

ENVIRONMENTAL IMPACT ASSESSMENT AND INTEGRATED WATER RESOURCES MANAGEMENT

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Received: 17/02/06
Accepted: 28/06/06

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ABSTRACT

Environmental Impact Assessment (EIA) plays an important role in the framework of the efforts aiming at the formulation of a complete water resources management. In our paper this issue is examined in an integrated way. The following issues are particularly examined : the notion of the EIA in general, the assessment methods and techniques on the basis of the suitability of their use, the economic aspects, the Greek legislative framework, case-law positions in general as well as the action and the steering pattern of the Greek Public Administration concerning this issue. This paper presents some conclusions and proposals which are drawn by the aforementioned integrated approach.

KEYWORDS: notion, programmes, economy, legislation, case-law, administration

1. INTRODUCTION

Environmental Impact Assessment (EIA) is one of the more important means of the implementation of prevention and sustainable development principles. The integrated water resources management takes place in the framework of the implementation not only of the aforementioned principles but also of other ones related to them. As a consequence, the aforementioned notion should consist an important determinative element for this management.

This notion, aims - among others - to the adoption of all the necessary measures in order to achieve an integrated environmental impact assessment by activities and programmes mainly aiming at the prevention of environmental damages and the rational resources management. When impact assessment mainly refers to the preliminary phases of elaboration of relevant programmes (e.g. developmental programmes, regional planning policy, elaboration of urban projects etc) then it is about the notion of Strategic Assessment of Environmental Impacts (SEA) (Cassios, 1991; Lee-Walse, 1992).

In the present paper, the issue of EIA in relation with the integrated water resources management in Greece is examined. Since an appropriate approach of the assessment in study should include various important aspects of it (technical, economic, legal, organising etc) it is obvious that the present approach should follow the same method.

The main elements of the study mentioned above are, among others, the comparative study of all assessment methods and techniques from the point of view of the suitability of land use for the water resources management, the problems of the "internalisation" of the external cost and the incorporation of the "environmental" component in the national accounts, the suitability of the present general and more specific legislative framework, the Greek case-law's positions as well as the Greek public administration's position.

The raising conclusions and the expressed proposals are emerged by the chosen synthetic method of the aforementioned issue approach and are "in principle" more complete than other related to them cases of different parts of the approaches.

2. THE NOTION OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

The variety of the environmental problems (many of them have an overall character) existing in the modern world, the decrease, in many cases, of "carrying capacity" of different ecosystems, the important influence (especially caused by large-scale works and programmes such as the water resources management programmes) on factors and variables of natural and human environment, as well as the adoption - in international level - of the sustainable development principal consist some of the most important reasons, which had as a result the replacement of the old and classic "polluter pays" principle with the "prevention" one.

It is worth mentioning that the notion of sustainable development, does not have any specific content but it is based on two main axis. The first one, refers to natural resources saving and the second one to environmental protection. Water resources are natural resources of great importance and they should be included in the frame of a compatible to the aforementioned principle management. Their management, should secure not only their largest possible savings (taking into account the fact that these resources are continuously depleting) but also that this management should be undertaken by manners leading to the smallest possible negative environmental impact. Prevention and Sustainable Development should be the main "constants" of the management in study (Milopoulos, 1995; Tolikas, 1982).

The realization of the prevention caution principle and the sustainable development one is assured, at a great extent, by the environmental impact assessment. In the frame of the latter, all impacts caused to the natural and human environment by works, activities and programmes at the levels of planning, construction/realisation and operation (positive-negative ones, small-big ones, direct-indirect ones etc) are attempted to be assessed in advance.

It should be now mentioned that there are important differences between works and programmes, which do not only influence water resources management (since the latter should probably be perceived in the frame of programmes realisation) but also relevant environmental impact assessment, as well as the choice of the appropriate assessment methods and techniques. Their most important differences are :

- a. The work's target is restricted while programme's one is widespread and it increases with the level.
- b. The alternative solutions in works, are particularly related to the position and the technology used while programmes are related to technical, institutional and intra-service factors.
- c. Time limits are small in works and large in programmes.
- d. Work's implementation is direct while programme's is durable.
- e. Future knowledge is "feasible" in works but not in programmes.
- f. The environment to be studied as well as the environment in observation are almost definite in works but not in programmes etc

Finally, it should be stressed that the features of the "large scale works" are similar to the relevant programmes ones (Cassios, 1991).

