The Project for the Port Saint-Hilaire Marina: A Litmus Test for the French Legislation on the Environment

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ABSTRACT■



MIOSSEC, A., 1992. The project for the Port Saint-Hilaire marina: A litmus test for the French legislation on the environment. *Journal of Coastal Research*, 8(3), 734–744. Fort Lauderdale (Florida), ISSN 0749-0208.

Since 1973, a series of laws have been passed in France with the aim of ensuring that the environment is better taken into account and better protected when some parts of the coastal zone are to be developed. In particular, impact studies and public inquiries have been made mandatory prior to the realization of any development project. Unfortunately, impact studies are seldom carried out properly, and this is often due to the shortcomings and ambiguity of the laws. Besides, in the course of the public inquiries, the citizens even more rarely challenge the projects and point out their flaws.

The case study of the Port Saint-Hilaire marina, in Vendée, exemplifies the scope and weaknesses of the French legislation on the environment.

ADDITIONAL INDEX WORDS: Coastal environment, coastal zone, environmental impact studies, marina.

INTRODUCTION

About 180 marinas have been built in France over the past fifteen years or so; and there seems to be a growing demand for more, as indicated by the proposed construction of some fifty new ones. In most cases, such projects involve individual communes rather than groups of communes, which would be more practical considering the financial stakes. The projects must henceforth be studied and carried out within the legal framework which was strictly defined in the past decade in relation to the protection of the environment. In particular, they must conform to the law called "loi littoral" (Journal Officiel, 4 January 1986). Two procedures must be observed in order to ensure better information for the public at large: an impact study and a public inquiry. However, these procedures, whose usefulness cannot be denied, present shortcomings that the legislators may not

The scope and limitations of both the impact study and the public inquiry will be shown through one case study, that of Port Saint-Hilaire in Vendée. Although this case study exemplifies the problem very well, one should not extrapolate from it.

ENVIRONMENTAL LAWS AND THE PROTECTION OF THE COASTAL ZONE

A Battery of Laws

The state's will to protect the coastal zone, however belated it may seem, is in keeping with similar concerns throughout Europe. During the 1970's several bills were gradually worked out, aimed at setting limits to the growth of tourism by trying to control urban development which, if it went unchecked, might result in the overconstruction of the coastal zone and in its privatization. In their concern about properly managing the coastal zone and preventing all conflicts that were bound to arise among developers and community, the government proposed a set of bills based on the Piquard report (1974), the last of which was the loi littoral passed on 3 January 1986. These laws fall into two categories: those which aimed at a better management of the coastal zone, and those which ensure that the residents be properly informed. The latter category is going to be dealt with here.

For a Better Management of Space

Two important ministerial circulars were issued in late 1973 (Moniteur des Travaux Publics, 29 December 1975). The first preserved the ecological balance in front of wide-ranging development operations, the second limited the use of the coastal areas for amenities which might be installed a little farther inland. Some time later, the Trust for the Conservation of Coastal Zones and Lakes was founded (JOURNAL OFFICIEL, 11 July 1975). That Trust was meant to ensure the protection and management of areas either particularly vulnerable or already badly damaged. In a way, it can be said that the private citizens and local councils passed on their responsibility for the preservation of the coastal zone to that useful organization. Further legislation was necessary to ensure a concerted and more effective management of coastal zones. This was soon accomplished when the Prime Minister issued a directive (JOURNAL OFFICIEL, 16 August 1976) that limited the granting of permits allowing the construction of housing estates in low-lying land behind dikes and it also guaranteed the public right of access to the shore. That directive was the first response to the harm done by the unsupervised construction of marinas along the Mediterranean coast. However, it took the State three additional years to produce "a coherent comprehensive doctrine" for the development of coastal zones. It eventually appeared in the Directive on the Preservation and Management of the Coastal Zone (Journal Officiel, 26 August 1979). For all its scope and importance, that Directive had to be overhauled when Decentralization laws were passed. The loi littoral was born out of a reflection on the obvious shortcomings of the Directive.

