies, plans and programmes. Even though the term SEA is relatively new the SEA process actually existed in different forms. From the 1969, already, the NEPA (National Environmental Protection Act) in the USE has prepares and settled the basis for the legislative and normative processes of the SEA.

The SEA is already legislated and applied in quite a few countries, in Canada, Denmark, Finland, France, Latvia, the Netherlands, New Zealand, Norway, Slovakia, Spain, Sweden and the USA, well before the launch of the 2001/42/EC. The adoption of the Directive 2001/42/EC is an attempt for a common effort of defining the process of the SEA or at least a common legislated agreement among the Member States for a fundamental model into the application of SEA. After all, the lack of the appropriate measures for the prediction of the impacts of the programmes of the urban and special plans and governmental policies, in many countries of the EU, including Greece made the need for a common legislative framework more immediate and important (Zagorianakos, 2001b).

The 2001/42/EC Directive is based on a systematic preparation and work. Before this Directive there existed relevant Directives that dealt with the assessment

of the special impacts whether these affected the environment and the sustainability or affected the urban and special plans and programmes. The 2001/42/EC Directive is based on the 'Directive for the Strategic Environmental Assessment' or the proposal for Directive with the topic 'the assessment of the impacts on the environment of the different plans and programmes' [COM(96)511 final - 96/0304 (SYN)]. In 1998 the European Parliament confirmed the proposal, modifying it in 33 points, while in 1991 there was circulated the first draft for the Directive 2001/42/EC, which contained the environmental assessment of policies on national level. Nevertheless, because of this special addition regarding the environmental assessments of the policies on national level the first drafted was rejected (Zagorianakos 2001b). It is also worthwhile to mention that the voting for the 2001/42/EC Directive extends the jurisdiction of the 85/337/EEC Directive for the EIA on the field of the urban and special plans and programmes (Risse N. et al. 2003, p. 457).

Even though the negotiation for the new proposal of the SEA were not an easy process, since the different member states set different positions, disposed different fields of interests and aimed to the materialization of different objectives the final proposal for the SEA took breath on December 1999 with the agreement of the Ministers of the Environment of the Member States (Feldmann L. et al. 2001). On the 30<sup>th</sup> of March 2000, under the Finish Presidency the political negotiations were put to an end and with the final and formal form of the 2001/42/EC Directive in which there added issues that regarded the quality of the environmental information and the introduction of monitoring systems.

### **The SEA Field of Application**

The SEA can be applied on policies, plans and programmes. All the countries that have experience on SEA are defining the policies, plans and programmes as such:

- Policy – A general bunch of action or a proposed direction that the government follows or will follow and which leads a continuous process of decision making (Sadler B. and Verheem R. 1996).
- Plan – A strategy or a design that can be proposed to make forecasts for the future, often with coordinated priorities, prospective and measures that deals with and enforces the policy. πον

- Programme – An adjacent organised agenda or proclamation of binding and proposals for tools or/and activities that deal with and apply policy.

Being more specific for the case of SEA plans and programmes are all these plans and programmes including those that are co-financed from the European Union as well as their modifications a) that are delivered or/and approved from an authority on national, regional or local level or that are delivered by an authority in order to be approved through the legislative processes of the Parliament or the government and b) that are required from legislative, normative or administrative arrangements (Directive 2001/42/EC, Art. 2).

Strategic Environmental Assessment are going to be applied on all the plans and programmes which are related to agriculture, forestry, fishery, energy, industry, transport, waste management, management of water resources, telecommunications, tourism, spatial planning or the land use and which is going to determine the framework for the future project licenses (Directive 2001/42/EC, Art. 3). Nevertheless, plans and programmes that exclusively serve aims of national defense or emergency situations and financial plans or programmes that regard the country's budget are not subject to SEA (Directive 2001/42/EC, Art. 3).