Even if the notion of EIA is not only confined to the elaboration of Environmental Impact Studies (EIS), the latter consist the main mechanism of its operation. It is obvious that thoroughness, credibility and the overall approach of impact of an EIS contribute effectively to the realisation of the principles mentioned above. Basic elements, that influence the credibility of the aforementioned studies are, among others, the coexistence of qualitative and quantitative variables, the subjectivity of judges, the suitability of the using methods and techniques, the specification of the projects and programmes as well as their differences with works, the determination of the study field (scoping), the choice of the works submitting to assessment (screening), the prediction in the frame of the study of the works' operation surveillance mechanism etc. Particularly, the following issues should be taken, among others, into account :

- a. In EIS there is a coexistence of quantitative factors (that can be assessed) and relevant qualitative ones (that can not be assessed in principle). The need of co-examining these quantitative and qualitative factors (also imposing by the fact of procurement and continuously comparison of the -in principle-appropriate alternative solutions and the choice of the most suitable one), demands the searching of methods and techniques that accomplish relevant - at least - quantification of qualitative variables. The latter results, among others, to the restriction of judgements' subjectivity.
- b. The demarcation of the study field consists an important factor, taking also into account the fact that, especially in large-scale works and programmes, dealing with the issue of EIA demands the elaboration of the necessary studies and it will cover all the stages of planning and implementation of programmes (Manouris, 1997). This demarcation is very important when we are dealing with integrated programmes such as the water resources management ones. Such programmes, extend to a variety of thematic areas, such as the protection of the natural character of natural water recipients and especially of those who present a special environmental interest (streams, lakes etc), the productive procedures, the urban and zone planning etc)
- c. The EIS impact at the level of works' planning (Lazarides, 1998) and programmes' realisation has been the subject of many studies. Among the raising results is the one mentioning that the time of the EIS elaboration in comparison with the relevant to other studies ones is of major importance. In every case, an EIA procedure, as well as the related to it EIS, should get started "quite soon" due to the fact that only at that time the possibility for an "assessment result" - resulting to the most appropriate and compatible to the prevention principle of the environmental protection - increases. It is obvious that an EIA procedure should start before EIS and finish after it.
- d. EIA procedure varies, due to previous pollution's control procedures aiming at dealing with specific and direct problems, created in the environment (mainly on the basis of the logic of rehabilitation of environmental damages and not of the prevention one). Nowadays, an EIA procedure should deal with integrated environmental problems. Thus, as it has already been mentioned above, all impacts of a work/ activity/ programme/ plan/ policy should be determined and assessed (natural, ecological, aesthetical, economic etc).
- e. It is obvious that an EIS, in order to achieve its targets, should have the character of a "real" visibility study as well as the action/actions planning one. For that reason, environmental sense, includes not only physiochemical and biochemical components but also all factors relating to individual and social human life (regional economy, natural resources, ways of living etc). According to the nowadays prevailing trend (concerning the aforementioned issues), an integrated assessment or a relevant co-examining of the anticipated benefits (economic, social, environmental ones etc) with the relevant damages should take place. It is obvious, that such a broad cost/benefit co-estimation, could lead to the rational assessment of the investing projects and programmes as well as to favour the conserving resources use (the water ones are included).

3. ASSESSMENT METHODS AND TECHNIQUES

Due to the aforementioned observations, it is obvious that the using methods and techniques can not be characterised by the same suitability grade for the case of EIA by water resources management programme. In the frame of the present study, an estimation of known methods and techniques (as far as the suitability is concerned) is attempted.

The use of "classic" methods is limited and it has - at the beginning - complementary character, due to the fact that for these methods some requirements are imposed (such as the not uncertain environment, the rational choice one and the static one). These requirements, do not apply to the case of the water resources management programmes. Significant deficiencies of these methods are, among others, the failure in incorporation of different factors and the failure in using qualitative data.

"Multi-criteria" analysis methods, have important advantages in comparison with the classic ones, mainly because: a) the environment could be uncertain b) it could be non static and as a result planning takes place in the frame of a continuous interaction of targets and means c)

the results of the aforementioned techniques can be related to different grades alternatively to some criteria with different priorities (special criteria weights). The ability of manipulating qualitative data, is also given, because in multi-criteria approaches the manipulation of mixed records or inclusively qualitative data records (numerical and regular prices escalations in the criteria) is possible. For the reasons mentioned above, they are - in principle - appropriate for impact assessment of water resources management programmes even if their suitability can be confined due to the existence of other problems (such as the deficiency of "objective" estimation and qualitative variables counting, the deficiency of demarcating the total of the relations among the environmental factors and variables, the deficiency of demarcation in total and "internalisation" of the external cost etc).