Towards a Better Protected Space and a Better Informed Public

At about the same period as the founding of the Ministry of the Environment (it has since been alternatively a ministry or a junior minister's office), new laws were passed which were all meant to ensure better management of the coastal zone. A very important step was the ministerial decree (JOURNAL OFFICIEL, 13 October 1977) which made it mandatory to carry out impact studies prior to all new development of space, so that natural areas and landscapes, animal species and plants, and natural resources and the ecological balance be preserved.

In the case of the Port Saint-Hilaire marina, the very size and cost (over F.F. 6 million) of the project made the preliminary impact study necessary.

The Content of the Impact Study

The project is a 700-berth marina, and the impact study a document of 88 pages (Etude d'impact de Port Saint-Hilaire). At the outset, the authors clearly stated the object of the study: the construction of a marina to be used at all times, whatever the tide, inside which the surf must never place the boats at risk; and maintaining an adequate depth in the entrance channel must demand as little dredging as possible. The impact of the construction of the marina on the neighboring coastline must be carefully considered so that all measures might easily been taken to ensure the coastline's protection.

The study is composed of four items:

- (1) A presentation of the project together with the reasons why it is being considered.
- (2) An analysis of the pristine state of the site and of its environment.
- (3) An identification of the impacts and an analysis of their effects on the environment.
- (4) The measures to be taken to counteract ill effects.

The report is composed of eight chapters organized in an analytic way. First, a few characteristic features of the coast are mentioned; then the following points are considered in order: the pristine state of the marine environment; the impact of the project on plants, on wildlife, and on people's lives; and finally it sums up all the compensatory measures that will be taken to counterbalance the impact of the marina on its environment. It ends with a bibliography of 37 titles.

Impact Studies and Public Inquiries: How to Keep the Public Informed

The law was initiated to allow open access to information at all stages of the decision-making process with the authorities, and to compel developers to consider the consequences of their projects on the environment. In fact, as PRIEUR (1984) (a French specialist of environment laws) wrote "... when all is said, the impact study implements the old saying: prevention is better than cure". An impact study must therefore be open to all concerned: to the authorities who have a say

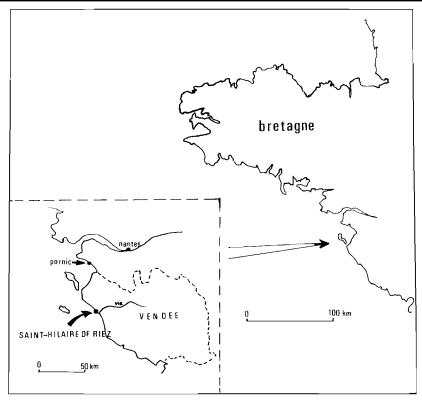


Figure 1. Location of proposed development of Saint-Hilaire de Reiz in the Department of Vendée.

in the decision, to various associations and trusts and to private persons; and it should be easily comprehensible to all. The principles of the procedure are clearly defined in *loi Bouchardeau* (JOURNAL OFFICIEL, 13 July 1983).

The public inquiry is a procedure, the purpose of which is to provide information, and to gather, prior to any decision-making, people's opinions, suggestions, remarks and counter-propositions, so that the authorities may make their decision with full knowledge of the facts. According to the law, all the development that risks modifying the environment and all town-planning projects must be subjected to a public inquiry. The law also aims at improving the procedure of enhancing the role and responsibility of the head-commissioners. The latter is appointed by the presiding magistrate of the civil service tribunal, and no longer by the Prefect; and he enjoys extensive powers. He can visit the site. He can summon the mayor and his councillors and the authorities concerned. He has right of access to any document which might prove helpful. He may call a public meeting with an open debate. In the end, he draws up a report complete with well-founded conclusions. Whence the importance of his role in the control of the different stages. He may have been chosen for his competence in relation to the case in hand, but it need not be so. The content of his report is of utmost importance on three grounds: (1) his advice lights the way for the person, usually the Prefect, who ultimately allows or vetoes the project; (2) he must report all that has happened in the course of the inquiry, particularly the possible incidents, and sum up all the arguments exposed by the opposing parties; and (3) he must state his own motivated conclusions, which, being his personal opinion, may differ from the one prevailing among the people concerned.