### **The basic steps of SEA**

According to Risse N. et al. (2003, p. 456-467) the basic steps for the application of the Strategic Environmental Assessment are the following:

- Screening. The application of screening is undertaken in order to answer the important question: Should SEA be applied to that special project (e.g. a special plan or a special programme or a special policy)?
- Scoping. It is applied in order to ensure that all the important issues that have to do with the decision making are arranged through the contribution of SEA. There is a relative consensus that not only the direct but also the indirect (or secondary) effects of a proposal should be examined as well as the cumulative effects should be included in to the SEA process.
- Indicators. Sometimes the description and the assessment of the effects is attributed by the terms of the sustainable development (e.g. measures that are used estimate whether the proposal is going to contribute to the sustainability).
- Stakeholders. All the stakeholders- the stakeholders that are going to be affected (or at least are interested) by the proposal- should be benefited by the

opportunity to participate in the process of defining the scope of the proposal. The negotiation with all the stakeholders takes place during the developing proposal and constitutes an important process.

- Identification, Prediction and Evaluation of Effects. SEA is interested both for the direct and the indirect effects. Those environmental impacts of policies, programmes and plans are indirect. This means that the policy, the plans and the programmes are planned in order to bring up changes in the social and economic life. These social and economic changes can lead to potential direct or indirect effects on the environment. The process of predicting and evaluating the environmental effects within an SEA can use some common methods with the EIA process.
- Integration. The integration of the environmental, social, economic consequences should be part of the prediction of the effects and of the evaluation process. This combined consideration of the environmental, social and economic consequences is essential since some proposals are going to bring up direct economic (or social) effects, which are going to lead to indirect environmental effects.
- Mitigation. SEA is essential to include measures that obliterate, decrease or reverse the negative environmental effects of the policies, the plans and the programmes and additionally to suggest solutions such as the restoration and the compensation for the potential negative environmental effects.
- Monitoring. It is important that SEA includes a plan for the control of the environmental effects, so that suppression measures to be taken in case that non-expected negative effects appear. Additionally, SEA needs to include a plan of monitoring so that it is ensured that the measures that are undertaken through the previous step are applied correctly.
- Independent Review. An independent review of a SEA provides the appropriate control for the quality of an assessment. The results of the review should be taken into consideration in the preparation of the final SEA and the final decision making.
- Influence on Decisions. SEA (including the results of the independent review) needs to be available to all those that make decisions, so that they can take into account the possible alternatives.

## **A critical approach on SEA**

The aim of the 2001/42/EC Directive is the promotion of the Sustainable development with the high level protection of the environment and the incorporation of environmental issues for the preparation and the institution of plans and programmes (Directive 2001/42/EC, Art. 1).

SEA is a formalized, systematic and comprehensive process of assessment of the environmental impacts of a policy, of a plan or of a programme and their alternatives, including the preparation of a written report on the results of the assessment. Afterwards the results of the assessment are used into the decision making, while it is also important to mention that there should always be ensured that the decisions are going to be a public knowledge throughout the process.

SEA is a continual process for the evaluation and the assessment of the impacts already from the previous stage of the decision making, always with public account. The environmental quality, the consequences of the alternatives and the intentions of planning are taken into account and are incorporated in the policy, the planning or the programme initiative, ensuring the whole integration of the relative biophysical, economic, social and political considerations (Arce R., Gullon N. 2000).

SEA entangles a holistic approach that takes into account the environmental impacts of the projects in time and multiple actions in a region or an ecosystem. On the contrary to the Environmental Impact Assessment, SEA provides the decision-makers information on long-term environmental effects. The wide scope of SEA gives the possibility to the policy-makers to anticipate the results into the human societies, animal and plant species as well as other ecological evolution.

The wide range of SEA can not be limited only to the environmental effects. The application measures in combination with the policies, the plans and the programmes provoke direct financial and social results. Therefore, the SEA constitutes a potential tool for the articulation of the projects on integrated plans, on their application and management targeting to the performance of the idealistic aims of the development, which improves the social conditions, the quality of life, the financial life as well as the environmental conditions without compromising the future. SEA rise the possibility for the analysis and proposal of alternatives and incorporate sustainable criteria throughout the whole process of planning. They also incorporate the principles of the sustainable development (Arce R., Gullon N. 2000).



Additionally, the SEA takes into account the cumulative impacts, such as the impacts on the environment that arise when the results of the application of the proposals are added to relative results of the past, of the present and of the predicted future. The cumulative impacts are important because the various impacts mainly of the private projects might be insignificant if they are taken only by themselves into account but they might be very important and serious if they are measured out collectively.