Multi-criteria models of environmental decisions making (they are also called managerial or technological models) have important contribution to the description of environmental systems and as a result to environmental decisions making. As a consequence they are - at the beginning - appropriate for environmental impact assessment by planning, construction and realisation of water resources management programmes.

However, in many cases, their results are not satisfactory because: a) theoretical difficulties related to the models construction emerge. These difficulties are due to the deficiency of an accurate determination of various senses which describe the real phenomena, taking also into account the large number of their interactions, b) the presumption of the existence of adequate and reliable elements does not always exist and result to the deficiency of constructing suitable models c) the lack of adequate knowledge for environmental problems and the interrelations and interactions of their determinant factors (especially of those having an overall character) contribute to the deficiency of the construction of a reliable model.

Systemic method can, under conditions, be included in the category of the - at the beginning - appropriate methods. Yet, in many cases, there are problems restricting the aforementioned suitability. It can be indicatively mentioned that at the level of system's determination, problems can be emerged due to the lack of adequate (in quality and quantity) elements as well as the lack of knowledge of the full range of natural environment elements and their interactions as well (issues of diet, drainage and the situation of superficial and underground waters are included in the elements mentioned above).

During the sample's construction, additional problems of the elements' choice, can also emerge due to the fact that for the purposes of the manipulation's ability it should include small number of elements (appropriately chosen and their relations appropriately determined). At the choice/determination level of the criteria total, the problem of quantification does also emerge since all phenomena should be quantified in terms of range or amplitude. Similar to the problems mentioned above, problems can also emerge to other procedure levels such as the level of finding alternative solutions, their assessment and the choice of the most appropriate one.

Most suitable EIA method is the one based on decisions analysis. According to this method, work's planning and the creation of problems are described as a procedure of decision making (that is the choice of a solution (after many alternative ones) in conditions of uncertainty). The decision's theory sets the suitable frame for their elaboration in risk conditions, because it gives the possibility of the undesirable consequences assessment (which is a result of failure in decisions analysis). Development and natural phenomena simulation models solution lead to the estimation of failure possibilities (considering that the impact assessment by the possible failure of works/programmes takes place at the technical analysis level that incorporates to the entire decisions making procedure).

Important advantage of the method mentioned above, in comparison to the classic cost/benefit one, is that there is the possibility of impact assessment and consequences which can not be easily translated to money (such as illness, crashes, animals lose, atmospheric and water pollution, ecological disasters etc). The method's suitability mentioned above can easily be traced in the case of programmes referring to water's management since their planning, creation and realisation present, among others, features of uncertainty, possible failures, necessity of dealing with relevant issues on the basis of more scientific areas methods (theory of statistics, system's analysis, business research, economy,

psychology etc), necessity of the assessment of various factors and variables of evaluators and non evaluators in money etc - that is to say features that tally to the use of the aforementioned method. Again, problems relevant to other techniques and methods can, of course, emerge. Though, in every case, the method in study is the most appropriate of all of them.

Finally, it should be mentioned that in most cases of planning, creation and realisation of water management resources programmes, the application of a combination of methods and techniques is attempted in order to achieve the most convenient assessment result.

4. WATER RESOURCES MANAGEMENT AND ECONOMY

Economic parameter plays an important role to the assessment in study. Related to it issues are, among others, the possibility of "internalisation" of the external cost, the possibility of the use of the most appropriate - in every case - economic means, the determination of social welfare which happens by water resources management of significant programmes, the detection of "scale economies" and "external economies" (pollution and environmental degradation are included in negative external economies), the deficiency of entire logistic cost/benefit display (especially of qualitative factors) as well as the funding of water resources management programmes.