There is no denying that in the last fifteen years in France, the State has taken the necessary measures for better control of the development of space, particularly that of the coastal zone where the demand is greatest. The public inquiry permits openness and access to information; but does it have effective results when it comes to making

decisions? The following examples will pose a number of questions and cast light on the ambiguous nature of the procedures.

AN EXAMINATION OF THE PROCEDURES

The Background of the Port Saint-Hilaire Case

To be fully understood, the impact study must be considered within the wider framework of the tourist development to which the project belongs. The marina which is under consideration in Saint-Hilaire de Riez (Figure 1) is to be the central point of extensive restructuring of its urban space. Over the years, tourist activities have grown in an erratic manner and the area has been haphazardly developed. Therefore, the local council's purpose in building the marina is to make it both the hub of tourism and a showcase whose role would be to attract a new kind of holiday-maker. The project would also be a natural showroom for the pleasure-craft built by Bénéteau, a local firm of international reputation.

So, the project is much more than the construction of a marina; it is a wide-ranging urban development operation, undeniably useful, which will also include the building of holiday-flats whose occupants will not all be users of the marina. The project is to conform with the law of 3 January 1986, on the development of the coastal zone.

Local people were given the opportunity to state their opinion about several elements of the project, and voice their grievances. Four public inquiries were held in Saint-Hilaire de Riez between 16 August and 30 September 1988.

Progress of the Public Inquiry

Everything went smoothly in the course of the inquiries. Whoever wished to come to the townhall to submit a written account of their grievances and to meet the head-commissioner during the three legal days was allowed to do so. Eightyseven statements were offered (far fewer than in the other such inquiries) and five letters were sent, two of which were from the "Comité pour la Protection de la Nature et des Sites", a conservation group. Fifty-seven opinions were favorable to the project, thirteen definitely unfavorable, and seven had reservations about some of its aspects. The commissioner did not give a fully detailed account of the unfavorable nor of the mixed statements. It was said that the petitioners worried about the spoiling of the natural site, about the changes which were bound to affect currents, about the erosion of the coastline, and the necessity of beach renourishment operations. They also feared that the construction of the basin and housing developments might increase pollution. All those favorable to the project pointed to the economic boom it represented. Eventually, the head-commissioner favored the project, overlooking the arguments put forward by the minority hostile to it.

It must be pointed out that there are 6,000 permanent residents in Saint-Hilaire de Riez and over 100,000 holiday-makers in summer; so, the public inquiry cannot be said to have rallied people's interest. Is this due to a lack of concern for a necessary democratic procedure, or to a failure to comprehend all the implications? To answer those questions, one must carefully consider the content of the impact study.

The inhabitants cannot be said to feel unconcerned with what is going on in their town. The main issue is to learn how the impact study can be understood by its readers. Is it comprehensible to all? Must petitioners only consider the likely impact on the environment or can they also point out the deficiencies, the oversights and the shortcomings of the study? Can the impact study initiate scientific controversy about the basic problems posed by the very existence of the project? What should be done is to confront the petitioner's remarks, the commissioner's conclusions and the opinion of experts who specialise in coastal zones. But, even so, nothing would be clarified.

Opinions of the Experts

At the request of the Pays de la Loire Regional Delegate for Architecture and Environment, the Port Saint-Hilaire impact study had been submitted to the "Association des Géographes Nantais" (the Association depends on the University and delegates one of its members to study the document). The appointed expert assessed both the content and the form of the study by comparing them with his own conclusions after investigating the site of the project and after studying not only the books mentioned in the bibliography, but a few more which had not been referred to or which did not appear in the citations. The purpose of the expert's work was to help the Delegate for the Environment determine the judgement he must make on the project. But the expert is legally entitled to submit his own opinions to the commissioner in charge of the study.

