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**ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT WITH
PUBLIC PARTICIPATION**

A company's view

Master's Thesis in
Industrial Management

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ABBREVIATIONS

BAT	Best Available Technique
EA	Environmental Assessment
EC	European Commission
EPP	Environmental Permit Process
EEC	European Economic Community
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
ELY	Elinkeino-, liikenne- ja ympäristökeskus (Center for Economic Development, Transport and the Environment)
EU	European Union
IA	Impact Assessment
MoE	Ministry of the Environment
MoJ	Ministry of Justice
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
PR	Public Relations
SIA	Social Impact Assessment
SME	Small and Medium Enterprise

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ABSTRACT:

Environmental and Social Impact Assessments are implemented to examine the consequences of planned actions on the physical-chemical, biological, socio-economic, social, cultural and biophysical surroundings of individuals and communities. The Assessment process is thereby split into different stages, ending in a written Environmental Impact Statement.

Bound by legal obligations, many companies face Impact Assessments for their planned projects. However, there is a considerable lack of empirical investigations on how businesses are affected by Environmental and Social Impact Assessments. Additionally, it must be considered that these processes can have a great influence on single companies concerning the development of business or project plans or on a company's investments.

The key findings show that EIA and SIA play a significant role in the development and design of a project, not only because of legal obligations but also because of the influence of the affected public. The analysis confirms that EIA and SIA have impacts on a company's work load, strategies and project plans. Public participation is considered to be an important part in their Environmental and Social Impact Assessment processes.

KEYWORDS: Environmental Impact Assessment, Social Impact Assessment, Public Participation, Participatory EIA, Participatory SIA

1. INTRODUCTION

In today's world one can discover an increasing valuation of nature and the environment. In many ways there is more and more concern about environmental protection, nature conservation or sustainability in terms of resource or land use. Therefore, it is not very surprising that for an increasing number of projects, plans or programs Environmental Impact Assessments (EIAs), but also Social Impact Assessments (SIAs) need to be conducted.

EIAs are designed to examine environmental consequences of planned projects or other activities. Therefore, a process is started to assess in different stages the impacts of a project plan, starting from a screening phase over a scoping phase, the consideration of alternatives, followed by a row of other steps and usually ends with a written Environmental Impact Statement. During the EIA process impacts of a project on physical-chemical, biological, cultural and socio-economic components of the total environment are investigated. Consequently EIA ensures the consideration of the environment in planning and decision-making.

Although SIA can be considered being a core part of EIA, in practice often a minor role is assigned to the assessment of social, socio-economic, cultural or biophysical impacts which is the main aim of SIA. Anyhow, SIA is an important instrument to discover the impacts of planned actions on individuals, communities or depending on the case even on societies. In order to stress its importance this thesis considers and treats SIA as an equally important assessment tool.

The third major aspect which is under investigation besides EIA and SIA is public participation. Public participation is seen as a fundamental and valuable component in Impact Assessment processes. Scientific research found evidence that public involvement can positively influence a project through increasing the legitimacy of a project or quality improvements. However, in practice these assumptions often do not live up to the expectations. Therefore, this study will closely examine this matter.

1.1. Research Problem and Objectives

Inside the study field of Environmental and Social Impact Assessment a lot of research has been done about methods, techniques or assessment tools. Nevertheless, only a limited number of studies– which can be described as a research gap – explored the role of a single project proponent, which can be a business or company that faces such an Impact Assessment process.

This thesis tries to fill this gap and looks at Environmental and Social Impact Assessment processes with Public Participation through the eyes of a company. Not only how companies are affected will be investigated, but also new opportunities resulting from these Impact Assessment processes for companies shall be presented. This study thereby looks for answers for the following underlying questions:

- What are the advantages and disadvantages for a company that needs an Impact Assessment for its projects?
- How does such a process affect the decision-making of a company?

- And finally, what does public participation during an Impact Assessment mean for a company?

1.2. Research Approach and Methodology

The research approach is mainly qualitative with a few quantitative elements and was designed as a single explorative and descriptive study. Based on their wide experiences with the mentioned assessment processes and public participation a single case company was chosen for a thorough investigation. A questionnaire was developed to study the following three main areas: general aspects of EIA and SIA, the company and its role in EIA and SIA as well as the company and public participation during EIA and SIA.

1.3. Thesis Structure

The study will start from a general literature review on the three pillars: Environmental Impact Assessment, Social Impact Assessment and Public Participation. General research findings will be presented and some basic assumptions on a company's role in an assessment process will be made. Before the overall research results will be analyzed, the used methods will be described. The thesis ends with a conclusion including some practical recommendations and an outlook for future research in the field of Environmental and Social Impact Assessment.

2. ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

2.1. Introduction to Environmental and Social Impact Assessment

At the beginning of this thesis the two overarching concepts of Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) shall be presented. Being aware of the fact that there is no consistent and homogenous use of the term SIA (Vanclay 2002), this study was nevertheless developed on the basic assumption that SIA plays an important role in the coverage of social issues and therefore is embedded in every EIA process. The particular role that SIA plays hereby is going to be highlighted and explained in later chapters.

Before presenting a detailed picture of EIA and SIA and its features, we first take a look at the history and development of these two Impact Assessments¹.

2.2. The History and Development of EIA and SIA

The beginning of EIA dates back to 1969, when the National Environmental Policy Act (NEPA) was first established in the United States. NEPA is meant to protect and restore the environmental quality. It was also designed to minimize adverse environmental impacts and to preserve the environment through the use of reports and recommendations that assess environmental impacts of a proposed action, its negative effects, and alternatives as well as stating short-term use vs. long-term productivity and any irreversible or irretrievable use of

¹ Impact Assessment is simply defined as “the process of identifying the future consequences of a current or proposed action” (Becker 1997: 2) and used in this thesis to summarize both EIA and SIA.

resources. All of these points are to be included in an Environmental Impact Statement (EIS). (Glasson et al. 1999: 28-30.)

Social or also known as Socioeconomic Impact Assessment was added to the NEPA process in 1973, and was intended to evaluate significant population and growth impacts or changes in resources like land use, water, and public services in the affected area. Besides, SIA is seen as a comprehensive tool to add the natural and physical environment and the relationship of people with the environment to the EIA process. (Canter 1996: 500.)

While spreading all over the world, EIA was established in a European Directive in 1985 which influenced the spread of EIA legislation in many European countries (Glasson et al. 1999: 37). In 1985 the Directive 85/337/EEC ('EIA Directive') was first implemented in the European Economic Community (EEC) (later renamed European Union (EU)); the Directive, which is meant to guide private and public projects, was amended in 1997, in 2003 and in 2009, including among others provisions for Public Participation aligning with the Aarhus Convention, adding new screening objectives or increasing the number of projects covered (European Commission (EC) 2010).

Especially the Aarhus Convention which was signed in 2003 contains a row of important changes, among others: early information of the public in the decision-making process, indication where information can be obtained, comments and questions submitted, where and how relevant information is made available. It also stresses the careful timing of public participation including "reasonable time frames" for the information of the public as well as the preparation and participation of the public in the decision-making process.

Reasons behind a decision should be presented to the public and main mitigation measures proposed. The Convention also strengthens the possibility for the affected public to review a procedure in front of a court of law or another impartial body, whereas information on judicial procedures shall be made public. (Hartley & Wood 2005: 321-322.)

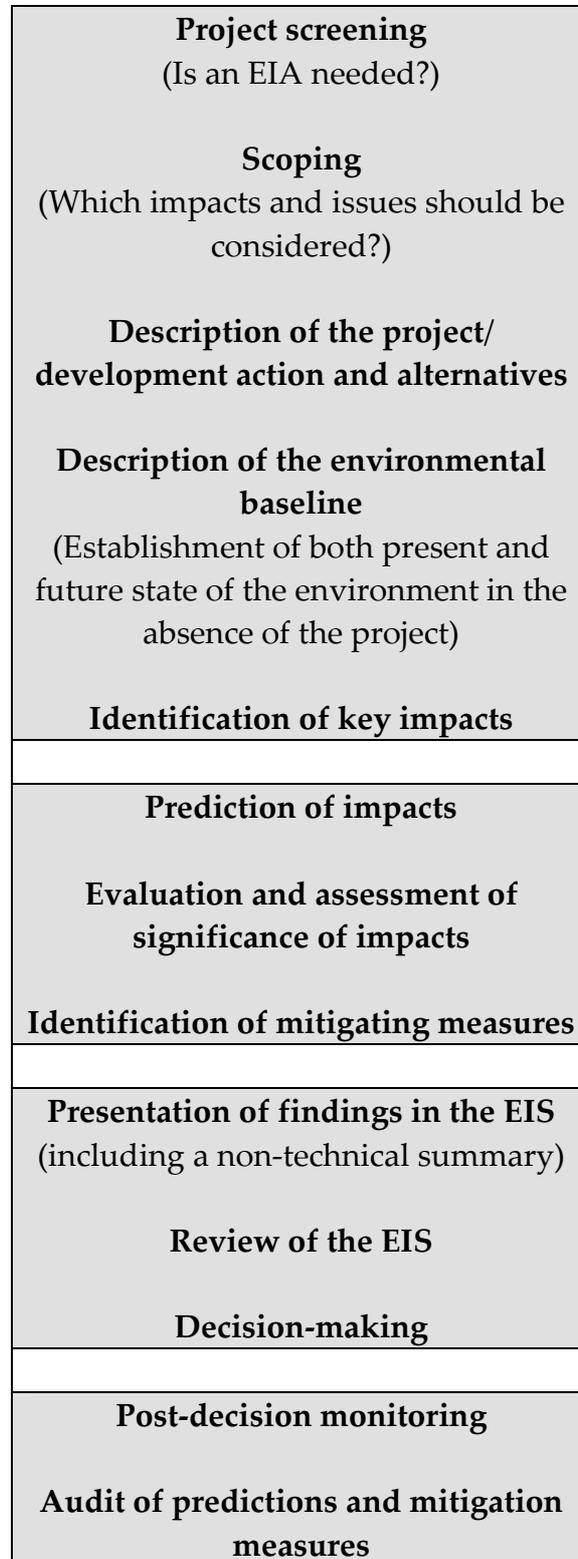
2.3. Environmental Impact Assessment

2.3.1. Definition

A great variety of different definitions and explanations of Environmental Impact Assessment exists. It can be summarized however, that EIA is mostly seen as an instrument or a process which systematically identifies and evaluates possible impacts of proposed projects, plans or programs on the physical-chemical, biological, cultural and socioeconomic elements of the overall environment. Thereby EIA is considered to be holistic and multidisciplinary (Canter 1996: 2, Jörissen & Coenen 1992).

2.3.2. EIA Process

Figure 1. EIA Process.



Source: Glasson et al. (1999: 5)

As it can be seen in Figure 1, EIA is based on a stepwise process that includes the following actions: At the beginning of every EIA process stands the project screening which limits the EIA application to those proposed actions or plans that might have major environmental impacts. Often the screening process is influenced by the existing EIA regulation in a country (Glasson et al 1999: 4). Scoping and baseline studies determine the next step, which includes the consideration of key receptors, significant impacts and project alternatives. For a first time there is communication between project proponents and the public, consultants, public agencies and interest groups (Morris & Theriviel 1995: 4). Besides, impacts need to be predicted and their significance evaluated and assessed. This is followed by a process of mitigation, where actions are undertaken to avoid, limit, abate or compensate for significant negative impacts. All findings are then presented in form of an Environmental Impact Statement (EIS), which is also reviewed to assess the EIS' quality. Under consideration of the EIS a decision is made by the relevant authority. Before the final step of auditing can be done where actual outcomes are compared with the predicted outcomes, there is a post-decision monitoring, a continuous assessment of environmental or socioeconomic aspects through a systematic collection of data over space and time (Morris & Theriviel 1995: 4-9, Glasson et al. 1999: 6).