Especially, for the above-mentioned issues, the following should be mentioned :

- I. Internalisation of external cost consists a mechanism of effective environmental protection. In the case of water resources, the internalisation should be attempted in every case where, in the frame of the management mentioned above, pollution is created or environmental resources are degrading. It is obvious that as entire, complete and real the internalisation is so larger environmental protection, is achieved and consequently so more "compatible" it is to the principles of sustainable development.
- II. Special reference should take place for the kind of problems created by the deficiency of economic science to include in various "accounts" the environmental component (especially in large scale works and programmes) and as a result neither an appropriate internalisation of external cost, can be achieved nor, due to these reasons, the choice of the most appropriate alternative solution is feasible. This takes place to water resources management where problems in the estimation of social benefit or social cost by the applied management may arise.
- III. It is obvious that, due to the fact that in the frame of EIA's procedure in water resources management programmes the environmental impact on qualitative factors should be co-examined, the importance to be given to the finding, implementation, application and combination of suitable assessment methods and techniques - giving the, as far as possible, properly economic assessment - should be great. The created problems by the planning and the realisation of water resources management programmes should be dealt towards the following directions :
 - the one of the entire and most appropriate exploitation of the existing assessment methods and techniques, which restricts the range of the aforementioned problems as well as the conception of new ones, aiming at improving the assessment in the frame of the economic approach
 - the direction of the co-examining the basic -at least - socioeconomic parameters with the others of technical, legal, organising etc character in the frame of the elaboration of EIS and
 - the direction of State intervention and the reception by the State of cohesive measures when the behaviour of individual initiative lead to the creation of expanded negative external economies (among them important position takes the environmental degradation).

5. LEGISLATIVE FRAMEWORK IN THE CASE OF GREECE

The legislative framework in study can be divided in two main categories. The first one includes the relevant clauses referring to EIA's notion as well as to EIS. The second one includes clauses directly or indirectly referring to water resources management.

For the first category the following issues are applied: The publishing of Directive 97/11 EU (for impact assessment of some plans of public and private works on environment - alteration of Directive 85/337 EU) and the 96/11 EU one (for the integrated precaution and the pollution control) has, among others, imposed the necessity of the alteration of Articles 3,4,5 of the Greek Law 1650/86 for environment (as they have specialised with the Greek Common Ministerial Decisions 69269/5387/90 and 75308/5512/90. The alteration mentioned above took place with the publishing of Law 3010/2002 (Greek Government Journal 91A/25-4-2002) "Modulation of Law 1650/1986 with the Directives 97/11 EU and 96/61 EU, demarcation procedure, arrangements of stream issues and other clauses". After the Law mentioned above, the following are published:

- Greek Common Ministerial Decision 15393/2332/2002 (Greek Government Journal 1022 B/ 5-8-2002) "Classification of public and private works and activities into categories and subcategories according to Article 3 of Law 1650/1986 as it was replaced by Article 1 of Law 3010/2002 "Modulation of Law 1650/86 with the Directives 97/11 EU and 96/61 EU etc (A91)", in the frame of which works and activities of categories A and B are divided into subcategories 1 and 2 (for A) and 3 and 4 (for B).
- Greek Common Ministerial Decision 11014/703/F104 (Greek Government Journal B´ 332/20.03.2003) "Procedure of Preliminary Environmental Assessment and Evaluation and Approval of Environmental Conditions" according to Article 4 of Law 1650/1986 (A´160) as it was replaced by Article 2 of Law 3010/2002 "Modulation of Law 1650/1986 with Directives 97/11 EU and 96/61EU ... and other clauses" (A´91) and number 25535/3281 (Government Journal B´ 1463/20.11.2002) "Approval of Environmental Conditions by the Region Secretary General of works and activities classifying to subcategory 2 of the Category A" according to number 15393/2332/2002 Common Ministerial Decision "Classification of public and private works in categories etc" (B´1022).
- Finally, the published Directive for Strategic Environmental Impact Assessment (Directive 2001/42EP of the European Parliament and the EU-Council of 27th 2001, referring to environmental impact assessment of some plans and programmes) should be transferred to the internal law order of member-states until 21st July 2004. It will give new improvement perspective of EIA by programmes (among them water resources management programmes in study are included).

For the second category, the main Greek Law 1735 of 19/20-11-87 "Water Resources Management and other clauses" (A´201) has been replaced by Law 3199/2003 "Protection and Management of Waters - Modulation with Directive 2000/60 EP of the European Parliament and the EU-Council of 23rd October 2000" (Greek Government Journal A´280/9-12-2003). In the frame of the first Law the following issues are predicted: the obligation of previous admission reception for every water use, country's division into 14 water districts demarcating by water parting, the creation of central and regional management bodies (and relevant committees) as well as the programmes of growth and management of State water resources (they are distinguished in long-lasting national ones, medium-lasting national ones, medium-lasting per water district ones and special aims ones), the prediction of conditions and requirements for the construction of works and exploitation of water resources by public sector bodies or individuals (in the frame of the applied programmes as well as the constitutive of Regulations for everyone's rights to water use after admission and in the highest limits of real needs and maintaining the extra quantity for using it in other uses). Moreover, conditions of maintenance and protection of quality and quantity of water resources (they are considered as use of the commitment of certain quantity of water for the protection and maintenance of water ecosystem) are predicted and clauses for the control of various activities spoiling the quantitative and qualitative condition of water resources, are effected as well as the disposal of sludge, industrial waste etc to water recipients is determined to take place according to the Greek Law 1650/86.

