



*Participation in the
Environmental Impact Assessment process.
Analysis of two case studies from the
energy sector in Iceland.*

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Abstract

This thesis examines participation between different actors in the environmental impact assessment (EIA) process, and the role and influence of participation, highlighting its strength and weaknesses and opportunities for improvements. Two highly controversial cases from the energy sector in Iceland are analysed using stakeholder theory and system analysis. One project relates to a dam and reservoir construction in the highlands of Iceland, the other the building of a high power transmission line crossing both highlands and inhabited areas of Iceland. It is argued that participation of different stakeholders in the EIA process is beneficial both for the EIA process and the final outcome. An increased participation in the EIA process will lead to less conflicts and more general acceptance of proposed projects. The actor to instigate participation is the developer of the projects. It is also the democratic duty of the government of Iceland to encourage participation regarding decisions that can affect the public, however the legal framework is not fulfilling its objective to encourage participation. After identifying the main components of participation in the EIA process the following proposal is put forward. The more external stakeholders participate in a process the more influential they will be on the process. The amounts of influence external stakeholders have will increase trust on the process and by reducing the likelihood of conflicts in later stages. Leading to an increase in acceptance of the EIA process, which in return will lead to an increase in the probability of projects being accepted and decreasing the probability of the project being opposed. Three main driving forces to increase participation in the EIA process were identified. The first one is *when participation* takes place in the EIA process. The second driving force is *legal requirements for participation* and the third is *willingness of the developer to instigate participation* of stakeholders.

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List of Abbreviations

CLD,	Causal Loop Diagram
DAD,	Decide-Announce-Defend
EEA,	European Economic Area
EEC,	European Economic Area
EIA Act,	Environmental Impact Assessment Act no. 106/2000
EIA regulation,	Environmental Impact Assessment regulation no. 671/2000
EIA,	Environmental Impact Assessment
EIS,	Environmental Impact Statement
EPA,	Environmental Protection Agency (USA)
EU,	European Union
NEPA,	National Environmental Policy Act (USA)
NGO's,	Non Governmental Organisations

1. Introduction

The image of Iceland is of volcanoes, glaciers and untouched wilderness, the place you can go to if you want to connect with untainted nature. On the other side is the abundance of potential renewable energy sources in the highlands and the question of whether it is a moral obligation to harness it, thus lessen constraints on non-renewable energy sources usage. This is the big picture in the background of conflicts regarding the point and purpose of environmental impact assessment (EIA) of projects in the energy sector in Iceland.

EIA is generally viewed as a framework for considering issues regarding location, design of projects and the environment in parallel, and by that producing better designed projects having in mind both the environment and the economy. In the past decade, with increasing force during the last couple of years, new ideas about the purpose of the EIA process have sprung to life focusing on the potential benefits of the EIA process to increase acceptance of proposed projects. The proposed method to do this is with the participation of all actors interested or those directly or indirectly affected by the proposed project.¹ Participation with the public has been mandatory in the Icelandic EIA process since it was first introduced into the Icelandic legal system in 1994. However, no reduction in conflicts regarding proposed projects has happened and it can even be claimed, especially in the energy sector, that the conflicts have been escalating.

Today these conflicts have raised serious doubts about the EIA process and many think it is time to change the EIA process. Suggestions for change are mostly linked to who should have the decision making power in the EIA process, if the decision maker should be one “independent agency” or many, and how scientific data is presented. The concentration on the decision making power has moved the focus away from the process of EIA. Participation is part of the EIA process and it has been claimed that beside the democratic value of participation other more direct benefits exists. Participation will strengthen the EIA process, as a whole by increasing the quality of the decisions, avoiding public controversy and creating trust between the developer and the different actors in the EIA process.² The importance of participation has not been the focus of discussion in Iceland as a means to improvements in the EIA process, although participation of all actors is central in the EIA process of the Icelandic EIA Act no. 106/2000.

The aim of this thesis is to examine participation between different actors in the EIA process, and the role and influence of participation, highlighting its strength and weaknesses and opportunities for improvements. In order to do this, two case studies, Nordlingaolduveita EIA and Sultartangalina 3 EIA are analysed. The case studies invoked conflicts among various actors in the Icelandic society since they were instigated. Today a consensus has been reached regarding Sultartangalina 3 but no end is in sight for the ongoing conflicts regarding Nordlingaolduveita 3. The two case studies will be analysed by applying stakeholders theory, systems analysis and the theoretical approaches regarding public participation so as to identify the main components of participation and what influences, participation in the EIA process, has in Iceland. The foundation for this analysis is an overview of the legal framework regarding participation in the EIA process in Iceland.