2.4. Social Impact Assessment

2.4.1. Definition

Social Impact Assessment has many facets that derive from the fact that it is established in various research fields; however it is mostly known in the social sciences (Becker 2001). Commonly it can be considered to be an independent instrument for measuring, monitoring and analyzing social consequences of planned interventions or developments. SIA nevertheless is also known as being a core part of Environmental Impact Assessment processes (Vanclay 2003).

Besides its role as being a companion of EIA, it is an instrument par excellence to combine public involvement, a company's awareness of social and environmental factors as well as the process of finding social, economic, cultural and various other impacts a project, program or policy can have on individuals, communities or even societies (Esteves 2008; Esteves & Vanclay 2009).

In general, two broad schools of thought on the basic purpose of SIA can be distinguished: One aiming at using SIA to make predictions about social change, the other one considering SIA as a facilitator for public participation in decision-making through the incorporation of any affected party or person, documenting a community's viewpoint or establishing forums to share and debate (Craig 2009). Although both SIA features can be considered being complementary in many cases, this thesis will, above all, focus on its role and importance for public participation.

2.4.2. SIA Process

Four distinct phases in the SIA process can be distinguished: It begins with understanding issues and opportunities, which is followed by the prediction of likely impacts or contributions. The third step embraces the development of mitigation as well as the creation of strategies. The fourth and last step is all about monitoring and adaptive management (Esteves & Vanclay 2009: 142).

Burdge, Fricke, Finsterbusch, Freudenberg, Gramling, Holden, Llwellyn, Petterson, Thompson and Williams (1995: 25-32) deliver a wider and far more detailed SIA process framework including a row of different steps which in practice can overlap. At the early stage of the planning process of a proposed project affected groups, stakeholders or individuals need to be identified and public involvement should be made possible. Further, for the identification of the data which is needed to proceed in the SIA process a detailed assessment and description including alternatives by the proponent of the project is necessary. Minimum data includes thereby location and land requirements, needs of ancillary facilities, the construction schedule, size of the work force, the facility's size and shape, need for a local workforce and finally institutional resources (Burdge et al. 1995: 25-26).

This step is followed by assessing baseline conditions, which includes a detailed description of the human environment and the area of influence. It among others includes population characteristics such as e.g. unemployment, workforce, infrastructure or services; further it embraces cultural and socio-psychological conditions like e.g. trust in political and social institutions, quality of life or attitudes towards the proposed project. The assessment of the

baseline conditions takes also into account relationships with the biophysical environment, i.e. residential arrangements, ecological aspects, areas used for recreation and living, places with an aesthetic or symbolic meaning, to mention just a few aspects. (Burdge et al. 1995: 26.)

Like during the EIA process scoping ensures that all possible (social) impacts can be assessed through the use of a variety of assessment tools like public surveys or public participation methods. Thereafter, predicted conditions are set for the situation where the proposed activity is not implemented, then predictions with the considered implementation of the proposed project are taken into account and finally the difference between these two steps are compared. So, the future consequences and impacts can be simulated on the basis of if an action was or was not implemented. It is of importance to determine the significance of the assessed impacts to see how affected groups or individuals might react to these developments. Naturally, people's attitudes before the implementation can give a hint to their attitudes afterwards. However, opinions might change, fears might be reduced, but also hopes might be disappointed. (Burdge et al. 1995: 27-28).

In addition to the identification of direct impacts also indirect impacts which often occur later and cumulative consequences which result from the ongoing actions of a project or activity should be assessed during the SIA process. Before developing a mitigation plan to avoid, reduce, alter or remove negative impacts alternatives to the proposed action should be considered. This step includes not only the recommendation of new or changed actions, but also the assessment and consideration of the alternatives' consequences and impacts. (Burdge et al. 1995: 30.)

For a proper mitigation Burdge et al. (1995: 30-31) suggest a three-step-process: During a first round negative or adverse impacts shall be avoided. If this is not possible then during a second round these impacts shall be minimized. In the third round for all impacts that can neither be avoided nor minimized affected parties shall be compensated.

The whole SIA process is rounded up by the development of a monitoring program which ensures that unanticipated impacts or deviations can be discovered and it compares projected with the actual developments. As far as possible, in case of deviations the form of additional actions or plans should be clarified. (Burdge et al. 1995: 31.)

2.5. Comparison of SIA and EIA

Embedded in the EIA process SIA plays a significant role for Impact Assessments and is designed to be used in all EIA processes. It focuses on the human dimension of environments and is meant to bring winners and loser of a project into light (Vanclay 2004: 283; Glasson 1995: 21). Although less established or commonly known, it should however be self-evidently included to measure the consequences and impacts of a proposed project on individuals, communities or even societies (Becker 2001; Burdge 2003a; Burdge 2003b). Thereby SIA has much in common with EIA. Its goal is to foster a more ecological, socio-cultural, equitable biophysical, human and sustainable environment (Vanclay 2003; Vanclay 2004).

Of major importance for the SIA process are however the impacts a project has directly on the affected people, i.e. social dimensions, negative and positive social consequences or social change processes which are caused by a certain project or activity (Esteves & Vanclay 2009). That means, mostly besides social factors, cultural, demographic, economic, social-psychological and political impacts are considered (Burdge et al. 1995; Vanclay 2003; Lockie et al. 2008).

EIA nevertheless is meant to have a broad social component, but in reality often only biophysical factors are included in the assessment process. SIA on the other hand covers all social aspects and issues affecting individuals or communities. While EIA is designed to be a participatory instrument it is mostly technocratic, whereas SIA tends to support participation. Another difference lies in the data expectation determined by a scoping process, whereas EIA focuses on quantitative indicators, SIA mostly uses a qualitative way of data assessment. (Vanclay 2004.)

2.6. Participatory EIA and SIA

An important difference which is often overlooked in the research of Impact Assessments is technocratic or product oriented, in contrast of participatory or process oriented, approaches. Whereas technocratic approaches focus on objectivity and empirical data, participatory approaches include local knowledge and information collected by those that are affected by a proposed action to use this as a basis for determining impacts. (Becker et al. 2004.)

In addition, Buchan (2003: 168) states: “Participatory Impact Assessment² refers to an approach that includes interested and affected parties in deciding indicators and measures of environmental and social impacts, in evaluation of effects and monitoring.” Logically, this means public consultation and public involvement in all single stages of an assessment process, starting from problem identification and project design till the implementation and monitoring phase (Becker et al. 2004; Buchan 2003).

Esteves and Vanclay (2009) see it even as an underlying premise that impacts should be first assessed from the perspective of the people directly affected and then from the perspective of the wider public. Public participation as a central feature of SIA consequently cannot happen without the inclusion of the input of the local community. (Esteves & Vanclay 2009.)

This brings us to the next chapter which focuses on public participation and its role in the EIA and SIA process.

² This thesis uses the terms “participatory EIA and SIA” and “Environmental and Social Impact Assessment with Public Participation” synonymous.

3. PUBLIC PARTICIPATION

3.1. Definition

Public participation can be defined as an organized, continuous, two-way communication process or on a general level as a practice used by governmental agencies, private-sector organizations or companies to consult and involve members of the public in the planning, decision-making, management, monitoring and evaluation process of an Impact Assessment (Dietz & Stern 2008: 17; Rowe & Frewer 2004: 512). Thereby public understanding of processes and mechanisms is conveyed and the public is kept fully informed about a project or activity and its impacts. In addition, the public's opinions, perceptions and needs as well as their preferences regarding resource use and alternatives to a certain project is actively inquired and taken into account (Canter 1997: 587).

Within the concept of public participation, Canter (1997: 587-588) further distinguishes between information "feed-forward" and "feed-back": Whereas information feed-forward describes the process where the public officials give information to citizens, information feed-back is the reverse which means that citizens give information to the public officials about policies. However, the term public participation should always imply a two-way communication process between project proponent and affected public and vice versa, not a one sided information flow (Rowe & Frewer 2005).

3.2. Theory and Concepts behind Public Participation

3.2.1. Theory of Public Participation

“A normative model of public participation is one that expresses and defends a vision about what public participation should accomplish and in what manner” (Webler 1995: 38).

There is no single dominant model or theory of public participation in Impact Assessment. However, a row of theoretical-empirical and normative frameworks (cf. Palerm 2000; Rowe, Horlick-Jones, Walls, Poortinga & Pidgeon 2008) have been developed on the basis of the so called Webler’s model which shall therefore be presented in the following.

Using Habermas’s theory of communicative action Webler developed a theoretical model for public participation which offers practical guidelines for the assessment of public participation in environmental decision-making (Webler 1995; Palerm 2000). Webler (1995; cf. Webler, Kastenholz & Renn 1995) considers the three criteria fairness, competence and social learning as a strong basis to evaluate public participation processes: Fairness means that an individual has an equal and fair chance to defend own interests and values as well as to make a contribution to the collective will. This can refer, for example, to the determination of an agenda, or simpler, to speak or raise questions or to have an equal access to knowledge. Competence, the second criteria, is related to the performance of participants. It can be described among others as the capability of protecting own interests, having a competent understanding of concepts, terms or definitions, possessing listening and communication skills,

being able to self-reflect or build consensus. Competence in this sense generally targets the possibility of collecting and verifying knowledge (Webler 1995). Social learning, which is the third and last criterion in Webler's model concerns the way citizens become responsible democrats and thereby reaffirm democracy. According to Webler et al. (1995) this happens when people are engaged in finding mutual acceptable solutions to a project or problem that affects their community or individual lives.

3.2.2. Concepts of Public Participation

Public participation can be categorized and distinguished in different ways. The use of Arnstein's ladder however is very common in the description of public participation in Impact Assessment processes:

Figure 2. Arnstein's Ladder.

8	Citizen control	Degrees of citizen power
7	Delegated power	
6	Partnership	
5	Placation	Degrees of tokenism
4	Consultation	
3	Informing	
2	Therapy	Nonparticipation
1	Manipulation	

Source: Arnstein (1969, quoted in Canter 1996: 591)

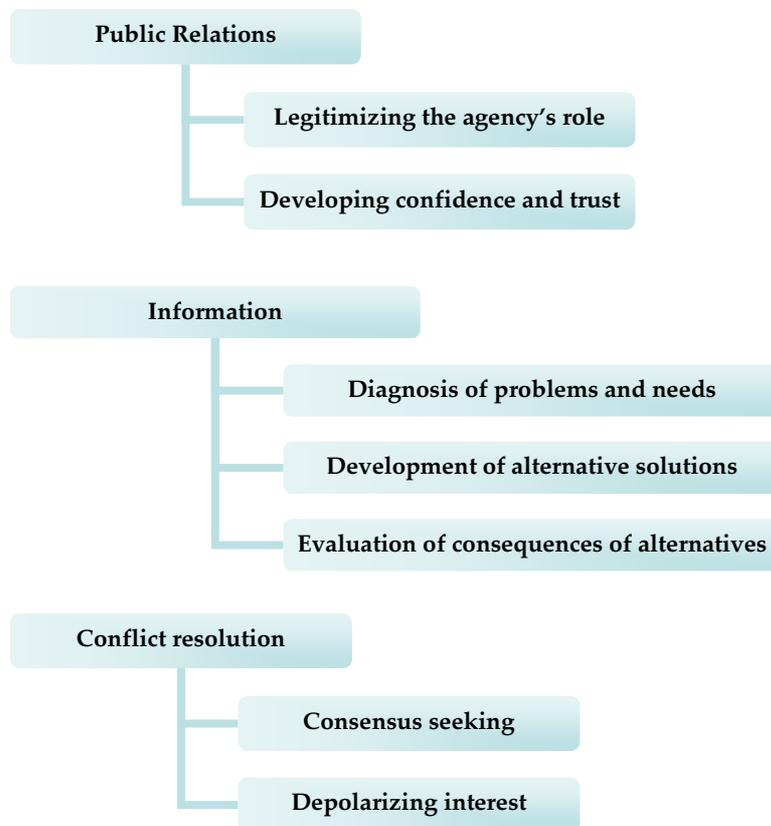
Arnstein's ladder describes all possible variations and levels of public participation starting from nonparticipation which includes manipulation and therapy, over degrees of tokenism (informing, consultation and placation) to degrees of citizen power including partnership, delegated power and ends on top of the ladder with the citizen control (Arnstein 1969, as cited in Canter 1996: 591). According to Rowe and Frewer (2000: 6) the lowest level of public involvement in a decision-making process can be described by top-down communication and a one-way flow of information, the highest level of participation can be characterized by dialogue and a two-way information exchange.