At the same time the 2001/42/EC Directive provides two ways for the implementation of the SEA within the Member States. On the one hand the SEA can be applied with new legislative means, like for example in distinctive laws or in planning of the legislation and the processes of the issues that are affected by the Directive (e.g. spatial planning (Stoeglehner G. 2004).

The SEA can constitute the broader framework of putting together an Environmental Legislation related to the Environmental Impact Assessment due to its strategic level of application (Zagorianakos 2001b). Therefore the Strategic Environmental Assessment can be used as a tool for a country's environmental analysis.

The current form of the 2001/42/EC Directive avoids the reference on policies and confines only to plans and programmes, leaving up to date this doubtful part of the impact assessment of policies and human activities for the future, when the accumulative European experience can allow its prompt application.

### **The SEA as a tool of ensuring Sustainable Development.**

During the past decades the sustainability turned out to be a very popular term for planners, politicians, consultants, experts, businesses, local authorities, NGOs and the public. There was recognized that the way that development was achieved led to lack of sustainability. Αναγνωρίστηκε Therefore, the sustainability, in the way that it was introduced in the Rio Earth Summit in 1992 came as a 'healthy' solution for the global community.

The achievement of sustainable development means that there should be satisfied four criteria at the same time:

1. Social progress which recognizes the needs of all social groups.
2. Efficient environmental protection.
3. Rational use of the natural resources.

4. Maintenance of a high and stable level of economic enlargement and occupation.

The role of SEA is closely related to the concept of sustainable development (Therivel et al., 1992) since it was recognised as a mechanism for the effective and the successful establishment of sustainable development (Fischer, 2002, IAIA, 2002, Lawrence 1997).

The added value of the SEA for the environment is that it can evaluate the economic and the social effects of the plans and programmes in order to become sustainable that special plan or programme. All these SEA requirements are those that ensure the sustainability of plans and programmes. (Scrave J.I. and Sheate W.R. 2004). Therefore, in order to apply the principles of the sustainable development the environmental assessment should not only focus on natural and physical issues but also to extend to issues of social wellbeing and economic development. (Partidario M.R. 2000).

The SEA belong to the immediate and effective ways of ensuring that the human activities are carried out in such a way that are environmental friendly through time (Glasson J. et al. 1994). Therefore the effective practice of the SEA can contribute to promotion and contribute the sustainable development.

### **The public participation**

The public participation can constitute an effective tool for planning and it is a general principle in the European Union. The public participation constitutes a vital part of the social justice and at the same time is a very important factor for ensuring sustainable development. People have the right and the obligation to participate in all the procedures that are likely to affect their lives (Allen A. 1999 σ. 221-222). Participation allows people to express their ideas and views, it helps them to promote negotiations and finally to empower certain groups of people.

Nowadays the lack of public participation can become a serious problem in the political and social life as well as in planning. When, for some kind of special reason, there rises the need to exclude the public or a social group, it is necessary to work very hard on that. At the same time, it is extremely important to study how and why the public participation can constitute an important contribution to the decision making, as well as the reason why the participation often fails to accomplish the primary objective.

There are different scientific backgrounds that support different aspects on the procedural approaches of the SEA that are very useful on the final formalization of an approach in practice. According to Connelly (2005, pp. 392-393) there are the technocratic and the participative approaches for conducting a 'good' SEA. The first were born within technocratic, specialized procedures, where the success can only be satisfied through the *rationalization* that is through tangible evidences that were gathered from unbiased experts. The second, on the contrary, are extremely interactive and participative and their success is based on the participating bodies.

Nevertheless neither of the previously mentioned approaches is prevailing in the SEA, because SEA is procedural equipped in order to deal with ambiguous normative challenges for the insurance of the sustainable development. Under this purpose the environmental justice is called to lead the conduction and the evaluation of the SEA. Additionally, the environmental justice is used as the rhetoric basis on which there can be analyzed and examined critical questions regarding how can someone be sure if SEA were conducted properly and correctly. According to the criteria of the environmental justice a 'good' SEA takes into account the consequences of the evaluation approach, always guided from the acknowledgement of the fact that certain groups tend systematic to 'lose' from distribution of the environmental benefits and costs. Therefore, the role of a good SEA is to arrange these imbalances or at least to settle 'fair' procedures which will not aggravate and protract the environmental injustices. (Connelly et al. 2005, pp. 393).