It will be argued that participation of different actors in the EIA process is beneficial both for the EIA process and to the final outcome. That an increased participation in the EIA process will lead to less conflicts, more general acceptance of proposed projects and that the actor that has the highest potential of increasing participation in the EIA process is the developer of the project. It is the democratic duty of the government of Iceland to encourage participation regarding decisions that can affect the public.

¹ Glasson, John et. al. (1999)

² Furia, Del Luca, Wallance-Jones, Jane (2000)

However, the legal framework regarding the EIA process of proposed projects is not fulfilling its objective to do that.

To do this I will start by explaining the term EIA and in general terms how the EIA process in Iceland works, followed by a chapter on theoretical perspectives and methodology. The purpose of participation in general and special considerations regarding participation in the EIA process is discussed in chapter 4. In chapter 5 an overview of the legal framework is given, starting with the historical background, the legislation of the European Union (EU) and finishing with an extensive overview regarding the Icelandic EIA process. Emphasising the legal procedure for EIA and who should participate in the EIA process according to the EIA Act and how they should participate. A short description will be given on the two case studies, Nordlingaolduveita EIA and Sultartangalina 3 EIA, followed by an analysis of the case studies where the process of participation and the driving forces for increasing participation in the EIA process are identified. Finally conclusions are put forward and recommendations.

2. Environmental Impact Assessment, history and definition.

2.1. Birth of EIA in historical perspective.

Much has been written about the concept of “sustainable development” in different disciplines like law, politics, economic and so forth. What most or not all disciplines have in common is the acknowledgement that the birth of the concept as it is most commonly used today is in the Brundtland report. In the Brundtland report sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”³ What this means has however been disputed, authors like Connelly and Smith have pointed out that what was initially attractive with the concept of sustainable development was that it offered grounds for a fundamental critique of existing practices.⁴ But the Brundtland report does not stop with this concept it adds that economic growth is essential for environmental protection. In international law the concept of sustainable development has been identified as having these common features:

- “-the need to take into consideration the needs of the present and future generations,
- the acceptance, on environmental protection grounds, of limits placed upon the use and exploitation of natural resources;
- the role of equitable principles in the allocation of rights and obligations; and
- the need to integrate all aspects of environment and development.”⁵

Environmental impact Assessment EIA arrives out of the fourth element “the need to integrate all aspects of environment and development”. This is the most formal part of the concept of sustainable development, since it requires collection and dissemination of environmental information that is the conduct of EIA. This integration of environment and development has a long history in international law first in the 1949 Conference on conservation and utilisation of resources. Stockholm declaration, principle 13, calls on states to adopt “... an integrated and co-ordinated approach to their development planning so as to ensure that their development is compatible with the need to protect and improve the human environment.”⁶ Here the nature is the human environment, yet it entails a recognition of that the nature has not just an instrumental value for humans but also inherent value.⁷ This is, however, the root of the EIA process as it is most commonly used today. EIA is therefore, historically, a tool for the

3 World commission on Environment and Development (WCED) (1987)

4 Connelly, James and Smith, Graham (1999)

5 Sands, Phillip (1995)

6 Sands, Phillip (1995)

7 Connelly, James and Smith, Graham (1999)

integration of developmental goals and the environment where nature is viewed as having an inherent value.

2.2. Definition of EIA.

Many have put forward a definition of what an EIA is, in Glasson et al. EIA is defined as a tool that seeks to ensure sustainable development through the evaluation of those impacts arising from a major activity that are likely to have significant environmental effects. It is anticipatory, participatory and systematic in nature and relies on multidisciplinary input.⁸ Others like Walthern look at it mainly as a process having the ultimate goal of providing decision makers with an indication of the likely consequences of their action.⁹ A huge gap is between the fore mentioned definitions. Glasson et al. see EIA as a process where the Environmental Impact Statement (EIS) is just one part of the process. Walthern however focuses on the EIS that will be presented to decision makers. The Icelandic EIA system sees EIA as a process where the EIS is just one part of the process, however, as will be discussed further in chapter 7 most emphasis has been on the EIS.