Four different levels of public participation which mirror the range of public power can be distinguished according to Westman (1985, as cited in Glasson, Therivel & Chadwick 1999: 165): information-feedback approaches, consultation, joint planning and delegated authority. Whereas information feedback implies that the public has no power in decision-making, the consultation at least gives the possibility of a two-way information transfer and limited discussion. Joint planning gives the possibility to the public to moderately influence a process, allowing for input and feedback. Delegated authority on the other side means a high extent of public power in decision-making because it includes better access to important and relevant information, gives greater control over alternatives and timing of a decision (Glasson et al. 1999: 166).

3.3. Objectives of Public Participation

According to Canter (1996:593) it is of importance to have objectives for public participation activities during the different EIA stages in order to be able to develop a comprehensive public participation plan. This can be explained by the fact, that a change of objectives during the different stages of the EIA process is possible or that some public participation techniques are more successful than others in achieving certain objectives.

Figure 3. Objectives of Public Participation.



Source: Hanchey (1981 as presented in Canter 1996, p. 593)

Figure 3 presents three main objectives of public participation, namely public relations, information and conflict resolution. All three categories are split in several second-order objectives. All these objectives are considered to be useful in the design and evaluation of public participation programs (Hanchey 1981, as cited in Canter 1996: 593).

Bishop (1975, as cited in Canter 1996: 593) on the other hand assessed six objectives for public participation and assigned these to the different phases of an EIA process. The six main objectives are:

1. Information dissemination, education, and liaison
2. Identification of problems, needs, and important values
3. Idea generation and problem solving
4. Reaction and feedback on proposals
5. Evaluation of alternatives
6. Conflict resolution by consensus

The first objective concerns the overall information and education of citizens on EISs and their purpose as well as the process of public participation. Thereby, the affected public should be also informed about the study progress, findings and potential impacts. Objective 2 means the identification of environmental matters of dispute and potential solutions which are addressed in the project study. The objective “idea generation and problem solving” addresses the development and finding of problem solutions as well as mitigation measures. Naturally, the fourth objective tests the public’s perceptions on the proposed actions and the fifth objective refers to the assessment of alternatives, and the informing of the public about the different environmental trade-offs. The final objective contains all necessary steps to resolve conflicts including mediation measures, compensations and other means to reach consensus over a proposed activity. (Canter 1996: 593-594.)

The meaning of the single objectives depicted in Table 1 can be considered self-evident. However, the Table mirrors that different stages of the assessment process require different actions. For example, whereas the information and education of affected citizens is of significance during all stages of the Impact Assessment process, resolving conflicts only applies to the stages of comparison of alternatives and decision-making. Placing the objective ‘obtaining feedback’

in all stages except during the scoping phase shows and reminds of the importance of keeping in touch with the affected public. Additionally, identifying and applying problem-solving methods is a central aim during impact evaluation, mitigation planning and the comparisons of alternatives.

Table 1. Public Involvement Objectives at various EIA Process Stages.

Objective	Stages of EIA process						
	Impact identification (scoping)	Baseline study	Impact evaluation	Mitigation planning	Comparison of alternatives	Decision making	Documentation
Inform, educate	X	X	X	X	X	X	X
Identify problems, needs, values	X	X	X	X	X		
Identify problem solving approaches			X	X	X		
Obtain feedback		X	X	X	X	X	X
Evaluate alternatives			X	X	X		
Resolve conflicts					X	X	

Source: Bishop 1975 (as presented in Canter 1996: 594)

3.4. Meaning of Public Participation

Public participation is considered to be a cornerstone of the Environmental Impact Assessment (Stewart & Sinclair 2007) and as it was mentioned earlier public participation during an EIA and SIA can be defined as an organized process in which elected officials, government agencies or private-sector organizations as well as companies engage, consult and involve the public in environmental assessment, planning, decision-making, management, monitoring and evaluation of activities that affect the respective public (Dietz & Stern 2008; Rowe & Frewer 2005).

To give an even clearer picture, Stewart & Sinclair (2007: 165) contrast on what public participation is not: “a human relations exercise that attempts to sell a predetermined solution to the public; a haphazard string of encounters with the public; a hollow attempt at transparent decision-making, where information is withheld and planning occurs behind closed doors; or a one-way communication process, where the lead organization fails to recognize that public participation is about both providing and receiving information”.

In order to clearly distinguish what public participation means and what not, three types of public engagement mechanisms shall be explained. Whereas public communication describes a process in which the policy-setting organization, which is mostly the regulatory agency, informs the public, vice versa public consultation implies that the public engages in contacting the policy-setting organization. Public participation thereby is a two-way process, i.e. a policy-setting organization and/or a private company and the public deal with each other in a mutual communication process (Rowe & Frewer 2005).

3.5. Reasons for the Implementation of Public Participation

Including public participation in the Social and Environmental Impact Assessment process is mostly based on two objectives: On one hand public participation is considered as a tool to ensure quality of an Impact Assessment decision, on the other hand public participation is meant for the creation of greater legitimacy (Dietz & Stern 2008: 43).

Some authors go even further and claim that public participation in an Impact Assessment process derives from the recognition of human rights regarding democracy and procedural justice. Public participation shall thereby reduce protest and stop the declining trust in governing bodies which may come from the implementation of unpopular policies or the conduction of unpopular actions (Rowe & Frewer 2000).

Webler et al. (1995) distinguish three reasons for the use of public participation in the EIA and SIA. First of all, a higher competence of the final decision can be mentioned. This fact is explained by the use of local knowledge and the public examination of expert knowledge. Higher legitimacy of the final outcome can be named as the second major reason since affected parties are able to present and explain their opinions and facts, which also means that all participants have equal chances to influence the outcome. Finally, it is assumed that public participation ensures a democratic process in the public decision-making activities. Besides the just mentioned objectives the authors state as a third reason social learning: conducting and taking part in a public participation exercise is considered to form responsible democratic citizens on one side and on the other side it is a means for reaffirming a democracy.

Another reason for the inclusion of the public in EIA and SIA process refers to environmental sustainability. It can be stated that the participatory EIA and SIA lead to more environmentally sensitive decisions, often triggered by environmental activists, interest groups or the local population that is interested in a more environmental friendly outcome (Spephard & Bowler 1997; Devlin & Yap 2008; Kapoor 2001).

In general, many assessment processes lost their credibility, being only a process which is driven by experts and in which the public can only react to already made decisions. Additionally, a fading confidence in neutral scientific knowledge and rationalistic planning models could be discovered. Therefore, public participation grew into a very important role of bringing back lost legitimacy and acceptance as a policy tool through adding subjective evaluation of project goals to the assessment processes (Saarikoski 2000).

3.6. Advantages and Disadvantages of Public Participation

Every assessment process is a process of interest conflict and strategic interaction between project proponents and project opponents or among multiple stakeholders who all try to influence the decision of the responsible authority (Devlin & Yap 2008). Public participation thus means to bring advantages but also disadvantages to the whole Environmental and Social Impact Assessment process. These two sides will be explained and highlighted for a better understanding of having public participation during an EIA and SIA process.

3.6.1. Advantages of Public Participation

Public participation is considered to be one possibility of ensuring that a project can meet citizens' needs and is suitable to the affected public. As mentioned above, the factor of legitimacy plays a great role of including the public, but it also can reduce hostility since affected people can actively influence a decision. Including the local knowledge and values as well as having a public evaluation of the so called expert or scientific knowledge is seen to improve the quality of the final decision (Spepherd & Bowler 1997). Additionally, public participation, properly conducted as a two-way communication process, is able to clear up misunderstandings and is one way to convey relevant information and issues, and how issues will be dealt with. It further gives the chance to identify and address controversies while a project is still in a very early phase (Glasson et al. 1999: 162).

Besides the major advantages of more trustworthiness, legitimacy and quality of decision-making for the assessment process, public participation also fosters transparency. This can be explained by the fact that information is kept available for the public and there is a designated reliable two-way communication process between project proponents and the affected public to ensure that misunderstandings, false information or other hindrances are reduced or avoided (Bond, Palerm & Haigh 2004; Kapoor 2001).

A positive result from the inclusion of the public in the decision-making process in an EIA and SIA is the "local ownership, commitment and accountability" (Kapoor 2001: 272), which means that affected citizens learn to take responsibility for the decisions or outcomes they influenced and contributed to.

Besides, citizens who participate in such an Impact Assessment become part of the whole process which provides them in turn with empowerment and accountability (Kapoor 2001).

Another apparent advantage of public participation during EIA and SIA is the potential it has on conflict reduction. Minimizing disagreement and less hostility can thereby be achieved by finding mutually acceptable solutions (Ivanova, Rolfe, Lockie & Timmer 2007; Saarikoski 2000). Early participation is considered to prevent escalation of frustration and anger. Besides, if a common agreement on a proposal can be reached, there is consequently less protest and fewer complaints which makes the overall process smoother and cheaper (Glasson et al. 1999: 162). It seems that citizens who were put off with ready made decisions, where there is no influence and real participation possible, become skeptical citizens and loose trust in project proponents (Spepherd & Bowler 2004) which can become a great burden for later projects and decisions.

Dietz & Stern (2008: 51) assume that ongoing relationships between public, agency and project proponent can build a level of mutual understanding and trust between them, which eases future engagements. Participation and cooperation between the single parties in turn can improve and deepen these ongoing relationships which then can positively affect and support other decision-making processes, assessments and implementation activities later on.

3.6.2. Disadvantages of Public Participation

In connection with the above mentioned conflict potential which is entailed in the EIA and SIA process with public participation is the fear of delay or the

force of project revisions (Spemherd & Bowler 1997: 725-726). In practical, time pressure or delay can result from demanded project (design) changes, changes of the EIS, revision of projects, legal actions from participants, or other forms of additional inputs by affected parties (Morrison-Saunders 1998: 2).

Moreover, public participation often leads to a slower and more costly assessment process (Spemherd & Bowler 1997: 725). Inaccurate information which comes from the lack of knowledge from participants and uncertainty of the process outcome are additional risk factors for project proponents besides higher project costs (Canter 1996: 588).

Lower decision quality or undesirable results at substantial costs in time, effort and funds is a further threat to a successful assessment process with public participation. Thereby not only outcomes can be of lower quality, but also the handling of scientific knowledge can be inadequate, since many citizens do not have the understanding for scientific matters or estimations. Public participation is not prone to avoid unfair and inequitable decisions, often the most active citizens influence a process, but this does not mean all affected people have the same opinion on a certain matter. Simply because they are inactive or demand less influence the overall outcome might be biased. (Dietz & Stern 2008, Glasson et al. 1999: 161)

Another disadvantage that can arise from including the public in an assessment process is that a good relationship between project proponent and an agency or planning authority unsettles. Besides, a project might be considered more important than it actually is. Public participation might give a plan a higher importance which implies higher costs in time and money. If the public is

contacted late in the process, e.g. at the stage of planning appeals or inquiries, there is the risk that public participation has already turned into a measure to bring a project to a halt. (Glasson et al. 1999: 161.)

3.7. Methods of Public Participation

“The way a public participation process is conducted can have more influence on overall success than the type of issue, the level of government involved, or even the quality of preexisting relationships among the parties.” (Dietz & Stern 2008: 95)

There is an endless list of methods of public participation. Studying all these methods and describing all of them is beyond the scope of this study. However, some methods being considered the most common, most effective and most promising will be presented in the following section. According to Rowe and Frewer (2000) there is no one acceptable, universally useable method for all public participation procedures.