### **The benefits of SEA**

SEA ensures a better co-operation between the bodies in charge that shoulder the responsibility for the environmental impact assessment of plans and programmes. (Zagorianakos E., 2001b). Undoubtedly the SEA creates the fundamental leagues between the different levels of policy and hierarch into planning. Additionally the SEA can perform as catalysts for further institutional and organizational changes (European Commission Contract, 2001). SEA gives the capability for provision of consultation among different governmental organisations and bodies as well as empowers the public participation into the evaluation of the environmental and social aspects of policies, plans and programmes.

SEA, through the methodology that follows, affect the planning positively (e.g. environmental, economic and social impacts for the promotion of the sustainable

development) (Zagorianakos E. 2001b). SEA introduces the environmental issues on time during the decision-making, well before the decisions on to the scale and the location. Further more SEA allows to the decision makers to prioritize the environmental effects of the strategic decisions before they become integrated projects. Compared to the Environmental Impact Assessment (EIA) the SEA can take into account a broader scope of alternatives and negotiation measures.

SEA can add to the effectiveness of EIA when the proposal that is cover by the SEA aims to concrete projects. Therefore SEA can lead to the effectiveness of the assessment since SEA allows different levels of detail or specification of the environmental assessment shifting from a primer wider stage towards a confined and limited stage (Weiner K.S. 1997). Under this sense whoever prepares an EIA for certain projects they can avoid to repeat analyses for objectives that where covered satisfactory from SEA (which where conducted for a plan or programme of a previous wider level, before the detailed level of that the EIA requires).

It is also very important to mention that the SEA empowers and leads the Environmental Impact Assessment. (EIA). First of all this happens with the incorporation environmental aims and issues into policies, plans and programmes. Secondly, it is elaborated beforehand recognition of the impacts and at the same time there is information. Thirdly SEA manages strategic issues and proposes alternatives when the solution of an objective is not easy and obvious (Sadler B. 1998a).

SEA plays an important role into the public raising awareness for the environment. A quite important part of the process of SEA is the one that has to do with the information and mobilization of the public for the environmental impact assessment (European Commission Contract, 2001). Motives for cooperation for the environment and the society between different social groups are met promoting environmental and development issues (Ζαγοριανάκος E. 2001β).

Another very important advantage is the contribution of SEA into the empowerment of the role of the NGOs on developmental issues (Zagorianakos E. 2001b). Since SEA can operate as advocates for the environment affecting the policy and the planning the role of the NGOs is empowered. After all the SEA process ensures that information and consultation is an open process therefore the NGOs can undertake there role as environmental sustainable development advocates more actively, efficiently and effectively.

The main aim of SEA, which in fact is actually the benefit of the SEA process is the improvement of the whole environmental effects of the proposed plans for spatial development as well as the improvement of the environmental effects of the multiple private projects (Scrave I.J. and Sheate W.R., 2004). At the same time SEA forecasts the possible environmental impacts from the application of a plan and its rational alternatives always trying to avoid and diminish the negative effects. Using SEA can improve the forecasting of the potential effects of some future plans (eg. In protected or environmental un-sustainable areas).

Applying SEA at an earlier stage in the decision-making process and including all the studies of a certain type or of a certain area, can ensure the fact that the alternatives and the cumulative effects are taking into account, the public is informed by the experts and the decisions that are related to the private projects are performed in such a way that it is ensured the prevention of potential impacts instead of their evasion (Glasson J. et al. 1994). Additionally, SEA is the central step in order to be ensured the performance of sustainable development.

Eventually, during the three decades of preparing the SEA the emphasis on the environmental protection was shift towards the environmental integration and the sustainable development. After all, the performance of sustainable development is a central aim not only within the European Union but also it is a global issue.