2.3. EIA process in Iceland.

A proposed project is subjected to an EIA according to Icelandic law if it falls under criteria's that are laid out in Annexe I or II in the EIA Act nr. 106/2000. If a project is subjected to an EIA the developer usually starts thinking about the EIA as soon as the main component of the project has materialised. The first step in the process is the pre-scoping stage, where the developer makes a document where the project is described, the different possibilities regarding location, design and what aspects of the project and the environment should be emphasised in the EIA. Important piece of the pre-scoping stage are the developers plans for participation. This document is then formally handed in to The Planning Agency that decides if they will accept the scoping document or if some changes have to be done on it. The scoping document is therefore a guide of how the rest of the process should manifest itself. After the approval of the scoping document the developer starts making the EIS. The EIS should be made in accordance with the scoping document and include the main alternatives that are available, description of the process and what effects it will have on different aspects of the nature, such as flora and fauna and other life forms, water, climate, landscape, air, humans beings, society and culture.

The EIS is an important part of the process since it should include all the relevant information on the project. Finally the EIS is handed to The Planning Agency that will deliver a ruling whether it accepts or rejects the project as it is proposed in the EIA. In this way the Icelandic system is different from many other systems where the EIS, as shown in Figure 1, is a report that many different government bodies have as a basis for decisions regarding granting of consent for projects along with other documents. Participation of the public, governmental agencies and others can be interwoven in all steps of the process.

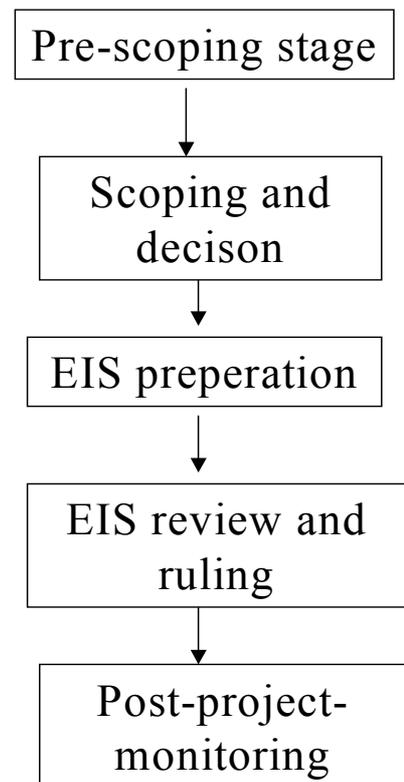


Figure 11 EIA process in Iceland

⁸ Glasson, J., Therivel, R., and Chadwick, A. (1994)

⁹ Walthern (1992) as cited in Weston, Joe (1997)

3. Theoretical perspectives and methodology.

3.1. Stakeholder theory, a link towards democracy.

The following theoretical model of stakeholder participation gives a framework of how to handle reality. The idea of stakeholder participation has its roots in the growth of alternative dispute resolution techniques in the 1970s and 1980s. Stakeholder participation can take on many different forms not limited to mediated dispute resolution, negotiation and arbitration.¹⁰

The EIA process, is a difficult one. It requires a multi disciplinary approach, using different kinds of knowledge from different actors with different worldviews and aims for the final outcome of the process. The EIA process requires participation of different parties, as in the Icelandic EIA Act nr. 106/2000, but in reality achieving this goal is problematic. Stakeholding is here used as a way of unravelling some of the complexity that is associated with participation in the EIA process.

“Stakeholding is about inventing new forms for the expression of voice and making exit harder, including for those who already enjoy influence. Inclusion is not just about preventing exclusion, it is also about generating the framework of loyalty for a process of mutual influence between partners with different stakes.”¹¹

Stakeholder theory began as a corporate management tool around the 1930 in the US, originating in the aftermath of the Great Crash of 1929 in the United States.¹² It matured in relation to the modern firm and in its simplest form consists of applying principles of democracy to economic life.¹³ Stakeholder approach is thus about reappraisal of the role of the government. The government has the capability of being the engine of economic and social change were its power needs to be shared and its exercise negotiated.¹⁴

Stakeholder theory is grounded in the theory of democracy claiming that all that are directly affected by decisions of companies or authorities, should have a proportionate voice in decision making affecting them. Stakeholding claims that the interest of different stakeholders should be incorporated in governance decision protected by rule of law or secured through voluntary cooperation and negotiated governance. Democracy is, therefore, the affected interest has the right to representation or some other form of protection.¹⁵ Stakeholding therefore extends the scope of the main principles of democracy from the political sphere to the society at large.