One of the most popular public participation methods are public hearings or inquiries. These procedures usually include a presentation, often by a governmental agency or the project proponent, about a planned project where the interested parties can give their opinions. For more intimate contacts with the public, sometimes small group meetings or so called focus groups are arranged in which the affected public or interest groups send their representatives to conduct a less formal discussion on a planned project, without an input from a facilitator. Besides surveys or referenda, local planning visits or field and site visits can be organized to include the public in the

decision-making process. Whereas local planning visits are meant to increase the understanding and cooperation between agencies, project proponents, interest groups or individuals, field trips are designed to deliver an accurate, in-real, practical picture of the planned implementation of a plan or project to all affected parties. Similar results of public participation might be achieved through public displays or model demonstrations where all necessary information of a project is presented to the interested public. A last, very promising method of public participation is seen in so called workshops: although it affords a high degree of preparation which might include various types of brochures, planning visits, media coverage, direct contact of the affected parties, it can provide a solid mix of the advantages of some of the above presented methods and actively aims to reach a convenient solution or consensus for all affected parties. (Rowe & Frewer 2000: 8-9; Canter 1996: 607-608.)

3.8. Meaningful Participation for Successful Decision-Making

While reading through the preceding sections, it might have become already clear that not any way of public participation is good, but in any case it matters how public participation is handled. Some authors therefore refer to what they call “meaningful” public participation (Stewart & Sinclair 2007; Palerm 2000) or “Best-Practice Public Participation” (Glasson et al. 1999). This part shall summarize major findings on effective public participation and thereby give recommendations for the practice of public participation.

What has been mentioned earlier and many practitioners and researchers frequently emphasize on is the importance of early involvement of the affected public or parties in the Impact Assessment process. It is a central point to remember that the communication with affected citizens should start as early as during the project proponent's planning phase, i.e. when no final strategies on a project are adopted or detailed plans on a project are decided (Bond, Palerm & Haigh 2004; Rowe & Frewer 2000; Stewart & Sinclair 2007; Ivanova et al. 2007).

In a study conducted by Stewart & Sinclair (2007), the interviewees who consisted of academics, civil servants, members of NGOs and the industry considered the following points as means for meaningful public participation:

- Integrity and accountability
(Transparency, sincerity of the lead agency, clear process intention, feedback to participants)
- Influence
(Fair chance of participation and influence on decision-making)
- Fair notice and time
(Adequate notice and fair timelines which allow participation)
- Inclusiveness and adequate representation
(Identification of potentially affected citizens to ensure fair involvement)
- Fair and open dialogue
(Two-way flow of information, fair discussion and debate)
- Multiple and appropriate methods
(Multiple participation methods and techniques, appropriate program design)
- Informed participation
(Enough information to be able to effectively debate issues)

- Adequate and accessible information
(Quality and access of information, explanations and interpretation of information if needed)

Some amendments to this list can be found in Palerm (2000): It is not only important that the affected public is identified, but also that this is followed by an active notification and inclusion of these citizens. Thereby, best-practice participation also means the provision of an appropriate venue for meetings with the public. Palerm further demands special meetings for the scoping phase in which all parties have an equal standing, additionally a neutral party and independent experts should be present for resolving possible conflicts. Finally, the written EIS should include a non-technical summary for an easier understanding and contain all information on how public claims were considered or even included into a decision.

In any case, all involved parties should keep in mind that public participation is not an end in itself, but a means to an end (Rowe & Frewer 2000). One reason for this kind of problem with public participation in EIA and SIA is the focus on process and access, rather than on the outcomes (Doelle & Sinclair 2006).

3.9. Empirical Evidence of Positive Effects of Public Participation

Most of the literature and studies on public participation seem to be in favor of the advantages and positive sides of public participation. According to Dietz and Stern (2008: 75) what they call “pro-participation bias” can be explained by the fact that many researchers conduct studies about participatory processes

since they are convinced by their positive outcomes and are more critical about negative findings. Both authors looked into this matter and collected empirical studies that eventually proved the positive effects of public participation in Impact Assessment processes.

Public participation is mostly considered, which also has been discussed in earlier sections of this thesis (cf. Advantages of Public Participation and Reasons for the Implementation of Public Participation), to enhance legitimacy, quality and the learning capacity of EIA and SIA processes. Dietz and Stern (2008: 77) mention findings of a study that indicates if involved citizens know that a decision in an Impact Assessment process results from public participation, it is more likely that a decision will be accepted. This is an example of legitimacy. Increasing learning capacity from participation was found among others in studies by Fishkin (2006). Through learning and gaining more information people were able to change their opinions on the issues and showed greater motivation to participate. It could also be proven that there is no such thing as “group think”, which means that individuals take over a dominant opinion. Deliberation led to the consideration of more factors and decreased personal bias and prejudice which consequently improved the quality of decision-making (Dietz & Stern 2008: 78).

3.10. Conflict Resolution and Mediation

Although conflicts and disputes are relatively common in EIAs and SIAs, and a great variety of recommendations exist to prevent them, it seems that there is far less literature on practical solutions on how to solve these issues. However,

existing literature in the field of Impact Assessment suggests a few techniques for conflict management and dispute resolution. According to Canter (1996: 609) traditional approaches for the management of conflicts are the use of litigation (court decision), legislation and/or regulation, administrative procedures, and arbitration (decision without court) as well as mediation or negotiation between conflicting parties. However the single procedure is named, the underlying technique can be called “collaborative problem solving” and is based on a voluntary, face-to-face interaction of the disputed parties and aims to reach consensus among the different parties. Thereby, a mediator often functions as a neutral third-party or facilitator. The law usually provides the possibility of a legal inquiry which is not very appealing for any party since it is very time consuming and expensive (Inkinen 2009). Therefore, a conflict arising from the EIA and SIA process should be solved before the point only a court can bring a final decision.

3.11. Governmental Agencies in a Public Participation Process

Governmental agencies play an important role in the EIA and SIA process, for example they determine the need for the conduction of an Impact Assessment beforehand or they can demand changes and adaption of project plans or scope; governmental agencies are further heavily involved in public participation programs.

Based on the principles of program management which shall be explained below governmental agencies are supposed to “engage in public participation processes with clarity of purpose, commitment, adequate resources,

appropriate timing, an implementation focus, and a commitment to learning”, otherwise they risk the failure of public participation processes (Dietz & Stern 2008: 96).

Clarity of purpose is one of the most important aspects concerning the role of a governmental agency involved in public participation processes. It refers to the engagement of an agency as leader, partner or stakeholder. In any case, the role of the agency should be clear as well as the assigned goals. Besides, there is a need to define legally possible actions and constraints for all affected parties. Additionally, the agency should have a plan of how outcomes from the participation processes will be used. Often, there is an increasing skepticism among participants if it is unclear to them how far they can actually contribute to an Impact Assessment process. It is therefore the agency’s main task to reveal what is the agency’s purpose and tasks and which role public participation plays in it. (Dietz & Stern 2008: 96-99.)

Agency commitment, adequate resources and appropriate timing can be described in a few words. Comparable to “clarity of purpose” the commitment of an agency means an agency is actively supporting a process and taking its results seriously. This also refers to the involved staff: there should be e.g. not much regional difference in the enthusiasm or skills or their position in an agency (Dietz & Stern 2008: 99). According to Dietz and Stern (2008: 101) successful public participation processes further demand an adequate funding, capacity and resources. The timing of the public participation process matters since a too early involvement is as destructive as a too late involvement. While in the former case key information might be missing, the latter may not allow for an adequate development of trust and understanding of the process or it is

even too late for participants to have a fair influence on the process. Therefore, the agency must be very careful with the timing of public participation processes, otherwise it might be even harmful to their own respectability.

The next principle “focus on implementation” again stresses the role of the agency to make clear what they can implement and what not. In this way the public’s understanding of the agency can be raised which enhances the chances for a successful public participation process. The commitment to learning finally refers to an agency’s self-assessment and design correction, which can happen even during the course of a public participation process or at its end. This step allows for improvements for future processes and contributes to the aspect of learning. Learning thereby can be improved through independent evaluations. (Dietz & Stern 2008: 105-106.)

4. PROJECT PROPONENTS AND PARTICIPATORY EIA AND SIA

Some information on obstacles and benefits for companies might have already been depicted in the preceding parts of this study. However, the following section tries to especially look into the project proponent's issues mirroring the general scientific literature on the impacts of Environmental and Social Impact Assessments on private companies. The most important aspects shall be presented and discussed.

4.1. Project Proponents and Impact Assessments

The literature generally lacks profound research on how companies are influenced and affected by EIAs and SIAs and therefore, only a very few insights can be delivered. However, the literature that deals with the effects of Impact Assessment on project proponents basically presents a two-sided sword, one side that brings an additional burden to proponents in the process of implementing projects and the other side which mirrors EIA and SIA as a beneficial and in many ways advantageous tool (Annandale & Talpin 2003; Pölonen et al. 2011; Esteves & Vanclay 2009; Stewart & Sinclair 2007; Speptherd & Bowler 1997). In the following the main arguments of both sides will be presented.

Environmental and Social Impact Assessments can work as a catalyst for companies in the way that they provide the opportunity to integrate environmental design into the early planning phase of a project. Furthermore, the whole process of environmental approvals is considered to be an important

determinant of a proponent's investment strategy (Annandale & Talpin 2003: 381). One explanation for this can be found by Esteves (2008) who explains that any Impact Assessment can have a considerable influence on a company not only as a project planning tool but also as an instrument for the integration of sustainability into core business strategies and for the assistance in forming collaborations between companies and communities as well as governmental agencies. According to Esteves and Vanclay's investigations (2009) companies agree to the point that long-term success for them comes from the ability of aligning their own interests with the communities' interests where they want to operate in. Additionally, a company's success depends on its ability of forming a "mature and respectful partnership" (Esteves & Vanclay 2009: 139). In this respect, EIAs and SIAs can be an instrument for project proponents to gather and maintain support among involved parties or respectively to legitimate the planning and decision-making process (Pölonen et al. 2011).

EIA and SIA are also known as being a "one time site-specific 'get-the-project-approved' statement rather than a life-cycle holistic assessment of impacts" which means that a company disregards a better planning process possibility and project decision as well as the chance of taking advantage of public input (Spephard & Bowler 1997: 727). Consequently, companies often regard EIA and SIA as a necessity to be fulfilled to be able to implement a project or plan (Esteves and Vanclay 2009: 137; Esteves 2008). Annandale and Taplin (2003) summarize bluntly that for a varying number of companies EIA and SIA simply mean an impediment.

The scientific literature however gives right to project proponents that consider these Impact Assessments an obstacle to their business. Palmer et al. (1995)

found evidence that environmental regulation in general which naturally includes EIA and SIA mean increasing costs which result in reduced profits for a high number of firms. Although some scientists claim that environmental regulation comes for free (e.g. Porter & Linde 1995), the increasing social benefits are not outweighed by the cost of regulations, for example the costs of an EIS can vary between 0.000025 and 5 percent of the project costs (Glasson et al. 1999: 239; Palmer et al. 1995).

Additionally, it is not evident in all cases that EIA and SIA including a statement report have a direct influence on sustainable or improved decision-making (Glasson et al. 1999: 237). According to Cashmore et al. (2004) an Environmental Assessment actually plays only a limited role in project appraisal and design decisions.

4.2. Project Proponents and Public Participation

Apparently public participation during the Impact Assessment for a company means not only an additional hurdle but also a lot more complexity and difficulties. Inkinen (2009) collected the most obvious threats for project proponents which range from lost investments, higher application costs over delayed projects till financial risks through judicial review. Other troubles arise from the threat of litigation and legal obligations as well as the revision of projects (Pölonen et al. 2011: 125).