The second Law differs considerably to the first one because, among others, it has not divided by the Greek State into large land unities but contrarily the first one every drainage basin (that is to say every water resource) is managed by particular water region.

In the frame of the second Law, the following are predicted: the Greek National Water Committee, the Central Water Service, the Region Waters Directorate (they are engaged into

water resources management as it is specifically determined in similar articles), the elaboration of management plan prepared by every Region, programmes of measures and observation of water condition, programme of special measures against the pollution, general regulations of water usage as well as admissions of water usage and performance of exploitation works.

Finally, the Greek Law 1650/1986 for environmental protection (A160) should also be mentioned. In its frame, is taken care for the ascertainment of waters quality and indeed for each kind of the protecting natural recipient, as well as the sensitivity of the ecosystems of the area anticipated also a national network of measurement stations of the parameters of water quality. It, moreover, predicts a system of taking measures and restrictions for water protection by works and activities, such as the implementation of anti-pollution technology, marginal prices of liquid waste and installation of instrument for the control of their quality, industrial procedure standards etc. It also includes, clauses related to natural recipients observation, the assurance of good operation and maintenance of the installations of works and activities having every kind of waste after the process as well as the protection and maintenance of nature and the landscape in areas of land, water or mixed character presenting ecologic, geomorphologic, biologic, scientific or aesthetic importance and not only demand special characterisation during Law's discriminations but also demarcation and arrangement of their special management regime.

From the study of the total of the aforementioned legislation as well as of the rest relevant legislation the following issues should be mentioned :

- a. due to the fact that that the alteration of the main legislative framework of the EIA, is very recent proposals - in the frame of its implementation - can not be given. Though, there are well-founded allegations that do not assure the necessary overall, integrated and reliable approach, which is impelled to exist in large-scale works and activities as well as in programmes related to water resources management
- b. in the frame of the legislative framework of water resources a series of similar issues are dealt with. It is rather doubtful if the aforementioned dealing adequately covers the demanding integrated approach, as it was prescribed in the frame of the present study.
- c. the situation is even more worsen if we take into account that both aforementioned legislative frameworks do not present among them the necessary connection and compatibility (both ones are necessary for an integrated water resources management where EIA plays an important role)

6. CASE-LAW POSITIONS IN THE CASE OF GREECE

Greek case-law dealt with the aforementioned issues expressing positions, not only for environmental impact issues but also for water resources management issues.

In the frame of the first category, Greek case-law has, among others, the following positions:

- a. the protection of natural and cultural environment directly arises by Article 24 of the Greek Constitution (which is applied directly)
- b. assessment should start by the appropriate, in every case, planning level
- c. among the assessment features is that it should be overall, entire, integrated and examine the alternative solutions (the "zero" one is included)
- d. among the alternative solutions, it should be chosen the one provoking the most mild impact on environment and it is technically feasible.
- e. environmental protection, is the most important factor of those composing the public interest.
- f. the pre-approval of the demarcation and the approval of environmental conditions (with the new legislative framework : preliminary environmental assessment and approval of environmental conditions) consist two different administrative clauses. That is to say that each citizen can ask for judicial protection exerting annulment application just after the clause of pre-approval of the demarcation and not at the end of the procedure (just after the approval of environmental conditions).
- g. works and activities should, among others, integrate to the logic of a mild management, be sustainable, serve - in principle - the public (and not the private) interest, not provoke expanded and serious morphology denaturations (particularly of the sensitive ecosystems

such as flumes, small islands, coastal zones etc), not be detrimental for landscape aesthetics, not pollute seriously and integrate in the frame of a general planning and programming

- h. EIA should take place before any other preparatory administrative action.