Stakeholding proposes that the dynamic consequences of stakeholding, is its ability to deliver better results, more responsive policies and higher quality decision. One of the key elements in stakeholder theory is distinguishing who are the stakeholders. Important distinction is made between the internal and external stakeholders, this distinction is used when analysing the two cases and the power each stakeholder perceives him/her self of having.¹⁶ Internal stakeholders are those that take the decision or like in EIA, control the process, while the external stakeholders are those who are influenced by or can have impact on a decision taken by the internal stakeholder. It is the essence of stakeholder approach in terms of practical decision making, that a decision maker must not view its stakeholder purely instrumentally as a means to an end, but rather regards their interest to have independent weight.¹⁷ Stakeholding means inclusion not exclusion, that all should have a voice and be empowered, but in different ways. It is assumed here that the government has an obligation to secure stakeholders

¹⁰ Bier, V. M. (2001)

¹¹ Barnett, Anthony (1997)

¹² Darling, Alister (1997)

¹³ Hirst, Paul (1997)

¹⁴ Rustin, Michael (1997)

¹⁵ Hirst, Paul (1997)

¹⁶ Darling, Alister (1997)

¹⁷ Parkinson, John (1997)

right to participate in decisions that affect them, in the broadest sense, both by using the rule of law and instigating voluntary cooperation

The theory of stakeholding has been received with open arms by scholars interested in participation. Special discussion regarding participation will follow in chapter 4. The trend to increase public participation has also shed light on obstacles in addressing to the public as a whole. The public, generally, consists of individuals and groups with different aspirations, interest and skills to take part in a participatory process, so the same participatory methods cannot apply to all. Of equal importance is the use of stakeholder theory in analysing case studies. As mentioned before the stakeholder approach is used as a theoretical framework of how to handle reality. Stakeholding sets a frames for the different actors that have participated in the process and provides a way to better understand the linkages that they have to different parts of the process. This leads back to the definition of stakeholder in the context of EIA process, therefore the following concept will be used:

“A stakeholder is an individual or group influenced by – and with an ability to significantly impact (either directly or indirectly) – the topical area of interest.”¹⁸

This definition captures that a stakeholder can just as well be an individual or a group, and are defined in relations to a specific issue.

3.2. System approach.

One of the aims of the EIA process is to gather and incorporate information from different disciplines to make it easier for decision makers to assess the impact the proposed project can have on the environment in all its complexity. A systems approach is used here to analyse this multidisciplinary process. A systems approach has many benefits in this context, it provides a multidisciplinary framework in which information from different domains can be integrated without being forced into one dimensional mapping, and to see the dynamic behaviours in the underlying structures of the system.¹⁹ It provides a tool for integrating the contributions of different disciplines.²⁰

3.3. Methodology.

This section describes the methodology adopted to gather appropriate information about the two case studies, what criteria was used to choose the cases and a questionnaire that was sent out to participants in the EIA process of both cases. Peer-reviewed literature and other secondary literature are employed to the scope and nature of the analysis. Informal interviews were conducted with internal stakeholders for further clarifying purposes.

When deciding which cases to use as a case study four main criteria were used. Firstly that the projects were in the energy sector, secondly that they were subjected to a mandatory EIA²¹, thirdly that the EIA process was in accordance with the new Icelandic EIA Act nr. 106/2000. Fourthly that there were apparent conflicts in the EIA process. The chosen cases fulfil all of the criteria described above. As discussed in chapter 2 the EIA consists of few stages i.e., pre-scoping, scoping and decision making by the Planning Agency, EIS preparation, EIS review and ruling by the Planning Agency, complaint and ruling by the ministry and post-project-monitoring. Although all stages are important, however the focus here is on five stages, pre-scoping, scoping, EIS preparation, EIS review and ruling by the Planning Agency. The main reasons for limiting the scope of the thesis with these five stages is because participation with stakeholders such as members of the public that has the effect of reducing conflict and give a better end result is mainly done in the early stages of the EIA process. Of a more practical nature,

¹⁸ Engi and Glicken, (1995) as cited Glicken, Jessica (2000)

¹⁹ Bender, Michael J. Simonovic, Slobodan P. (1996)

²⁰ Cleyton, Anthony, M. H., Radcliffe, Nicholas J. (1996)

²¹ Projects are subjected to a mandatory EIA when they fall under the criteria in Annex I of the EIA Act no. 106/2000.

because the ruling of the Planning Agency was appealed to the Minister for the environment and he has still not issued his ruling.

Additionally, it is seen as positive that the developer is the same for both the projects chosen. Mainly because documents could be gathered using the same method, namely, all official documents that were published during the process were gathered. Secondly, a thorough search was done in the databases of the developer with the aim of finding information about communication between the developer and stakeholders. The developer allowed open access to his database to gather information needed for the aim of the thesis. Informal interviews were done with the project leaders of the two cases for further information about the overall process and information not in the computerised database.