### **The Differences between SEA and EIA**

The differences between the Strategic Environmental Assessment (SEA) and the Environmental Impact Assessment (EIA) can be summarized in the following table: (table 1)

Table 1

<b>SEA</b>	<b>МПЕ</b>
It is performed before the developmental process and informs the developmental process.	Usually it is performed together with the developmental proposal.
It is focused mainly on the better execution of certain actions (reactive).	It is focused on the previous actions where there were introduced the decisions (pro-active).
It assesses the effects of a policy, plan, programme or a developmental process on the environment.	It assesses the effects from the proposed development on the environment.
It is focused on the agenda of sustainability aiming towards the root of the environmental degradation.	It is focused on a definite agenda, treating the environmental degradation systems.
It is directing areas, regions and sectors of development.	It is directing a special project.

It is a continuous process, aiming to the provision of information the right time.	It has an appointed start and an end.
It assesses the commutative effects and recognizes the complications and the issues of sustainable development.	It assesses the direct and indirect costs and benefits.
It can incorporate synergistic effects.	It is difficult to incorporate synergistic effects.
It takes into account a grate scope of alternatives.	It takes into account limited number of alternatives.
It canters on the preservation of the selected levels of environmental protection.	It centers on the mitigation of the effects.
It has a wide perspective and low level of detail in order to provide a vision and an overall frame.	It has a narrow perspective and high level of detail.
It creates a framework upon which the cots and benefits can be measured.	It focuses on certain impacts of a project.
Provides a greater level of flexibility.	It is confined on specific impacts.
It is based on an territory (larger scale).	It is based on an area (smaller scale).

Sources: Arce R. and Gullon N. (2000), Clayton D.B. and Sadler B. (1995), UNEP (2002)

According to the table above the SEA and the EIA have a lot of different points and actually SEA is a completely different evaluative methodology in comparison to the EIA methodology. It is very important to notice that the SEA are not introduced to replace or to abolish the EIA but to supplement the EIA wherever there is a void as well as to support the EIA through the tools the SEA commands.

Additionally, it is important to underline the fact that SEA should not only be considered as solution that appeared to occupy the empty space that the EIA has left but also to overcome the difficulties of comprehending and applying the EIA into projects. EIA should better not be left aside because EIA contributes to the improvement of the quality of the decision making (Fischer T.B. 2003). After all, SEA have not appeared in order to replace the EIA as far as it concerns the comparison and the assessment of the alternatives into the projects (regardless scale) and finally EIA should not for any reason be confined to the point that it just forms intervention measures.

SEA adopt ex-ante operations such as the identification and the comparison of the alternatives, the assessment, based on technical and public known criteria, reports, public participation as well as ex-post operations such as the mechanisms that control the quality and the ex-post evaluation (Partidario M.R. 2000), all with a systematic and coherent way, ensuring an open and strategic decision making and contributing to the improvement of the quality of the additional decisions including the EIA projects.

Finally, the SEA is broadening the EIA from the project level to the policy, plan and programme level. The development action can be targeting on a project on a programme on a plan or a policy (Glasson J. et al. 1994). Until today the EIA were used mainly for the private projects. Nevertheless the programmes, the planes and the policies of the EIA give bear a great interest within the European Community and the rest of the world.

### **The case of assessment the environmental impacts in Greece**

#### **The legislative framework of environmental impact assessment in Greece**

The Community Directive 97/11/EC “about the impact assessment of public and private projects on the environment” were incorporated into the Greek legislative framework with law 3010/2002 (FEK 91 A’/25.04.2002) «Harmonization of the law 1650/1986 with the Directives 97/11 E.C. και 96/61 E.C., process of bounding and adjustment of issued for the water streams and other arrangements».

The law 3010/2002 incorporates into the national legislation the Directive 97/11/EC as well as the Directive 96/61/EC «about the integrated prevention and control of the pollution». With the new law, as it was happening with the older one, in order for a project to be permitted there is the obligation of the EIA process depending on the category/size of the project. In the A category an Environmental Impact Assessment (EIA) is conducted which is presented to the region authority and in a few cases to the Ministry of Environment and Public Works. In the B category a Preparatory Environmental Assessment is conducted and it is presented to the prefectural authorities. In the C category there are required the essential justifications that testify that the project is not polluting the environment and it is complying with the legal system and it is presented to the municipal authorities.