The form of impact studies must also be examined. Such studies are written according to a stereotyped plan which scrupulously respects the letter of the law. They may vary in bulk, but they are usually composed of chapters which do not solely bear close relation to the subject at hand. For instance, a series of articles on the local community, its history and its activities can be found in the studies. As it deals with environmental matters, a study presents questions in an analytical way: the geomorphological aspects are dissociated from the climatic and biogeographical ones. The report is mainly based on the compilation of published monographs and theses. There would be nothing objectionable with this if the sources were referred to according to the depth of information included and methodologies instead of their themes. In the impact studies, scientifically-conducted research can be found alongside booklets written by local scholars and nature lovers. The expert's rigorous, slow, and meticulous methods, based on careful field study and on the systematic checking of sources are placed on a level with other works which, for all their usefulness, are not the result of rigorously-conducted research. In other words, the main part of an impact study is nothing more than a compilation of sources, all the more annoying because the conclusions have rarely been checked against facts. More disturbing, it also appears that a certain number of fundamental research works have been ignored, or used without being mentioned (such as the works of Pinot (1980) on the coastline evolution). When reading an impact study, one often gets the impression that its author is practically unaware of the problems posed by research at all levels, and is virtually unable to make a synthetic summary of sources (which is a serious shortcoming because environment functions first and foremost as a coherent system). The report's first concern seems to have been to give all contributors equal treatment. Such an attitude is all the more questionable from a scientific point of view as a careful reader can easily point out contradictions from one chapter to another. It is also obvious that the impacts of the projects are systematically minimized.

Is Port Saint-Hilaire a Harmless Project?

First, is the site chosen suitable? The impact study states that it is "comparatively sheltered from the waves" (SOGREAH, 1988). A map review (see Figure 1) clearly reveals that there is

not a single safe natural harbor left along the coast of Vendée. Port Saint-Hilaire will be dug into a perfect mica-schist marine abrasion platform; it is obvious that if the rock has become so smooth, it is due to the strength of the waves at that place! Safe access cannot be only guaranteed by mathematical reasoning from the parameters of swell waves in spite of refraction studies carried out which only show "examples". One cannot deny that designing and making resistant seawalls is a technician's job. One cannot deny either that the piers of the Pornic La Noëveillard marina collapsed in the winter that followed its inauguration (Miossec, 1988). Pornic is not all that far from Sion, nor is it more exposed. Besides, when one considers the layout of the harbor entrance, access is not likely to be particularly easy in rough weather for the less-skilled seamen. Although it tended to minimize risks, the impact study of the Bourgenay marina, a little farther south along the coast of Vendée and in a very similar site, warned future users of the same drawback.

Second, will the basin silt up "at the same pace as neighboring harbors" (SOGREAH, 1988)? The study conducted by SOGREAH (Société Grenobloise d'Etudes et d'Aménagement Hydrauliques) (1988) estimates that the silting rate should be similar to that of neighboring harbors: i.e., 10 or 20 cm/year, which would make dredging necessary every five or ten years. Neither the petitioners nor the commissioners have challenged these estimates. However, one might raise several objections. First, is it relevant to compare "neighboring harbors" when the one closest to Port Saint-Hilaire is Croix de Vie, situated at the mouth of a river where currents have a different action. What about the various allusions to the turbidity of the water in the impact study? One can read for instance: ". . . measurements made in May 1985 both at high water and at neap-tide, revealed the load to be 5 to 10 mg/l. All that time, the sea was calm; when it is rough, the load is certainly much more dense and it may be presumed to reach 20 or 30 mg/l" (SOGREAH, 1988). One must remember that the parameters used for scale model experiments are based on such "estimates" and "presumed" amounts, which have been defined according to questionable methods. Considering the financial burden that the project represents for the commune, the research office could reasonably have been expected to make measurements at different times of the year, particularly during spring and autumn tides. To that remark, the head of the DDE (Direction Départementale de l'Equipement) of Vendée replied that "it is virtually impossible to send out a boat to take samples near the place where waves break in rough water" (in a letter to the Delegate for Architecture and Environment). The answer is all the more disturbing because of the additional statement included in the communication "if one had to take into account the variation of the turbidity over a year, it would be much more difficult to compute the siltation rate with accuracy". Such a dilatory answer clearly proves that in impact studies, the real environment is not considered for itself but in relation to the scale models to be built!