In the interest of getting information from different stakeholders involved in the EIA process of the two projects, two identical questionnaires were sent out to participants in Nordlingaolduveita EIA and Sultartangalina 3 EIA that used an e-mail address or had given up an e-mail address. The aim with the questionnaire is to get information about how different stakeholders viewed their influence in the process and their view of the EIA process in general so as to see if there is a difference participants perception between the projects. The whole questionnaire is in Appendix I. The questions asked were divided into three sections. Firstly, the participants were asked to group themselves in a stakeholder group. The options were, the developer, including all who worked for the developer, e.g. internal stakeholder, public living near the project, public not living near the project, givers of opinion, granters of consent, NGOs scientists and others. The second question group is regarding in what stage he/she took part in the process, then how influential he/she was on that stage and lastly what methods were used. In the third group of questions the participants where asked to respond about statements about the purpose of public participation in the EIA process, the given alternatives were, A: Strongly agree, B: Agree, C: Disagree, D: Strongly disagree. In the fourth question group participants were asked to respond to statements regarding general aspects of participation in the process. The answers alternatives were the same as in question group three. After each question participants were offered to give comments, which many of the participants did, to explain their choice and to comment on the questions themselves. This feature was intentional by the author since the questions had the aim of getting the general view of the participants to statements that have been put forward by scholars in the field regarding the aim of participation.²²

Shortcomings of sending out questionnaires by E-mail are firstly that is not possible to send the questionnaire to all that participated in the process. Secondly, the group of stakeholders that presumably would not be represented is the public. While the internal developer, and government agencies and municipalities were more likely to be represented. Advantages are that the respondent remains anonymous, since the system is designed in such a way that it does not show who is responding. Secondly, answers will arrive in matter of days, thirdly no paper is wasted and finally this approach is much more economic than traditional methods of sending questionnaires by mail. Therefore, in this specific study I concluded that advantages outweigh the shortcomings of using E-Mail e-mail based system.

Gathering E-mail addresses of the participants was done by going through the data that was gathered from the developer, Landsvirkjun, secondly the Planning Agency gave a list of all E-mail addresses that they had in their files. However, because of problems with the handling of received E-mail at the Planning Agency they had not stored all E-mail addresses of the people that sent in by E-mail. Consequently the number of E-mail addresses gathered did not extend to everyone whom had sent in written comments by E-mail. In the end a total of 73 e-mails were sent to participants regarding Nordlingaolduveita EIA and 43 E-mails to participants regarding Sultartangalina EIA. The initial questionnaires were sent out on the 3rd of October 2002 and after receiving 18 answers regarding Nordlingaolduveita EIA and 14 for Sultartangalina 3 EIA a remainder was sent on the 9th of October 2002. The final number of responses were 39 regarding Nordlingaolduveita EIA giving a total of a 53 %

²² A.K Wolf et al. (2001), Luca del Furia et al. (2000)

response to the questionnaire. Regarding Sultartangalina 3 EIA a total of 24 responses were received giving a 56% total response. The questionnaires were closed on the 14th of October after receiving no new answers since the 10th of the same month. It must, however, be noted that in some cases the same people have taken part in both processes but they were asked to answer both questionnaires. The questionnaire is analysed qualitatively more than quantitatively, mainly because of the nature of the questions and also because there were so few participants that received the questionnaire and the total response was about 55% for both questionnaires.

Since the questionnaires were sent out to participants on E-mail addresses it is difficult to assess beforehand the distribution of different stakeholder groups that received the questionnaire. The following Table 1 shows what stakeholder those who participate identified themselves as.

Table 1 Distribution of participants answering the questionnaire into stakeholders for Nordlingaolduveita EIA and Sultartangalina 3 EIA

Stakeholder	Nordlingaolduveita EIA	Sultartangalina 3 EIA
A) Developer (also if working directly for the developer)	13	8
B) Public living near the project site	1	2
C) Public not living near the project site	3	0
D) Giver of opinion	4	7
E) Granter of permits	3	2
F) NGOs	2	1
G) Scientist	7	0
H) Others	6	4
Total	39	24

The problem of sending a questionnaire to E-mail addresses are that it is difficult to identify beforehand in which group, the person behind the e-mail address, should be identified with. It is therefore difficult to say what category those belonged to that did not reply to the questionnaire. Of 24 individuals that answered the questionnaire regarding Sultartangalina 3 EIA only 2 identified themselves as "Public living near the project site", even though that it can be stated with some certainty that at least 13 E-mails sent to participants in Sultartangalina 3 EIA belonged to the public. The answer to the question why so few answered is a difficult one. One possible explanation to their lack of interest could be that the public believes the EIA process is over, they accepted the conclusion and have lost interest. It is difficult to say how many members of the public, that is groups B and C, received an e-mail asking them to participate regarding in the Nordlingaolduveita EIA. With a cautious estimate it can be said that at least 9 individuals falling under group B) and C) received the invitation to participate in the questionnaire but only 3 answered. That is still a higher response rate than in Sultartangalina 3 EIA. The conclusion can be drawn that the public in general did not respond well to the questionnaires but that the developer, givers of opinion and granter of permits had a higher response rate to the questionnaire. Which can be interpreted as an indication of the interest the developer, givers of opinion and granters of consent have in the EIA process.