#### **The inadequacies of the Environmental impact Assessment in Greece**

Unfortunately in Greece, in many cases, the methodology on the Environmental Impact Assessment has not always functioned satisfactory and efficiently. Therefore there were not pursued or there were displaced the real impacts on the environment due to bureaucracy, insufficient information of the public services, low quality projects for the project-makers lack or insufficient function of controlling and monitoring measures.

First of all, there many cases where the legislative procedure for environmental permission is by-passed after governmental interventions. In specific cases of projects the allocation of projects and the construction permission are approved of special laws, which subtract the right of participation and intervention into the process. A very representative example is the one of the location of the Olympic projects in Athens 2004, where in order to eliminate the reactions of public participation and interference there were issued special legislative framework for these locations.

Additionally, the competent services for environmental permissions are not always equipped with the specialized staff or lack of staff. As a consequence, it is not always possible the performance of quality controls in the EIA and the compliance with the environmental rules. The Special Service of Environmental Investigators, a body that were enacted only in 2001, with basic activity the conduction of environmental controls and the enforcement of penalties, is not until today sufficiently equipped with the appropriate staff. According to Karavasili M. (2005), «the controls are usually conducted during the process of permission and after serious accusations and not after programming, while the number of annual controlled projects and activities is extremely insufficient. It seems that there is no system of registering the current and/or new (under permission projects and activities and there are not registered issues related to the results of the controls according to Directive 331/2001/EC»

At the same time the project makers that are undertaking the conduction of EIA follow the common practice of copying. In mane cases the project makers copy whole parts of previous EIA that was already presented to the prefecture or to the region authorities, indifferent to the quality of their EIA. In the majority of the cases the greater part of the study is a long description of the wider physical space where the project is going to be located without a thorough and deep analysis of the special impacts from the location of the project in the physical space of the area.

### **Challenges and opportunities from the application of the Strategic Environmental Assessment in Greece**

Until today in Greece there elaborated, approved and materialized a great number of plans and programmes in sectors such as industry, energy, agriculture, transport, tourism, land us, management of the water resources, waste management



and urban planning. Nevertheless, Greece was lacking the process from the assessment of the environmental impact during the preparation as well as during the elaboration and the control of the application of these plans and programmes.

The up to date EIA was proved to be insufficient, while the incorporation of the SEA into the national law is an important challenge for further evolvement of the impact assessment of plans and programmes in Greece. SEA is expected to constitute an important step towards the environmental management according to the principles of sustainable development.

It is expected that the SEA will bring up rationalization into the planning as well as better internalization of the external cost of the developmental process. The SEA does not leave the environmental quality and the environmental protection to the market dynamics and trends but to three basic ecologic principles: 1. the European Environmental Policy, the protection and the punishment of the pollutant (Modinos M. 2005).

The incorporation of the Strategic Environmental Assessment into the Greek legal framework constitutes an important challenge as it depends on the determination of a entirety of parameters which can become quite complicated: (Toleris E. 2005):

1. The scope of the Directive
2. The process of screening
3. The specifications of the studies
4. The competent authorities
5. The negotiations with the public
6. The monitoring of the impacts

The harmonization of the Directive 2001/42/EC with the Greek legislation constitutes not only a chance but also a challenge for the re-examination and the re-definition on the location analysis and special planning, on the environmental policy, on the sustainable development, on the effective co-operation of all the involved actors as well as on the public participation in planning.