Further in the report, however, the turbidity of the coastal water is mentioned in other connections. For instance, on page 36 (SOGREAH, 1988), the sea is declared to be usually turbid, even very turbid at times, a few hundred yards offshore. Biologists confirm this when they state that the comparative sparcity of the algae on the shore platform is probably due to the turbidity of the water. So, twice in the course of the impact study, both the turbidity of the water and the strength of the seas on the site of the future marina have been mentioned. Can we assert then, that the construction is not likely to alter the environment, neither now nor later? Who could ask that essential question and be listened to, let alone be understood? Here lies the first shortcoming of the procedure, and it is linked with the way the impact study has been drawn up, and with the ability or opportunity of lay persons to point out contradictory statements with serious implications for the future.

One can go further with the criticism of the impact study. In the chapter that deals with siltation problems, it reproduces a sedimentation map of the continental shelf using the findings of Vanney (1977). The map (Figure 2) reveals a zone, between 5 and 20 m deep, which lays southwest at the entrance of the projected harbor, where 20-50\% of the sediment is composed of silt. It must be an ancient valley of the river "La Baisse" filled in during the last rise of the sea level. Vanney has named that zone "vasière de la Vigie" but this has been omitted by the authors of the impact study. Is it because the word "vasière" (sludge zone) might have been disturbing for the readers and for the decision makers? It is clear that all the snags seem to have been smoothed by the impact study.

There is further evidence of the tempering of

the conditions described in the report. The local people know that in winter huge quantities of algae coming from the shore platform accumulate on the very spot intended for the marina basin. This movement is additional confirmation of the great strength of the seas on the platform. The impact study takes into account the effect of the marina on the movement of the algae, and suggests that compensating measures be taken: for instance, the town-council should have the algae gathered before it enters the harbor. Giving such advice is tantamount to blotting out one consequence of the marina on the environment because the commune is advised to act as though the marina does not exist, whereas it will seriously alter the marine environment. Nevertheless, the invasion by algae has been taken into account by the research office SOGREAH that had simulated it (1988) in its scale model experiment (carried out without the landing stage and boats, however). In the course of the experiment, several photographs were taken in which the results were visible. Two photos show the algae floating into the harbor at the beginning of the flow and drifting around at the height of the tide; these two photos were taken from the same angle, from above (Figures 3a and b). The last photo of the series (Figure 3c) shows the situation at the end of the ebb-tide with the caption "the algae tends to go away with the ebb-tide". But the photo is taken obliquely and the lighting makes the algae hardly distinguishable from the surrounding water. If the experiment had been conducted scientifically (is it possible to consider that sawdust can represent silt in a scale-model?), or at least honestly, all the photos would have been taken from the same angle! Have the authors of the impact study done their job with carelessness or has the research office not realized how their photos would be analvsed. Can we say that the results of the scalemodel experiment have been presented in a deliberately misleading way? Can the impact study be trusted when it says "there is no denying that algae will float into the harbor, but routine maintenance work (particularly regular dredging) will be sufficient to remedy this drawback" (SO-GREAH, 1988)? The evident consequences of that invasion have obviously been glossed over; i.e., the decaying of algae and its subsequent foul odors, and its contribution to siltation.

It is therefore evident that the impact study for Port Saint-Hilaire is questionable; in part, owing to the way the effects are presented rather than

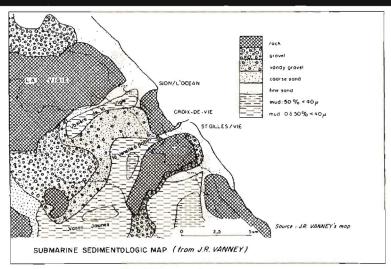


Figure 2. Distribution of fine-grained bottom sediments of Sion/L'Ocean, the proposed site of the marina.

to the research unit's manner of conducting their work.