The questionnaire was first made in English and then translated in Icelandic by the author. Since the EIA process for both projects was in Icelandic it was necessary to have the questionnaire in Icelandic although it offered the danger of mistakes in translation both from the original questionnaire and regarding translations of comments made by participants in Icelandic. However the danger of some of the participants misunderstanding the questions in English was even greater. It also reduces likelihood of mistakes in translation that the author of the questionnaire and this paper performed the translation.

4. The purpose of participation in EIA.

Interest in public participation has substantially increased over the last ten years.²³ In most countries some kind of public participation is compulsory in Environmental Impact Assessment processes.²⁴ However, it is apparent when surveying literature that the concept “participation” has no uniform meaning. Therefore it is necessary to go over the different meanings of the concept before proceeding to the analytical section. McDaniels, Timothy L., et al. identified three different components of how the participation concept is used.²⁵ Firstly, it is used to look at the process proponent that is what method was used. Secondly, it relates to what is the role of those who participated and finally, three rationales for participation of the public are put forward, normative, substantive and instrumental. Now each component will be scrutinised.

Different participation methods are often discussed in the literature. It has been proposed that participation is a way to ensure that projects meets citizens needs and are suitable to the affected public. Techniques or the methods used to conduct public participation have to be in conformity with the objects of the participation process.

The second proponent in the concept of participation has to do with the role the participants have in the process. This type of analogy started with the influential work of Arnstein who put forward the ladders of citizen participation²⁶ in a decision making process. Were the lowest level of participation compromises of decide-announce-defend (DAD) participation method to the highest were the public have decision making authority.²⁷ McDaniels, Timothy L., et al. criticise Arnstein for raising expectations towards what kind of inclusion can be expected with participation of the public and also that what Arnstein sees as the highest form of participation is what elected governments and government agencies have the legitimate powers to do.²⁸ This argument is further strengthen by what will be discussed later which are the difficulties with participation especially in environmental matters where scientific uncertainty can be high and the amount and complexity of technological data is staggering. The definition of the highest and lowest forms of participation, however, is a good measurement tool to analyse how some methods are considered more participatory than others.

Thirdly, there are three main rationales for participation²⁹, normative, substantive and instrumental. The normative rational derived from the principle that government should obtain the consent of those who are governed and therefore, the citizens have the right to participate meaningfully in a public decision, so it is a proper and fair conduct of a democratic governance.³⁰ It has been argued that citizen involvement is not only desirable but also necessary in a democracy and decisions that are the offspring of public participation are superior to others since “the only legitimate answers are those derived through a process that incorporates the public will.”³¹ Stakeholding is a part of this normative rational since it emphasises that stakeholders should have special interest or connection to the matter at hand and public participation is always about getting people interested, as soon as a person gets interested, he/she will acquire the status of a stakeholder.³²

Substantive rationales for participation are that the relevant wisdom in an EIA processes are not limited to scientific knowledge. Gliken J. argues that there are three kinds of information, cognitive, experimental and value-based.

²³ McLaverty, Peter (2002)

²⁴ Glasson, John, Therivel, Riki and Chadwick, Andrew (1999)

²⁵ McDaniels, Timothy L., et al. (1999)

²⁶ Arnstein, S.R. (1969)

²⁷ Rowe, Gene. and Frewer, Lynn J. (2000)

²⁸ McDaniels, Timothy L., et al. (1999)

²⁹ McDaniels, Timothy L., et al. (1999) are emphasising public involvement in participation.

³⁰ McDaniels, Timothy L., et al. (1999), Shepherd, Anne & Bowler, Christi (1997)

³¹ Portney, (1991) as cited in Shepherd, Anne and Bowler, Christi (1997)

³² This view is emphasised in Public Participation in Making Local Environmental Decision (2000) were the most important attributes of participation are better decisions and stronger democracy.