In the frame of the second category, the following positions are expressed :

- a. in the light of the principles of the Rio Declaration for the environment (1992) and the development of the Directives of Agenda 21, it is clear that every water use is subject to the principles and the restrictions composing the sustainable development of water resources which are a vital element of natural environment
- b. fundamental principle of the aforementioned management, is that sustainable water management should take place at the level of the drainage basin (Harper and Ferguson, 1995) and be planned and integrated due to the fact that during the well-founded assessment and estimation of the needs and the available water resources a systematic plan of the use of their resources is elaborated, taking always into account the relation of flowing and underground waters, the quantity of the available reserves and the integrated water use (the possibility of their reusing is also included)
- c. as arises by Article 24 of the Greek Constitution, the syntactic legislator has made natural environment an object of lawful protection. As a consequence, this clause makes compulsory its entire and efficient protection with the adoption of necessary measures, not only by the common legislator but also by the Administration (precautionary and suppressive ones and indeed either normative or general or individual ones). Superficial and underground waters are included in the notion of natural environment as natural resources and ecosystems.

Finally, case-law refers also to the issue of EIA's interrelation with water resources management. Particularly, according to case-law, ".....giving the crucial water interdependence with various water ecosystems (lake ones, riverine etc) and water lands (most of them are protected by the Ramsar Convention). The aforementioned sustainable water resources management should - when it is necessary - include the assessment and the evaluation of each decided management, either in general or individual level in relation with quality and quantity of the influenced water ecosystem".

7. PUBLIC ADMINISTRATION'S POSITIONS, IN GREECE

From the aforementioned analysis it is obvious that Greek public administration should adapt its action of water resources management, according to the positions of the Supreme Court of Cassation due to the following variety of reasons:

- a. the Greek public administration has the obligation to comply with the Court Decisions by the Constitution (Article 95, par.5 of the Constitution)
- b. the extended case-law is compatible with the nature and the peculiarities of water resources management and the kind of its management implying by nature
- c. the actions of the administration which are compatible with case-law policy will obviously create appropriate conditions for rational and integral water resources management, according to sustainable development's demands. Moreover, the latter has already been included to constitutional texts.

Unfortunately, the Greek public administration does not seem to abide by these positions due to a variety of subjective and objective reasons (lack of related knowledge, inappropriate employees, meritocracy etc).

8. CONCLUSIONS - PROPOSALS

By the aforementioned analysis of the issue the following conclusions and proposals emerge:

- a. EIA is an application of the prevention principle. This assessment requires, among others, the elaboration of appropriate EIS which presents study's features of "developmental character" in order to assess every kind of existing impact on natural and human environment (caused by programmes, such as the water resources management ones) and their interrelations. This fact implies the searching, conception and implementation of similar assessment methods and techniques. As a consequence, every interested body (public administration, universities, research centres etc), should take care for the

- understanding of all the issues mentioned above and the development of a relevant research.
- b. The nature of water resources management programmes, their complication, the variety and dimension of their impact on a plurality of factors of the natural and human environment are some of their features, implying the use of assessment methods and techniques which take into account, among others, the possibilities of failure of these programmes (e.g. sensitivity analysis etc).
 - c. The economic impact component should particularly be taken into account on the basis of the needs of "internalisation" of the external cost, the creation of scale economies, the avoidance of the creation of negative external economies as well as the incorporation of the environmental dimension to various accounts. The needs mentioned above usually are not co-estimated by the public administration. The latter should take measures and mainly incorporate appropriate conditions to EIA requirements in order to take into account the aforementioned component.
 - d. The Greek legislation, connecting directly or indirectly to the issue in study, can not be considered as basically "arranged" to the aforementioned techniques and socioeconomic demands and as a result presents partiality. The reinforcement of the efforts for the reassurance of the, as far as possible, bigger compatibility between EIA's legal frames and water resources management consists a very important requirement of the improvement of the situation.
 - e. The Greek Case-law has, in many cases, moved in the frame of relevant technical and socioeconomic demands expressing a variety of proper views and positions. Unfortunately, the Greek public administration does not consistently comply with the relevant judicial decisions even if that it is its obligation that directly arises by the Greek Constitution (Article 95, par.5 of the Constitution). On the basis of the fact of the creation of important problems in water resources management programmes (because of the cancellation of individual and normative clauses by the Greek Administrative Courts) it is proposed that case-law positions should be seriously taken into account (particularly in the stage of the composition of relevant EIS requirements).
 - f. Finally, it is easily emerged the conclusion that the issues in study, at the level of public administration, should be dealt with "inter-scientific" basis and the related studies should be elaborated and controlled by each appropriate "inter-scientific" team.

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