Raising questions about sedimentation problems does not necessarily challenge the project itself. On the other hand, one might very well object to the way the problems of the littoral drift have been addressed (the strength of the breaking waves, the direction and importance of the longshore drift, the erosion of shallows) and, from one objection to another, formal criticism could very easily lead to actual challenging of the project itself.

CAN THE LEGAL PROCEDURE ACHIEVE ITS AIM OF MAKING RELIABLE INFORMATION AVAILABLE TO ALL PARTICIPANTS IN THE PROCESS

Neither the current mandatory impact study nor the public inquiry which provides some measure of control over development projects fully satisfies the experts. But most Regional Delegates responding to questions of design and environmental protection think that the two legal procedures have undeniably improved the development of the coastal zones; so, the system can be worked on.

Responsibilities of the Legislature

To understand the scope of the legal procedures, one must consider the situation. The new

Ministry of Environment does not carry much weight when it is confronted with other powerful public services. The best example of a powerful agency is the Ministère de l'Equipement, which is carefully structured around a hierarchy of highranking civil servants, and which has ruled over the management of the entire French territory for several decades. Because of changes in the political balance of power, the Ministry of Environment has at times been reduced to a "Secrétariat d'Etat"; even though the Secretariat was placed under the Prime Minister's responsibility. This is a clear indication that the environmental questions do not receive constant consideration.

It follows that for all their shortcomings, the laws mentioned above must be seen as progress. The procedure which makes impact studies mandatory is ambitious and contributes to the outlawing of questionable practices. It definitely impedes the developers' action since, henceforth, before any project can be carried out, it must be examined in order to identify the direct or indirect impact of the operation as a whole or of each of its elements on the environment in the near or in the more distant future. This implies that the notion of environment should be clearly defined. The Legislature will then be confronted with a certain number of obstacles that address the shortcomings of the procedure.

According to the law, the environment above all refers to the natural environment, which may

Study on a scale model of the penetration of algae into the marina

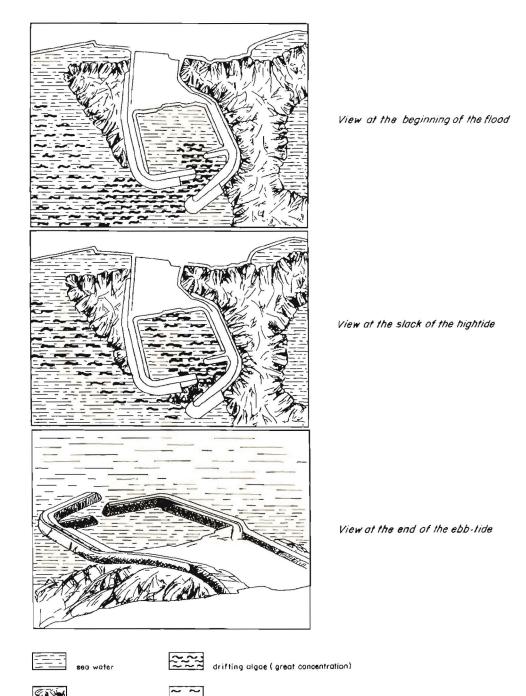


Figure 3. Portrayal of algal distribution in scale model during different stages of the tide.

seem a limited definition. Who knows about and who is concerned with the environment? Essentially experts and conservationists address this matter. These two groups view environmental problems in very different ways. Conservationists are very often nature lovers who do volunteer work. Their approach to environmental issues is often sentimental rather than scientific. The experts, for the most part scholars, tend to break down their research into individual operations. Each of them specializes in a particular field and they often work and reason on a large scale, seldom on a medium or small scale. Their method is analytical rather than synthetic which is undoubtedly a shortcoming when it comes to assessing the consequences of a project on a whole system. In spite of that, they might very well have been entrusted with the impact study, which would have been more sensible because they are not party to the project.