For many project proponents, public participation is considered unnecessary because of the people's lack of project-specific expertise or they only consider

public participation as an instrument to inform citizens about certain aspects of a planned project. While a company might aim to push a project through or tries to avoid a public process, a project proponent risks losing trustworthiness and accountability. Thereby citizens tend to become skeptical and more often engage in legal actions (Spepherd & Bowler 1997: 726).

Although the variety of possible risks or threats for a project proponent is great, many studies refer to various opportunities and chances that are actually possible with or despite public involvement aside the general advantages of public participation. When considering the risks of including or avoiding public input, a project proponent should always consider the potential benefit of fostering a long-term co-operative relationship with the affected citizens through accepting public input (Spephard & Bowler 1997). This can even develop into a corporate-community partnership to build community support, strengthen the company brand and reputation and also gaining access to local opinion leaders and decision-makers. Thereby, value for business can be created and a better investment performance achieved (Esteves & Barclay 2011).

5. IMPACT ASSESSMENT IN FINLAND

Since the case company operates in Finland and Environmental and Social Impact Assessments can vary greatly from country to country and are determined by legal settings which provide not only the legal framework but also mean legal obligations, this study incorporated the Finnish Environmental Law. The following chapter therefore introduces the Finnish legal framework on Impact Assessments³ and presents some empirical findings on Finnish Assessment processes.

5.1. Legal Background

“The aim of this Act is to further the assessment of environmental impact and consistent consideration of this impact in planning and decision-making, and at the same time to increase the information available to citizens and their opportunities to participate.” (Section 1 of Act on Environmental Impact Assessment Procedure, MoE n.y.)

The EIA Act (Act on Environmental Impact Assessment Procedure) of the year 1994 is the implementation of the EIA Directive and Espoo Convention into Finnish Law. The act was revised twice in 1999 and 2006. The Decree on Environmental Impact Assessment (EIA Decree 713/2006) was thereby established as a complementation to the EIA Act (Pölönen et al. 2011: 121, Ministry of the Environment (MoE) (2010)). Additionally, also public

³ The term Impact Assessment is not only used to summarize EIA and SIA here, but refers to the Finnish legal context and therefore also includes Environmental Assessment and Environmental Permit Processes.

participation in referral to the Aarhus Convention and the EIA Directive 2003/4/EC has been incorporated into Finnish Law. Thereby, it is stated: “The goals of increasing citizens' opportunities to participate and influence decisions, and ensuring that information is widely available to citizens, are among the key objectives behind the legislation drafted by the Ministry of the Environment” (MoE 2008).

In more detail practical matters concerning the EIA in Finland are written down in “Guidelines for the environmental assessment of plans, programs, and policies in Finland”. A major aspect is the fact that the assessment of environmental impacts is an integral part of planning and decision-making. Explicitly, it is stated that EIA in Finland promotes participatory planning by the public, NGOs and authorities to gather a broad range of different opinions in the early stages of drafting plans, programs and policies. Therefore, the EIA which hence includes SIA refers to all social, public, environmental, cultural, biological conditions and others aspects concerning e.g. living conditions, human health, community structures, landscape or the utilization of natural resources. (MoE 1999.)

All governmental agencies, municipalities as well as all regional councils are bound by these guidelines in Finland, whereas the Ministry of the Environment is responsible for steering, monitoring and developing the implementation of these guidelines. The Finnish Environment Institute and the Regional Environment Centers thereby provide assistance in planning the EIA of plans, programs and policies (MoE 1999). The need of an EIA is decided by the Regional Environment Centers (Pölönen et al. 2011).

As stated in the legislative drafting for the Finnish EIA process, SIA cannot always be differentiated from an Economic or Environmental Impact Assessment. Social impacts are assessed from the point of view of individuals, human interrelationships influencing political decisions and therefore are able to affect the functioning of a democratic society (MoJ 2008: 34-36). For example, in Section 2 of the Finnish EIA Act (MoE n.y.) it is defined that environmental impacts on e.g. human health, living conditions or community structure are assessed which basically can be considered as a form of Social Impact Assessment.

Besides the EIA there are various other permits and registration schemes: Environmental Permits, Land Use, Building Act and the Nature Conversation Act (MoE 2009). Due to the limited scope of this thesis only the Finnish legislation on EIA and Environmental Permits are investigated.

5.2. EIA and Environmental Permits: Legal Obligations for Businesses

“Businesses operating in Finland are legally obliged to be sufficiently aware of the environmental impacts and risks of their activities - and of opportunities to reduce these impacts and risks.” (MoE 2011a)

According to the above mentioned statement, all businesses operating in Finland are bound by the terms of the Environmental Protection Act (86/2000). EIAs must be conducted if an activity or project is planned that falls in a category listed in Section 6 of Finland’s EIA Decree (268/1999). In any case, four principles apply:

- Prevention of harmful environmental impacts beforehand or minimization of impacts (Prevention and minimization of harmful impacts principle)
- Conduction of activities with due diligence and care to prevent harmful impacts (Precautionary and due diligence principle)
- Best Available Technique (BAT principle)
- Purposeful and cost-effective combination of measures (Best environmental practice principle)

The Polluter Pays Principle ensures that any party is responsible for its activity and legally obliged to “prevent, minimize, correct and compensate for any harmful environmental impacts”. Regional environmental centers and municipalities’ environmental officers supervise the activities within the field of environmental impacts (MoE 2009). All costs concerning the EIA process including costs for environmental impact investigations, hearings or other public measures must be borne by the project applicant. Additionally, they must also pay a statutory fee to the respective ELY center (Elinkeino-, liikenne- ja ympäristökeskus, in English: Centre for Economic Development, Transport and the Environment) to cover all the administrative costs of the official statements for EIA programs and EIA reports (MoE 2011b).

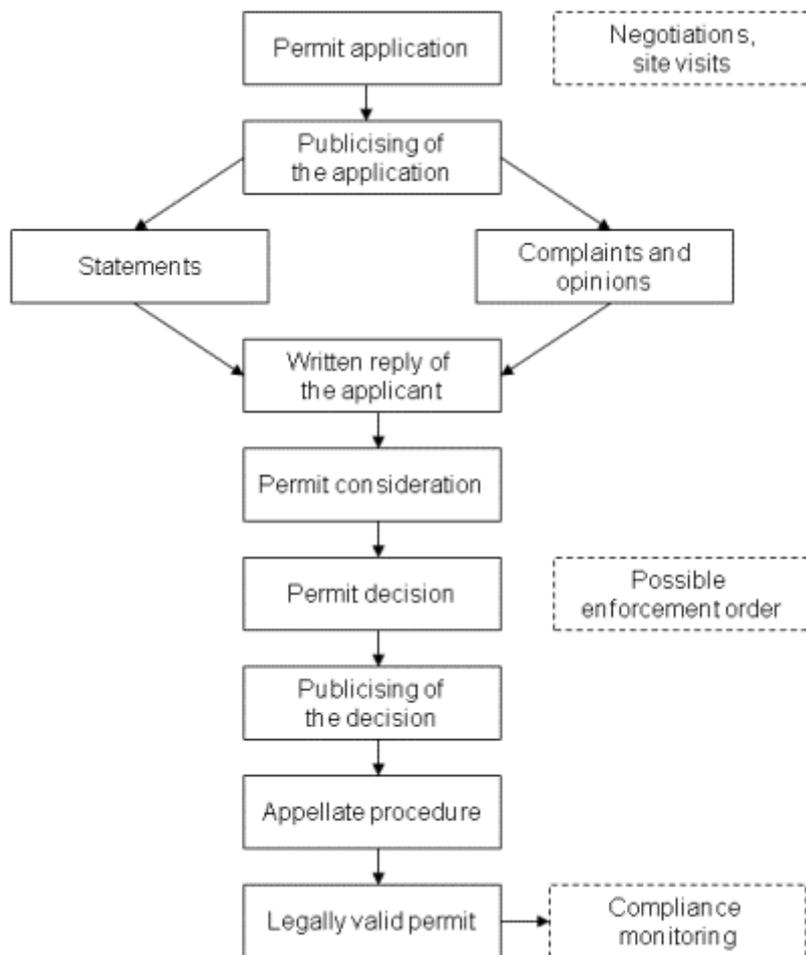
5.3. The Environmental Permit Process

Environmental Permits are designed to control and cover all sorts of possibly harmful activities or other negative environmental impacts (MoE 2011c). Projects or activities that contain a risk of pollution therefore need to go

through an Environmental Permit process. Section 28 of the Environmental Protection Act specifies where Environmental Permits are needed. Section 1 of the Environmental Protection Decree lists all activities in the respective business sector that require these permits (MoE 2009). According to the Finnish EIA legislation fees for Environmental Permits are borne by the EIA applicant (MoE 2011b).

Regional state administrative agencies and municipal environmental protection authorities give out or are responsible respectively for issuing Environmental Permits on one hand, on the other hand ELY centers and municipal protection authorities function as control authorities which include the supervision of Environmental Permits. Furthermore, it is written down in the Act on Environmental Impact Assessment Procedures that ELY centers work as contact authorities in assessment matters. (ELY 2010.)

Figure 4. The Finnish Environmental Permit Process.



Source: ELY 2011

5.4. EIA and EPP in Finland – Empirical Findings

Inkinen (2009) – in his study “Public Participation in environmental permit process at regional” – presents some very interesting points about the Impact Assessment process in Finland. He interviewed permit authorities, permit applicants and participants about their roles and experiences. He reached the conclusion that the law is the key determinant of the whole process since it determines the techniques used and sets requirements for participation. Although participation is regulated it is individually decided by a permit

officer, which has been criticized by many permit applicants. They demand a standardized process instead of a process that is dealt differently from different authorities. Additionally, affected businesses also pointed out that some regional authorities demand more, some far less information from them. The further study revealed that the communication is strongest between applicant and authority, which can have a negative impact on public participation. However, companies in many cases are more active in the public participation process than agencies. Nevertheless, permit applicants often face unnecessary costs because of participation, financial risks through judicial reviews and considered the possibility of participants to request extra information as greatest burdens. Participants on the other side were mainly affected by the cost of lawyers and the need of experts.

The authors of the research project "Effectiveness of Environmental Impact Assessment" Pölonen, Hokkanen and Jalava (2011) come to the conclusion that the Finnish Impact Assessment system is in general in a good shape but contains some minor shortcomings. EIA plays a major role in environmental decision-making, providing a wide knowledge base and encourages to public participation. Therefore, the assessment processes which on average take 14 month ensure a high-quality of decision-making. The researcher also point to its influence on project designs, opinions and valuations of the various stakeholders. However, the quality of the Finnish EIA significantly depends on the governmental agency or authority- a point that was already made by Inkinen (2009). Besides, there is no comprehensive use of EIA results in the decision-making process, which is considered a major obstacle in the EIA process in Finland. A clear strength of the Finnish system on the other hand is the possibility of authorities to specialize in certain EIA issues. Finally, the

authors remark that EU and Finnish legislation provide a solid framework for Impact Assessments. (Pölönen et al. 2011: 127.)

5.5. Public Participation in the Environmental Permit Process in Finland

Permit thresholds and responsibilities for the permit applicant are determined by law. These and also how public participation looks like in the permit application process can vary from permit authority to permit authority which can use the law's flexibility to interpret matters differently (Inkinen 2009: 19).

Whereas the permit authority is the main informant of the public, the more active party in dealing with the public is mostly the project applicant. Especially larger organizations try to foster an open relationship with local inhabitants through public meetings or other informational events (Inkinen 2009: 20). The law provides two possibilities of public participation during the Environmental Permit Process: On one hand interest groups or individuals can participate before the permit decision is made, in form of an administrative way through written comments, statements or complaints. That means participants have direct influence before a decision is reached and can affect the decision-making process. The second form of participation can be done through judicial review after a permit decision has been made (Inkinen 2009: 30).