- Cognitive knowledge "... is based on technical expertise and is generated by individuals. This is the type of information presented by scientists and other experts, and involves factual arguments about issues such as nature and extent of potential environmental damage and the methodologies for assessing such damage..."
- Experimental knowledge is "...based on common sense and personal experience and, again, is developed by individuals." This kind of knowledge is comes usually from the residents or users.
- Value-based knowledge is "... moral or normative, is derived from social interests, and is based on perceptions of social value. Such knowledge engenders debates about the "goodness" of activities."³³

According to Glicken J. the inclusion of experimental and value based knowledge raises the importance of stakeholder identification.³⁴ The final decision is "better" when local knowledge and values are included and when expert knowledge is publicly examined.³⁵

The final rationale for participation is instrumental, as successful implementation of a project is far more likely with broad public support.³⁶ Projects carry more legitimacy, and less hostility, if potentially³⁷ affected parties can influence the decision-making process in the end, thus, increasing the likelihood that the project will be implemented and less likely that public opposition will delay the project.³⁸ In other words compliance and support for the project is more likely.³⁹

There are many obstacles to participation, in the EIA process in general. The technology challenge is one of the more apparent ones that is the amount of data and scientific uncertainty.⁴⁰ It is very difficult to present such data to the public and it can make the public even more distrustful.⁴¹ The participants have high hopes towards participation and get frustrated when their demands/opinions are not taken into account.⁴² There are also conflicts between environmental values of different stakeholders and economic approaches. There can also be problematic getting the attention of the public and then to get them to participate when there are so many things that people can spend their time on.⁴³ Additionally, stakeholders self-interests can constitute a problem since their views of the problem and their demands can worsen the condition for other stakeholders.⁴⁴ Lastly NGOs concerns are a double edged sword; on one hand the participation of strong NGOs should represent more forcefully public opinion; on the other side, it increases the free-rider problem that occurs when the public moves back and lets the organized environmental groups present their own agenda.⁴⁵ The following five points have been listed by the UNEP for effective participation; identification of stakeholders, putting forward accurate, understandable and timely information, dialog between the internal and external stakeholders, assess what the public has to say and give feedback about action taken and how the public influenced the decision.⁴⁶ Participation is a complex and problematic process that is constantly working with goal conflicts and inherent problems, but still continues to be embraced, especially in environmental

³³ Glicken, Jessica (2000)

³⁴ Glicken, Jessica (2000)

³⁵ Shepherd, Anne & Bowler, Christi. (1997)

³⁶ McDaniels, Timothy L., Gregory, Robin S. and Fields, Daryl (1999)

³⁷ Pretty et al (1995)

³⁸ Shepherd, Anne & Bowler, Christi. (1997)

³⁹ Shepherd, Anne & Bowler, Christi (1997)

⁴⁰ UNEP (1997) recognizes the importance of putting forward accurate, understandable and timely information to increase the efficiency of public participation.

⁴¹ A common argument against that the Planning Agency accept projects are that because there is scientific uncertainty the precautionary principle should be used, in the meaning that if there are uncertainties then projects should be abandoned. This increases the pressure on the developer to say that things are certain when scientific certainty is difficult to reach when dealing with natural systems.

⁴² Spyke, Nancy Perkins (1999)

⁴³ The problem of getting the public to participate is addressed extensively in: Public Participation in Making Local Environmental Decision. (2000) The Aarhus Convention Newcastle Workshop. Good Practice Handbook. DETR

⁴⁴ Arias (1996)

⁴⁵ Spyke, Nancy Perkins (1999)

⁴⁶ UNEP (1997)

matters.⁴⁷ To sum up it has been shown that participation is by no means an easy concept to deal with and it is important to be aware of the different components that participation includes and the obstacles for participation.

5. Legal Framework and the procedure.

5.1. Historical background of EIA Acts.

Environmental Impact Assessment was first adopted formally in the United States in 1969 as part of the US National Environmental Policy Act of 1969 (NEPA). The legislation has its roots in the growing environmental movement of the 1960's where emphasis was on the right of each person to a healthy environment. NEPA was immediately seen by the environmental movement as a significant vehicle for preventing environmental harm. NEPA is a generally worded law and thus it requires substantial interpretation. Guidelines were put forward by government agencies but much of the strength of NEPA came from early court rulings. Influential lawsuits instigated by the growing environmental movement greatly strengthen the EIA process and caused many projects to be stopped or substantially amended. The way that the United States EIA system was formed by extensive litigations over interpretation and how it works is the main reason why other nation have not used the same form and procedures.⁴⁸ Glasson et al. even state that the flood of early lawsuits with the delays and costs involved was a lesson to other countries on how not to set up an EIA system.⁴⁹