Yet, in the decree of the 13 October 1977 JOURNAL OFFICIEL, the second paragraph of Article 1 stipulates that the cost of the impact studies must be met by the developer, under the questionable pretext that they are responsible for the project and that their research offices are bound to possess a vast array of technical and economic data. Hence the ambiguous nature of the whole process, as the research offices are both judge and judged and can hardly be expected to emphasize the hazards of the project. In the case in question, SOGREAH has been asked both to carry out research on the project and to write the impact study. In some other cases, the town-councils or the developers have asked other research offices to subcontract the impact study. But the result has eventually been the same because the data have been supplied by the developers. It is felt that a research office that would stress the hazards implied in a project would soon go out of business!

All this is very logical: an impact study is a legal procedure. What matters is not the project itself but the way it is presented. This is why the authors of the different sections systematically try to have their statements backed by experts, either by consulting the latter on specific points without letting them have an overall view of the project, or by using their articles to support their interest.

Hence the impact studies which are carried out are fundamentally ambiguous and written according to extremely questionable methods. Further, it is difficult for ordinary citizens to have a say in the matter as they can intervene only in the final stages of the process, and their objections will not necessarily reach the head-commissioner.

Equally fundamental is the relationship between the State, local authorities, and private firms. The case in question is a project to be built in the Domaine Public Maritime, a part of the Nation of France. The organization in charge of the whole process is composed of public services (here, the Maritime Unit of the DDE) which have supplied the basic data concerning the realization of the project; a private firm (SOGREAH) which virtually holds a monopoly on coastal hydraulic works and which, after cursory examination of the site, has built up a scale-model whose reliability directly depends on that of the parameters used; and of local councils (representatives of communes or of groups of communes) that pay for the development of the project. The case of Port Saint-Hilaire clearly stresses the conflicts of the law, as the State is both represented by the Maritime services of the DDE that fully support SO-GREAH's activities, and by the DRAE (Regional Delegate for Architecture and Environment) that may challenge them. Therefore, the Legislature can definitely be held responsible for the shortcomings of the procedure which entrusts the developer's research office with the task of criticizing their own project in relation to the environment.

The Difficulty of the Public Participation Process

A public inquiry usually does not mobilize the enthusiasm of the local people. Very few people can grasp the technical points of a dossier. In the course of a public inquiry, people worry about the way the project will fit into the landscape, but they never suggest that it may not be technically sound. It appears very clear that the public's knowledge of the coastal environment is inadequate and does not allow it to grasp the full scope of the project. Impact studies are bulky. The language used is often a sort of jargon which places them beyond reach of the average citizen. Besides, they are available to the public only very late and in circumstances which are not exactly conducive to serious thinking.

The town-council that commissions the operation usually displays notices which are mere advertisements for the project, and the information session often turns into a forum where, once again, the form is given more consideration than the content.

The inquiry report into Port Saint-Hilaire does not only deal with the harbor itself, it is a thick document (INQUIRY REPORT, 1988) in which many written protests demand that the town planning scheme be overhauled because it is detrimental to some of the local owners.

The commissioners were very much impressed by the way the municipality had organized the show and it is illuminating to read their report which mentions: "an outstanding organization; a warm welcome; very clear information; a clever and harmonious display" (INQUIRY REPORT, 1988). The presentation greatly influenced their judgement and, flouting the letter of the law which requested that the report on the inquiry be separated from their personal opinion, the commissioners warmly supported all the arguments in favour of the project and made fun of the others. To those who feared that the marina would substantially reduce the shrimp and shellfish gathering zones of the shore platform they indicated that "contrary to what some have declared, the 90 meter-long jetty is not likely to spoil the view nor to endanger the environment" (INQUIRY RE-PORT, 1988). Furthermore, "it has been observed that rip-rap always create an environment favorable to the safe growth and proliferation of certain species of fish and shellfish" (INQUIRY REPORT, 1988). Here is further evidence of the head-commissioner's biased attitude in this case. One letter sent to the town-hall was very favorable to the project. The commissioner declared that "it was not to be summed up, as it was written by a technician who had carefully analysed all the elements of the case, and who knew what he was talking about. Therefore, it was a definitive refutation of all persons and pseudo-sentimental criticism of the project. The life of a country is based on facts" (Inquiry Report, 1988). Another letter was frankly unfavorable. It was not printed in the report but it was commented upon "... unfortunately, one can also read in it some objections which are technically worthless as they gainsay the results of the research carried out by an authoritative laboratory, and as they completely ignore the answers to the problem already given by the impact study" (INQUIRY REPORT, 1988). It is clear that the head-commissioner fully gave credit to the conclusion of the impact study in the name of the laboratory's reputation, and that he accepted the technician's study because it was favorable to the project. Here, the limitations of the procedure appear very clear because the headcommissioner was consistently on the side of the project designers and never tried to "enlighten" the decision-makers. He concluded by saying "what are thirteen unfavorable letters in front of the 550 applications for hiring berths in the marina, which clearly prove that the project receives public approval?" (INQUIRY REPORT, 1988). In other words, economic considerations justified the project. The head-commissioner had not even tried to base his conclusions on the impact study itself, which he deemed above all criticism since it was issued by a reputable team of researchers.