Although the just described opportunities of participation might appear as sufficient a variety of loopholes for both sides – the permit applicant and participants – can be found: Inkinen (2009: 47, 48) comes to the conclusion that public participation in general is limited and mostly not more than a

compromise between the affected parties can be achieved. Thereby, the possibility for participants to resubmit comments to demand another response by the applicant is seen as an abuse by project applicants but an exercise of right by authorities (Inkinen 2009: 21). During a judicial review, courts can then either modify permits to the permit applicant's advantage, or to the advantage of the affected public: "Permit applicants typically request permit conditions to be relaxed, whereas private litigants, NGOs and other parties want permit conditions to be tightened" (Inkinen 2009: 42).

6. METHODOLOGY

6.1. Research Design and Research Questions

This study is designed to bring light to an often disregarded part of research in the field of Environmental and Social Impact Assessments with Public Participation: What does it mean for a company to have Impact Assessments for its projects? What advantages and disadvantages for a company are connected with EIA and SIA? How does an assessment process affect the decision-making of a company? And finally, what does public participation during an Impact Assessment mean for a company? In order to find out more about these issues, one company with a variety of experiences with these assessment procedures including public participation has been chosen for an in-depth investigation.

The research strategy can further be described as being not only descriptive but also explorative in nature. Explorative studies on one hand are meant to examine a new area to later develop precise questions for further research, descriptive studies on the other hand deal with a known and well-defined subject and use a study to give an accurate description and then receive a detailed picture of a certain topic (Neuman 2007: 16).

Since there is a lack of research and studies on how companies are affected by Impact Assessment processes, this study can be seen as rather explorative in nature. However, since concepts of Environmental and Social Impact Assessment as well as formal processes like the permit processes are legally established and practically applied tools and the theory and structure of Impact

Assessments are well known, quite a few assumptions can be drawn from former and somehow related studies in this area, which gives the researcher of this study the possibility of describing events and ongoing developments specifically affecting the chosen case company and comparing these with assumptions made in other studies in the field of Environmental and Social Impact Assessments. It can be summarized therefore that this study is based on a mix of an explorative and descriptive study design.

6.2. Research Approach and Data Collection

The research methodology used for this study was based on a mostly qualitative and inductive research design with a small quantitative part. The data collection was done through a mail questionnaire to analyze a single case company's experience in the field of EIA and SIA as well as public participation. Therefore, the questionnaire was distributed among the company's employees who work in different business areas, but who have all been actively involved in different assessment processes. With the use of a questionnaire biased answers resulting from the presence of an interviewer could be avoided. Ahead of the data collection there was a face-to-face interview with one company representative in which the company's experience with Impact Assessments and public participation was explored for a first time, details about the content of the study were discussed and further proceedings were set up.

The questionnaire was split into the following three sections:

- 1) General Questions on Environmental and Social Impact Assessments

- 2) The Department/Company and its Role in the Environmental and Social Impact Assessments
- 3) The Department/Company and Public Participation during the Environmental and Social Impact Assessments

Further, open questions were used in the questionnaire which can be found in total at the end of this thesis. Open questions were chosen for this study since a variety of advantages can be gained from them. First, they offer a good possibility for the respondent to clearly state own ideas and information. Additionally, unexpected findings might be discovered. Second, complex issues can be easier dealt with. Respondents can use their own knowledge, creativity, self-expression to present information. Third, an unlimited number of possible answers can be found which enriches the content of the study and finally, open questions reveal a respondent's interpretation on certain issues. That way, misinterpretation or unfeasible, simplistic answers can be avoided (Neuman 2007: 178).

6.3. Theory Development and Theoretical Assumptions

As mentioned above this study used a rather inductive study approach which can be also termed as a qualitative hypothesis-generating research approach (Auerbach & Silverstein 2003). An inductive approach implies that the theory is developed during the data collection process, while at the beginning just a few assumptions can be made (Neuman 2007: 35, 50, 90).

The following underlying research questions were posed:

- 1) How is a company affected by the assessment of environmental and social impacts of their proposed projects? What advantages and disadvantages arise from Impact Assessments for a company?
- 2) How do EIA and SIA affect the company's decision-making?
- 3) And what does public participation during an assessment process mean for a company?

6.4. Validity and Reliability

Whereas validity means “how well an idea about reality ‘fits’ with actual reality” and can be described as a “bridge between a construct and the data”, reliability in the context of research refers to the dependability and consistency of study outcomes which means that the same findings and conclusions can be achieved if another researcher follows the same procedures of an earlier study and conducts the same study all over again (Neuman 2007: 115,120; Yin 1994)

To ensure that this study meets the mentioned criteria, underlying assumptions of validity and reliability are explained and followed by a short description on how they were implemented.

6.4.1. Construct Validity

Construct validity, according to Yin (1994), can be achieved with three tactics: Besides having several sources of evidence, it is important to create a chain of evidence which can be done with using different forms of information (e.g.

documentation, records, observation etc.) and finally to allow key informants to review the draft study report.

This study tried to meet the prevalent validity criteria the following way: While conducting this study several sources of evidence, employees were asked to fill in the study's questionnaire and deliver their personal and individual answers. In order to meet the chain-of-evidence-criteria different source were used: one personal interview, documents and a questionnaire.

6.4.2. Internal Validity

Internal validity focuses on the question if event x led to event y, therefore it is mainly concerned about making inferences (Yin 1994). However, it also means that there are no errors internal to the design of a study, excluding that alternative explanations could be used to explain a certain event or errors were leading to false interpretations (Neuman 2007). However, this study does not account for internal validity since this form of validity is mainly necessary for experimental research which does not apply to this thesis.

6.4.3. External Validity

External validity further deals with the generalizability of a study's findings, i.e. if the results of one study can be applied in other cases as well. The test of external validity is only possible when a theory developed in a first study and its findings are tested through replications in later studies (Yin 1994). "High external validity [therefore] means that the results can be generalized to many situations and many groups of people [or in this case many companies]. Low

external validity means that results apply only to a very specific setting” (Neuman 2007: 121).

However, since this is a single study at a single point of time securing external validity in this study is not completely possible. However, the made premises and underlying assumptions which were used for conducting this study are kept open to provide a transparent and solid basis for further investigations of the subject of companies facing Environmental and Social Impact Assessments with public participation.

6.4.4. Reliability

Reliability which means consistency or dependability can be assured with the documentation of procedures, which allows that the same steps can be easily repeated in later studies. Using several data sources and applying various measurement methods can thereby ensure that the reliability criterion is met (Neuman 2007, Yin 1994). This study tries to make all relevant material public, including the questionnaire used for the data collection which can be found attached at the end of this thesis.

6.5. Data Analysis

“All data analysis is based on comparison.” (Neuman 2007: 328). Based on this premise the collected data was compared and assigned to different categories. Since qualitative data analysis is less standardized than its quantitative equivalent, answers from the questionnaire were collected and compared with

the assumptions this study is based on. This step could be summarized under the term “Illustrative Method”, i.e. evidence is gathered and compared with preexisting theory, which in turn can be confirmed or rejected by the collected evidence (Neuman 2007: 335). This way all available information was collected, summarized and matched with the prevalent scientific research in the field of Impact Assessments.

The study’s results were further analyzed in an inductive way. Inductive means that at the beginning there is the collection of empirical data which is then followed by the creation of abstract ideas, whereas ideas are related to the gathered data (Neuman 2007). This method is quite different from the deductive approach which is mainly used in quantitative research where the abstract idea or hypothesis is tested with the help of empirical data. However, this study tried to develop or confirm existing theories depending on the fact how well they were developed and investigated already. Results of this analysis are presented in the following chapters.

7. CASE COMPANY

7.1. Description

The company in which the present study was conducted on operates in the energy sector and consists of four departments with a total of 24 employees that work in different business areas. All areas are located in the field of energy production. In 2010 a turnover of 188.4 million Euros was achieved. Not only the turnover has increased over the last years, the case company also shows a growing number of investments which could be even doubled in 2010 compared to 2009. The company also significantly increased its human resources during that time.

The reason for selecting this particular company for further study in this Master's Thesis is its profound experience in Environmental and Social Impact Assessments. As an SME it can represent a substantial part of companies that deal with these kinds of assessment processes. Additionally, the case company is familiar with public participation during its projects and project assessments. Thereby, the company cannot only provide important knowledge about former and current assessment processes, but also has the ability to help other companies in the same situation with its experiences. It is out of question that the collection of knowledge about a company's experience with EIA and SIA is of importance to science which generally lacks the practical view point of companies facing these assessment processes.

7.2. Introduction to the Case Company's Current Practices

Depending on the kind of project, the case company faces different or no Impact Assessment processes. Impact Assessments can be split into the following three categories: Environmental Assessment (less comprehensive form of EIA), EIA and Environmental Permit Process (all including SIA). Of course, a variety of other types might be needed (e.g. land use or building permits), but are due to the limited scope of this study disregarded. If any or which kind of assessment is needed is determined by law and usually ELY centers make the decision upon (cf. Impact Assessment in Finland).

Most of the activities connected with the conduction of an EA, EIA or EP process are outsourced. The case company works together with the respective governmental agency, consultancies and other professionals. For example, experts like biologists or geologists are instructed to investigate possible impacts of a proposed project. While the case company coordinates the process and informs involved parties including agencies and the public, a consultancy is assigned for the development of EISs. Nevertheless, the company is responsible for the overall assessment process.

Before the general public is contacted the case company gets in touch with the local ELY center. According to Finnish Law ELY centers decide if an Impact Assessment is required and if this is the case, also determine which form of Impact Assessment is needed for a proposed action. Land owners that might be affected by a proposed action are further contacted and informed about the company's plans.

8. ANALYSIS OF RESEARCH FINDINGS AND DISCUSSION

“Last year, the issues of the Act on Environmental Impact Assessment Procedure were charted for several projects. The licensing processes [...] often take time, since it is complicated to combine many different interests” (Abstract from the Case Company’s Annual Report 2010).

In this chapter the study’s findings concerning the knowledge and experiences with Impact Assessments of the case company will be analyzed. The analysis is separated into different parts, covering general factors, opinions and suggestions on the different aspects of Impact Assessments. In contrast to the theoretical findings of Chapter 4, this section presents the practical and empirical information of one company on EIAs and SIAs and tries to round up the different insights.

Additional to an introductory face-to-face interview with one company representative and material from conducted projects, the following section will present the results of the questionnaire. It was answered by two employees who are mainly responsible for the conduction and are highly involved in the Impact Assessment processes of the case company.

8.1. Key Figures

As can be seen from Table 2, the number of EIAs and SIAs differ quite remarkably between the single departments. While Department A has 10 Impact Assessments per year, Department B faces only one or two Impact

Assessments. The 90% - quote of Department A is surely remarkable, but explicable by the fact that the case company operates in the field of renewable energy and for the construction of any kind of plants EIA and SIA are statutory (MoE w.y.).

Thereby, mostly two to four employees are involved in the different stages of the Impact Assessment process in Department A and in Department B half of the employees are somewhat affected.

Table 2. Overview of Key Figures.

Respondent	Department	Number of EIAs/SIAs per year	Percentage of projects that need EIA/SIA (in %)	Employees involved in EIA/SIA (on average/in percentage)
1	A	10	ca. 90	2-4
2	B	1-2	10	50%

8.2. General Findings on the Company's View on EIA and SIA

8.2.1. Advantages and Disadvantages

The company's insights confirm the general view of researchers in the field of EIA and SIA that advantages for the company can be found in an increasing quality of the project design and preparation. According to the respondents, projects are developed better since they are more systematically studied as well

as more thoroughly prepared before it comes to the implementation. Besides, the company confirms that the need of informing the affected public is also considered an advantage arising from the Impact Assessment process.

However, many disadvantages and impediments can also be found. EIA and SIA are considered to be very time consuming which leads in some cases to delays. Additionally, the assessment process significantly increases the company's work load which in turn can result in higher costs for the company.