## References

- Allen A., 1999, 'Local-international Partnerships in Metropolitan Environmental Management: Latin American Experiences', in A. Atkinson, J. Davila, E. Fernandes and M. Mattingly (eds.), *The Challenge of Environmental Management in Urban Areas*, Aldershot: Ashgate
- Arce R., Gullon N., 2000, 'The application of Strategic Environmental Assessment to sustainability assessment of infrastructure development', *Environmental Impact Assessment Review*, vol. 20, p. 393-402
- Conelly S., Richardson T., 2005, 'Value-driven SEA: time for an environmental justice perspective?' in *Environmental Impact Assessment Review*, vol. 25, p. 391-409
- Clayton D.B., Sadler B., 1995, *Strategic Environmental Assessment. A Briefing Paper*, International Institute for Environment and Development
- Feldmann L., Vanderhaegen M., Pirotte C., 2001, 'The EU's SEA Directive: status and links to integration and sustainable development', *Environmental Impact Assessment review*, vol. 21, p. 203-222
- Fisher T.B., (2002), *Strategic environmental assessment in transport and land use planning*, London: Earthscan
- Fischer T.B., 2003, 'Strategic environmental Assessment in post-modern times', *Environmental Impact Assessment Review*, vol. 23, p. 155-170
- IAIA, 2002, 'Strategic Environmental Assessment Performance Criteria', in *International Association for Impact Assessment*, vol. 2004
- Glasson J., Therivel R., Chadwick A., 1994, *Introduction to Environmental Impact Assessment. Principles and procedures process, practice and prospects*, London: UCL Press
- Karavasili M. (2005), *Annual Report 2004 – Results of the Environmental Controls*, Athina: Special Service of Environmental Investigators
- Lawrence D.P., 1997, 'Integrating Sustainability and environmental impact assessment', in *Environmental Management*, vol. 21, no. 1, p. 23-42
- Modinos M. (2005), 'Strategic Environmental Assessment and Sustainable Development', *The Strategic Environmental Assessment: Challenges and Opportunities for the Legislator and the Authorities, Nomos & Fysi.,*

- Environmental Law Library-17, Papadimitriou G. (eds), Athina-Komotini: Sakkoula Publications
- Partidario M.R., 2000, 'Elements of an SEA framework-improving the added value of SEA', *Environmental Impact Assessment Review*, vol. 20, p. 647-663
- Risse N., Crowley M., Vincke P., Waaub J.P., 2003, 'Implementing the European SEA Directive: the Member States' margin of discretion', *Environmental Impact Assessment Review*, vol. 23, p. 453-470
- Richardson T., 2005, 'Environmental assessment and planning theory: four stories about power, multiple rationality, and ethics', in *Environmental Impact Assessment Review*, vol. 25, p. 341-365
- Sadler B., Brooke C., 1998, *Strategic Environmental Appraisal. Report of the International Seminar, 27-29 May, Lincoln, UK, West Yorkshire, UK: Department of the Environment, Transport and the Regions.*  
<http://www.planning.detr.gov.uk/sea/index.htm>.
- Sadler S., Verheem R., 1996, *Strategic environmental assessment: status, challenges and future directions*, Report No. 53, The Netherlands: ministry of Housing, Spatial Planning and the Environment
- Scrave J., Sheate W.R., 2004, 'Strategic Environmental Assessment (SEA): will sustainability be weak enough to dilute it?' *Conference on the Human Dimension of Global Environmental Change*, Berlin, 3-4 December 2004
- Stoeglehner G., 2004, 'Integrating Strategic Environmental Assessment into Community Development Plans – A case study from Austria', *European Environment*, vol. 14, p. 58-72
- Therivel R., Wilson E., Thompson S., Heaney D., Pritchard D., 1992, *Strategic Environmental Assessment*, London: Earthscan Publications
- Toleris E. (2005), 'Strategic Environmental Assessment: Challenges and Opportunities for the Legislator and the Authorities', *The Strategic Environmental Assessment: Challenges and Opportunities for the Legislator and the Authorities, Nomos & Fysi*, Environmental Law Library-17, Papadimitriou G. (eds), Athina-Komotini: Sakkoula Publications (in Greek)
- Verheem R., Tonk J., 2000, 'Enhancing effectiveness: strategic environmental assessment: one concept, multiple forms', *Impact Assessment Project Appraisal*, vol. 18, no 3, p.177-182

UNEP, 2002, *Environmental Impact Assessment training Resource Manual*, 2<sup>nd</sup> edition, Geneva: UNEP

Weiner K.S., 1997, 'Basic Purposes and Policies of the NEPA Regulations' in Clark R. and Canter L. *Environmental policy and NEPA*, Boca Raton NL: St. Lucie Press

Zagorianakos E. 2001b, 'Back in the future. The Brussels' plans for extending the Environmental Impact Assessment' in *TOPOS* vol. 16, pp. 198-209