CONCLUSIONS

This article is based on one case study; therefore it must not be given universal value. However, it has brought to light a whole range of serious problems which prove that the protection of the French coastal zone is not completely satisfactory although it has been improved over the past two decades.

The Legislature was responsible for the questionable aspects of the proceedings when it compelled SOGREAH's research offices to carry out the impact study. It paved the way for many a deviation, for these offices regard the study as a constraint which they make the municipalities ultimately pay for. As they are not expert in environmental matters, they just try to disarm critics and to justify the project.

The very notion of an impact study is not beyond criticism. As the interveners must consider a document which is the complete blueprint of the project, it is the form rather than the content which is assessed. It has rightly been written that the experts should intervene earlier in the proceedings and that a second assessment should be made compulsory at various stages so that the methods used by research offices might be discussed. All this would be done with the aim of improving information gathering techniques and of getting more reliable data, but not to set experts against technicians. But this would also go against usual practices in France.

The last point concerns the public inquiry whose scope cannot but be limited. It is the reflection of the citizen's interest in the life of the city on the one hand, and the interveners' competence on the other, along with that of the head-commissioners who are supposed to listen to them. Most of them are former civil servants used to thinking and acting within the framework of an unchallenged hierarchy. Although they are badly paid for this task and they are not adequately equipped to address the problems posed by seashore manage-

ment, they feel proud of being invested with responsibilities. They certainly ought to be the first persons to receive information and explanation from experts.

ACKNOWLEDGEMENTS

A special note of appreciation is extended to Christine Frezal for her assistance in translating this manuscript.

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□ RESUMO □

Desde 1973, em França, foi produzida uma série de textos que têm progressivamente assegurado uma melhoria nas medidas a tomar para a protecção dos elementos naturais do Ambiente, no quadro do ordenamento do litoral. Esta foi a finalidade da lei de 3 de Janeiro de 1986, dita Lei Litoral. Paralelamente, outros textos regulamentares asseguram uma maior transparência nas operações do ordenamento, em particular nos estudos de impactes ambientais e nos inquéritos ao público sobre a utilidade do projecto, medidas estas que devem ser tomadas antes do desenvolvimento dos projectos.

A análise que se faz destes procedimentos, no que respeita ao projecto da marina de Saint-Hilaire de Riez, na Vendée (França), ilustra as limitações da legislação francesa sobre o Ambiente.

□ RÉSUMÉ □

En France, depuis 1973, une série de textes législatifs a progressivement assuré une meilleure prise en compte des milieux naturels dans le cadre des opérations d'aménagement sur le littoral. La loi du 3 janvier 1986 dite loi littoral en est l'aboutissement. Parallèlement, d'autres textes réglementaires ont assuré une plus grande transparence des opérations: le projet doit faire l'objet d'une étude d'impact, réflexion approfondie sur les conséquences de toute opération sur l'environnement, suivie d'une enquête d'utilité publique.

L'analyse de ces procédures à propos du projet de port de plaisance de Saint-Hilaire de Riez en Vendée en illustre toutefois les limites.