One specific problem assigned to the implementation of EIA and SIA processes is for example the low progress of projects. Besides, conflicts are generally related to the proposed project site as well as environmental and social features.

8.2.2. Problems and the Case Company's Suggestions for Improvements

The respondents are in favor of a faster process flow, i.e. EIA and SIA process should, in their opinion, be conducted faster. From the agency or governmental side they therefore expect that their instructions should be more specific and point at the need of a better time management. For example, in case of public complaints that are proven wrong or without a cause opponents are still able to unnecessarily prolong projects. Thereby, the company often faces a public that does not fully understand the meaning of an EIA and therefore sees the need of the establishment of a common knowledge base on EIA and SIA.

8.3. The Company and its Role in EIA and SIA

8.3.1. EIA and SIA and their Influence on the Case Company

The conducted study revealed that EIA and SIA can surely have an impact on business plans, e.g. in some cases social and environmental impacts made projects unprofitable. On the other hand, EIA and SIA influence business plans in that sense that areas where there is no need for an Impact Assessment are preferred. The company further considers EIA and SIA as a project planning tool that can be used to make research about possible project areas. Thereby it also affects the basic design of a project before the company applies for e.g. an Environmental Permit. The company is aware of limitations, among others legal obligations, and tries to match the project design with respective legal determinations concerning Environmental Assessments, EIAs and SIAs or Environmental Permits.

According to Esteves (2008), EIA and SIA are means to integrate development and sustainability into core business strategies. Respondents confirmed this statement and added that Impact Assessments make a project implementation in many ways more sustainable. As an example, they refer to nature conservation areas which are better protected through EIAs. The provision of permits can further determine a business strategy and also influences the land acquisition policy of the company.

In general however, one respondent summarized that the conditions arising from the different Assessment processes and the legal framework control almost all activities of the company to a certain extent.

8.3.2. The Case Company and its Communication Processes

Through the whole assessment processes the company communicates with the affected community and ensures the exchange of information in form of a mutual two-way communication process. Thereby, a reconciliation of business needs and community needs is made possible, in the way that the community which is affected by a proposed project can make own suggestions to the implementation of a project. This is usually done in form of a survey in which the affected public is asked to give their opinions on a proposed project, ask questions or make any other comments. Business needs are thus tried to be matched with social aspects during the course of the assessment process.

The company confirms that EIA and SIA could work as a PR tool, but considers EIA and SIA mainly as an instrument to assess impacts and which allows activities to be handled in accordance with legal obligations, e.g. permit conditions.

8.4. The Case Company and Public Participation during EIA and SIA

“Public participation is a very important part of our EIA processes.” (One respondent’s closing comment on public participation)

8.4.1. The Case Company’s View on Public Participation

Correct information and avoiding rumors are considered major advantages from having public participation during Impact Assessments. Public

participation also means for the company receiving faster feedback on their project plans. The negative side of public participation is revealed at public meetings, where mostly project opponents are present, people with a positive or neutral attitude towards a proposed project usually participate less. In general, opponents to a company's proposed project appear more "noisy" than the others. The inadequate handling of public information and falsification of information is also seen as a critical aspect by the respondents.

8.4.2. Communication between the Case Company and the Public

The affected public is contacted at least two times: once before and once after the EISs is published. However, additional communication between the company and affected citizens or the community during the process occurs. The different departments use different ways to get or stay in contact with the affected parties.

The company appreciates the local knowledge and public's understanding of special features concerning the location and is positively convinced by this form of information exchange during the EIA and SIA. This is one way for the affected public to contribute and influence a proposed project. It is ensured that the public can present their opinions. The company implements a project on the basis that the local acceptance is as high as possible.

The study further revealed that the public can suggest alternatives to project plans. In case they match the company's objectives, alternatives are taken into account for the implementation of a project. During the project planning phase

the public may be contacted but this happens only in case of important or necessary occurrences and this is mostly done by mail or phone calls.

Important changes to project plans are further made public by the company through different media, e.g. newspaper articles. Otherwise detailed content on project plans are not publicly available. However, applications for Environmental Permits are made public.

Conflicts are dealt with by public meetings, announcements or changes to project plans. On the other hand, it is possible that disputes are resolved by either directly contacting the opponent through e-mail or by phone or an agency's decision on the matter.

8.5. Summary and Discussion

The study's findings confirm many theoretical or scientific assumptions concerning companies and EIAs and SIAs, for example project delays, demands for project plan changes or other impediments like higher cost for companies. However, it also shows that the case company can find advantages in Impact Assessments. Respondents for example mention increasing quality through better structured and more systematic project developments.

Mostly public participation is not only considered being important, but also appears in a positive light. General provision of information to the affected public and the avoidance of false information and rumors are mentioned as most important advantages arising from public involvement. The study

however shows that opponents to a proposed project are far more active than citizens with a neutral or positive standing. The scientific literature refers here to the risk of biased decisions and outcomes (Glasson et al. 1999: 161; Bond, Palerm & Haigh 2004) which consequently lower the quality of a decision. Besides, it might bring unjustified changes to a project design.

The agency's role during the Impact Assessment processes is found to be improvable. The case company sees a need for a better time management and more specific instructions. According to Dietz and Stern (2008: 96) agencies need to provide for a successful Impact Assessment process among others a clear structure on legally possible actions, constraints and give well-defined specifications and guidelines. Thereby, a point that is also found in Inkinen's study (2009), there is a need of more consistency between the different agencies.

Interestingly, although the impacts on the company are quite significant and as one respondent pointed out somehow affect almost all the activities of the company to a certain extent. The study basically shows that EIA and SIA are not considered burdensome and unfounded. There is still a great influence from governmental agencies and the public on the company's project plans and various activities which e.g. results in a slower project progress. However, the company accepts that the project outcomes are more sustainable and that EIA and SIA can be used for combining local knowledge, community needs and business needs.

9. CONCLUSION

The aim of this study was to explore the impact of Environmental and Social Impact Assessments on any given business. One case company with a variety of experiences in the field of Impact Assessment was selected and used for a thorough study. Three major research questions were investigated:

- 1) How is a company affected by the assessment of environmental and social impacts of their proposed projects? What advantages or disadvantages arise from Impact Assessments for a company?
- 2) How do EIA and SIA affect the company's decision-making?
- 3) And what does public participation during the assessment process mean for a company?

In general, EIA and SIA can be considered to be costly processes for a project proponent. In addition to the frequent criticisms like project delays or slow progress of projects the findings of this study confirmed the disadvantages of EIA and SIA such as extra costs due to longer process time and higher efforts. Social and environmental impacts also made projects unprofitable and affected business plans in that way that areas or projects were chosen where there was no legal obligation for the conduction of an Impact Assessment or where only a smaller Environmental Assessment was needed.

However, an Impact Assessment can also have a positive influence on companies. For example, project designs are developed more systematically and studied more thoroughly before project propositions are made which leads to more sustainable decisions. In addition, public participation is one way for the company to gain faster feedback on their project plans.

In addition, public participation is considered in many respects important for the company, although it is also connected with the risk of falsification of information and rumors. Thereby, often opponents to a proposed project try to gain more influence, while citizens with neutral or positive attitudes are less involved which might result in a biased process with an unjust outcome.

In summary, Environmental and Social Impact Assessments for the presented case company can be described as two-sided: On one side there are various negative impacts resulting in additional costs and on the other side one can find improved project designs, more structured project developments and finally more sustainable decisions.

As mentioned at the beginning of this study the field of Environmental and Social Impact Assessments lacks empirical investigations and theories on how companies are directly and practically affected by these processes. This study was developed based on this consideration and tried to confirm theoretical assumptions and to add some empirical insights to the existing literature. The author of this thesis is thereby aware of the fact that this study can only offer a limited picture of the relation between Impact Assessments and businesses. It should be kept in mind however that EIAs and SIAs are usually conducted in a unique setting, since every case and project includes different communities, values, problems or stakeholders which results in a limited generalization. Additionally, country-specific settings and differences in respect to Environmental Legislation should be considered in future studies while comparing different cases.

REFERENCES

- Annandale, David & Ross Taplin (2003). Is environmental impact assessment regulation a 'burden' to private firms? *Environmental Impact Assessment Review* 23, 383-397.
- Arnstein, S.R. (1967). A Ladder of Citizen Participation. *Journal of the American Institute of Planners* 4, 216-244, quoted in Canter, Larry W. (1996). *Environmental Impact Assessment*, 2nd Edition.
- Auerbach, Carl F. & Louise B. Silverstein (2003). *Qualitative Data: An Introduction to Coding and Analysis*. New York: NYU Press. ISBN: 9780814706947.
- Becker, Henk A. (1997). *Social Impact Assessment: methods and experience in Europe, North America and the developing world*. London: UCL Press. ISBN: 1857283465
- Becker, Henk A. (2001). Social impact assessment. *Journal of Operational Research* 128, 311-321.
- Becker, Dennis R., Charles C. Harris, Erik A. Nielsen & William J. McLaughlin (2004). A comparison of a technical and a participatory application of social impact assessment. *Impact Assessment and Project Appraisal* 22: 3, 177-189.
- Bishop, A.B. (1975). Structuring Communications Programs for Public Participation in Water Resource Planning, quoted in Canter, Larry W. (1996). *Environmental Impact Assessment*, 2nd Edition.
- Bond, Alan, Juan Palerm & Paul Haigh (2004). Public participation in EIA of nuclear power plant decommissioning projects: a case study analysis. *Environmental Impact Assessment Review* 24, 617-641.
- Burdge, Rabel J., Peter Fricke, Kurt Finsterbusch, William R. Freudenberg, Robert Gramling, Arnold Holden, Lynn Llwellyn, John S. Petterson, James Thompson and Gary Williams (1995). Guidelines and Principles for Social Impact Assessment. *Environmental Impact Assessment Review* 15, 11-43.

- Burdge, Rabel J. (2003a). The practice of social impact assessment – background. *Impact Assessment and Project Appraisal* 21: 2, 84-88.
- Burdge, Rabel J. (2003b). Benefiting from the practice of social impact assessment. *Impact Assessment and Project Appraisal* 21: 3, 225-229.
- Buchan, Dianne (2003). Buy-in and social capital: by-products of social impact assessment. *Impact Assessment and Project Appraisal* 21: 3, 168-172.
- Canter, Larry W. (1996). *Environmental Impact Assessment*, 2nd Edition. Boston: McGraw-Hill. ISBN: 0-07-009767-4.
- Cashmore, M., R. Gwilliam, R. Morgan, D. Cobb and A. Bond (2004). The interminable issue of effectiveness: substantive purposes, outcomes and research challenges in the advancement of environmental impact assessment theory. *Impact Assessment and Project Appraisal* 24: 2, 295–310.
- Craig, D. (1990). Social impact assessment: politically oriented approaches and applications. *Environmental Impact Assessment Review* 10, 37-54.
- Devlin, John F. & Nonita T. Yap (2008). Contentious politics in environmental assessment: blocked projects and winning coalitions. *Impact Assessment & Project Appraisal* 26: 1, 17-27.
- Dietz, Thomas & Paul C. Stern (2008). *Public Participation in Environmental Assessment and Decision Making*. Washington: National Academies Press. 321 p. ISBN: 9780309123990.
- Doelle, Meinhard & A. John Sinclair (2006). Time for a new approach to public participation in EA: Promoting cooperation and consensus for sustainability. *Environmental Impact Assessment Review* 26, 185-205.
- ELY (2010). *Environmental Protection* [online] [cited 16/08/11]. Available from Internet:
<http://www.ely-keskus.fi/en/frontpage/environment/Sivut/default.aspx#3>
- ELY (2011). *Environmental permits* [online] [cited 16/08/11]. Available from Internet:
<http://www.ymparisto.fi/default.asp?contentid=47724&lan=en>

- European Commission (EC) (2010). *Environmental Impact Assessment – EIA* [online] [cited 20/04/11]. Available from Internet: <http://ec.europa.eu/environment/eia/eia-legalcontext.htm>
- Esteves, Ana M. (2008). Evaluating community investments in the mining sector using multi-criteria decision analysis to integrate SIA with business planning. *Environmental Impact Assessment Review* 28, 338–348.
- Esteves, Ana M. & Frank Vanclay (2009). Social Development Needs Analysis as a tool for SIA to guide corporate-community investment: Applications in the minerals industry. *Environmental Impact Assessment Review* 29, 137-145.
- Esteves, Ana M. & Mary-Anne Barclay (2011). New Approaches to Evaluating the Performance of Corporate–Community Partnerships: A Case Study from the Minerals Sector. *Journal of Business Ethics*. Available from Internet: <http://www.springerlink.com/content/45g23v162m17p507/fulltext.pdf>
- Fishkin, J.S. (2006). Strategies of public consultation. *The Integrated Assessment Journal* 6: 2, 57-72.
- Glasson, John (1995): Socio-economic impacts 1: overview and economic impacts. In: *Methods of Environmental Impact Assessment*, 2nd Edition, 20-41. Eds. Peter Morris & Riki Therivel. London: UCL Press. ISBN 9780203995709.
- Glasson, John, Riki Therivel & Andrew Chadwick (1999). *Introduction to Environmental Impact Assessment*, 2nd Edition. London: UCL Press. ISBN 1-84142-002-6 HB.
- Hanchey, J.R. (1981). Objectives of Public Participation, quoted in Canter, Larry W. (1996). *Environmental Impact Assessment*, 2nd Edition.
- Hartley, Nicola & Christopher Wood (2005). Public participation in environmental impact assessment: implementing the Aarhus Convention. *Environmental Impact Assessment Review* 25, 319-340.
- Inkinen, Aino (2009). *Public participation in the environmental permit process at regional level* [online]. The Finnish Environment 39. Finnish Environment

Institute, Helsinki. Available from Internet:
<http://www.environment.fi/download.asp?contentid=112877&lan=en>

Ivanova, Galina, John Rolfe, Stewart Lockie & Vanessa Timmer (2007). Assessing social and economic impacts associated with changes in the coal mining industry in the Bowen Basin, Queensland, Australia. *Management of Environmental Quality: An International Journal* 18: 2, 211-228.

Jörissen, J. & R. Coenen (1992). The EEC Directive on EIA and its Implementation on the EC Member States. In: *Environmental Impact Assessment*, Volume 1, 1-14. Ed. A.G. Colombo. Dordrecht: Kluwer Academic Publishers. ISBN: 0-7923-1589-8.

Kapoor, Ilan (2001). Towards participatory environmental management? *Journal of Environmental Management* 63, 269-279.

Lockie, Stewart, Maree Franetovich, Sanjay Sharma & John Rolfe (2008). Democratization versus engagement? Social and economic impact assessment and community participation in the coal mining industry of the Bowen Basin, Australia. *Impact Assessment & Project Appraisal* 26: 3, 177-187.

Marriott, Betty B. (1997). *Environmental Impact Assessment: A Practical Guide*. New York: McGraw-Hill. ISBN: 0-07-040410-0.

MoE (n.y.). *Act on Environmental Impact Assessment Procedure, unofficial translation* [online] [cited 18/08/11]. Available from Internet:
<http://www.ymparisto.fi/download.asp?contentid=84193&lan=en>

Ministry of the Environment (MoE) (1999). *Guidelines for the environmental assessment of plans, programmes and policies in Finland* [online]. [cited: 06/05/11] Helsinki: Edita Ltd. Available from Internet:
<http://www.ymparisto.fi/download.asp?contentid=19877&lan=en>

MoE (2008). *Legislation* [online] [cited 16/08/11]. Available from Internet:
<http://www.ymparisto.fi/default.asp?contentid=53075&lan=en>

MoE (2009). *Legal obligations for businesses* [online] [cited 16/08/11]. Available from Internet:
<http://www.environment.fi/default.asp?contentid=341828&lan=EN>

- MoE (2010). *Environmental impact assessment* [online] [cited 16/08/11]. Available from Internet:
<http://www.environment.fi/default.asp?contentid=202779&lan=en>
- MoE (2011a). *Business and the environment in Finland* [online] [cited 16/08/11]. Available from Internet:
<http://www.ymparisto.fi/default.asp?contentid=173287&lan=en>
- MoE (2011b). *Environmental impact assessments for projects* [online] [cited 16/08/11]. Available from Internet:
<http://www.ymparisto.fi/default.asp?node=19743&lan=en>
- MoE (2011c). *Policy instruments* [online] [cited 16/08/11]. Available from Internet:
<http://www.ymparisto.fi/default.asp?node=6050&lan=en>
- Ministry of Justice (MoJ) (2008). *Impact Assessment in Legislative Drafting – Guidelines* [online] [cited: 07/05/11]. Helsinki: Edita Ltd.
 Available from Internet: <http://www.om.fi/en/1210773148629>
- Morris, Peter & Therivel Riki (1995). Introduction. In: *Methods of Environmental Impact Assessment*, 2nd Edition, 3-19. Eds. Peter Morris & Riki Therivel. London: UCL Press. ISBN 9780203995709.
- Morrison-Saunders, Angus (1998). The effect of public pressure during environmental impact assessment on environmental management outcomes. Presented at: *IAlA'98 Sustainability and the Role of Impact Assessment in the Global Economy*. 18th Annual Meeting of the International Association for Impact Assessment, 19-24 April 1998, The Convention Centre, Christchurch, New Zealand. Available from Internet:
http://researchrepository.murdoch.edu.au/2444/1/effect_of_public_pressure1998.pdf
- Neuman, W. Lawrence (2007). *Basics of Social Research: Qualitative and Quantitative Approaches*, 2nd Edition. Boston: Pearson Education.
- Palerm, Juan R. (2000). An Empirical-Theoretical Analysis Framework for Public Participation in Environmental Impact Assessment. *Journal of Environmental Planning and Management* 43: 5, 581-600.

- Palmer, Karen, Wallace E. Oates and Paul R. Portney (1995). Tightening Environmental Standards: The Benefit-Cost or the No-Cost Paradigm? *Journal of Economic Perspectives* 9: 4, 119-132.
- Porter, Michael E. & Claas van der Linde (1995). Toward a New Conception of the Environment-Competitiveness Relationship. *Journal of Economic Perspectives* 9:4, 97-118.
- Pölonen, Ismo, Pekka Hokkanen & Kimmo Jalava (2011). The effectiveness of the Finnish EIA system – What works, what doesn't, and what could be improved? *Environmental Impact Assessment Review* 31, 120-128.
- Rowe, Gene & Lynn J. Frewer (2004). Evaluating Public-Participation Exercises: A Research Agenda. *Science, Technology & Human Values* 29: 512-556.
- Rowe, Gene & Lynn J. Frewer (2005). A Typology of Public Engagement Mechanisms. *Science, Technology & Human Values* 30: 2, 251-290.
- Rowe, Gene, Tom Horlick-Jones, John Walls, Wouter Poortinga and Nick F. Pidgeon (2008). Analysis of a normative framework for evaluating public engagement exercises: reliability, validity and limitations. *Public Understanding of Science* 17: 419-441.
- Saarikoski, Heli (2000). EIA Procedure. Environmental Impact Assessment (EIA) as collaborative learning process. *Environmental Impact Assessment Review* 20, 681-700.
- Spepherd, Anne & Christi Bowler (1997). Beyond the Requirements: Improving Public Participation in EIA. *Journal of Environmental Planning and Management* 40: 6, 725-738.
- Stewart, Jennifer M. P. & A. John Sinclair (2007). Meaningful Public Participation in Environmental Assessment: Perspectives from Canadian Participants, Proponents, and Government. *Journal of Environmental Assessment Policy and Management* 9: 2, 161-183.
- Vanclay, Frank (2003). International Principles for the Social Impact Assessment. *Impact Assessment and Project Appraisal* 21: 1, 5-11.

- Vanclay, Frank (2004). The Triple Bottom Line and Impact Assessment: How do TBL, EIA, SIA, SEA and EMS relate to each other? *Journal of Environmental Assessment Policy and Management* 6: 3, 265-288.
- Webler, Thomas (1995). "Right" Discourse in Citizen Participation: An Evaluative Yardstick, In: *Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse*, 35-86. Eds. Ortwin Renn, Thomas Webler & Peter M. Wiedemann. Dordrecht: Kluwer Academic Publishers. ISBN 0-7923-3517-1.
- Webler, Thomas, Hans Kastenholz & Ortwin Renn (1995). Public Participation in Impact Assessment: A Social Learning Perspective. *Environmental Impact Assessment Review* 15, 443-463.
- Westman, W.E. (1985). Ecology, impact assessment and environmental planning. New York: Wiley, quoted in Glasson, John, Riki Therivel & Andrew Chadwick (1999). *Introduction to Environmental Impact Assessment*, 2nd Edition.
- Yin, Robert K. (1994). *Case Study Research: Design and Methods*, 2nd Edition. Thousand Oaks: Sage Production. ISBN: 0-8039-5662-2.

APPENDIX

QUESTIONNAIRE

Part 1:

General Questions on Environmental and Social Impact Assessments (shortened to EIA/SIA)

1. How many EIAs/SIAs are there per year in your department?
2. What percentage of your projects needs an EIA/SIA?
3. In your department what percentage of your employees (on average) deals with matters concerning the EIA/SIA processes?
4. How is the EIA/SIA process organized by your department? Which parts are outsourced? Which parts are done by the department/company?
5. In your opinion what are the advantages of having an EIA/SIA process for your department?
6. What are the disadvantages/impediments/burdens of having an EIA/SIA process in your department?
7. What kind of problems surfaced during and after the implementation of EIA/SIA processes?
8. In your opinion how can the EIA/SIA processes be improved....
 - from the company's side?
 - from the agency's/governmental side?
 - from public's side?
9. What are the laws that are binding for the company/your department during the EIA/SIA process?

Part 2:**The Department / Company and its Role in the Environmental and Social Impact Assessments (shortened to EIA/SIA)**

10. Do the EIA/SIA processes affect the development of business plans in your department?
11. In your opinion, can EIA/SIA be considered as a project planning tool? If yes, in what respect or how is it used as a project planning tool?
12. EIA and SIA are means to integrate development and sustainability into core business strategies. Do you agree with this statement? If yes, can you mention a concrete example?
13. EIA and SIA can be used to build collaborations with the company and communities. Do you agree with this statement? If yes, why?
14. In your opinion, can EIA/SIA be used to achieve a reconciliation between business needs and community needs? If yes, why?
15. Do you see EIA/SIA as a PR tool? Do you think it can strengthen the company brand and its reputation? If yes, can you give an example?
16. Do you have additional comments/ideas about the role of EIA/SIA in your department?

Part 3:**The Department / Company and Public Participation during the Environmental and Social Impact Assessments (shortened to EIA/SIA)**

17. What percentage of your projects includes public participation?
18. What are the advantages of having public participation during an EIA/SIA process?

19. What are the disadvantages of having public participation during an EIA/SIA process?
20. At what point during the EIA/SIA process do you get in contact with the affected public?
21. In your opinion, how does an effective and helpful public participation during the EIA/SIA process look like?
22. How does your department communicate with the public?
23. How can the public actively contribute to your project during the EIA/SIA processes?
24. Can public suggest project alternatives to you? If yes, do you incorporate these in your project plans?
25. Does your department/company inform the public of the changes during the project planning phase which were made according to their suggestions? If yes, how?
26. How about after the project planning phase? Do you keep in contact with or inform the affected population/individuals? If yes, how?
27. Is the content of your project plans publicly available?
28. How do conflicts with the public are dealt with?
29. Do you have any additional comments/ideas concerning public participation during the EIA/SIA processes?