EIA systems have been established in various forms throughout the world in developed countries like Canada in 1973, France in 1976 and later also in less developed countries. The European Union adopted a directive on EIA in 1985. In the 1990 after the break up of Soviet Union many East European countries took up EIA processes and in 1996 more that 100 countries had EIA systems.⁵⁰ These EIA systems, however, vary greatly between countries, some are in the form of mandatory acts or statues like in the EU, in other non-enforceable guidelines have been established. Often the EIA is prepared in an ad hoc manner at the request of funding bodies like the World Bank.⁵¹

5.2. EU legislation.

The gestation period for the EU directive on environmental impact assessment was about eight years, first drafts were made in 1977 but the first to be formally published was not until 1980. Consequently, the final text of the directive was not agreed by the member nations of the EU until July 1985. Reasons for this delay from the first draft to the directive 85/337 on the assessment of the effects of certain public and private projects on the Environment⁵² are many and it would be to simplistic to say that it where just certain states that caused the delay. According to Wathern. P the EIA directive merely provides one example of the more extreme cases of the difficulties involved in formulating and adopting EU policy.⁵³ Since this secondary legislation is a directive, it is in the hands of each member state how it is implemented, therefore, the EIA system has different characteristics in the different member States.

There were two major reasons for the European Economic Community now European Union to establish a uniform system of EIA in all member countries. But to understand them it is necessary to have in mind that the main objectives of the EEC was economic integration, to establish a common market, promote harmonious development of economic activities and raise the standard of living in the Member States.⁵⁴ The member states were, however, also concerned about the state of the physical

⁴⁷ Spyke, Nancy Perkins. (1999)

⁴⁸ Glasson, John. Therivel, Riki and Chadwick, Andrew (1999)

⁴⁹ Glasson, John. Therivel, Riki and Chadwick, Andrew (1999)

⁵⁰ Glasson, John. Therivel, Riki and Chadwick, Andrew (1999)

⁵¹ Glasson, John. Therivel, Riki and Chadwick, Andrew (1999)

⁵² Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the Environment.

⁵³ Wathern. Peter. (1992)

⁵⁴ Craig, Paul and De Búrca, Gráinne (2002)

environment and in the first Action Programme on the Environment of 1973, the EEC advocated the prevention of environmental harm based on pollution prevention at the source and that effects on the environment should be taken into account at the earliest possible stage. Further action programmes of the EU have reinforced this emphasis. Secondly, the EU wanted to “level the playing field” as stated in the aim of directive 85/337/EEC. In other words, it would distort competition between the countries if one Member Country would gain unfair advantage by not having requirement for Environmental Impact Assessment.

As mentioned before the adoption of Directive 85/337 did not result in a uniform EIA system among the member states. Therefore, in 1997 a new directive 97/11⁵⁵ was adopted to amend directive 85/337 aimed at making the EIA system of the Member states conform more to each other. Other major changes introduced in directive 97/11 include more projects being put on the Annex I and II but the main change in content was its emphasis on consultation and participation with the public and obliging competent authority to take into account the results of consultation with the public, and the reasons and considerations on which the decision on a project proposal has been based.⁵⁶

The flexible wording of directive 85/337 gave way to a difference in its implementation by different countries, amendments made in directive 97/11 subsequently reduced many of the differences in the EIA system of the member states.⁵⁷ Public consultation was one of the things that directive 97/11 addressed but still the member states vary considerably in the level of public consultation they require in the EIA process. However many member states go beyond that requirement. In Denmark and the Netherlands the public is consulted during the scoping process. In the Netherlands a public hearing must also be held after the EIS is handed and in Spain the public must be consulted before the EIS is submitted. The Austrian system seems to go furthest by requiring public participation at several stages of the process with citizens groups and the Ombudsman for the environment having a special status.⁵⁸

5.3. Convention on access to information and public participation in environmental matters. (Aarhus convention.)

This new convention is the result of two years work of 38 countries that are members of the UN Economic Commission for Europe and appropriately with participation of many non-state participants that although having observers status participated in the drafting process to an “unexpected degree”⁵⁹. The full name is “Convention on Access to information, public participation in decision-making and access to justice in environmental matters” and it was open for adoption and signing in Aarhus Denmark 25 of June 1998.

The convention consists of three pillars, access to information, public participation in environmental decisions and access to justice. Here attention will be placed on the second pillar public participation in environmental decisions. In article 6 of the convention minimum requirements are set for public participation in whether to permit activities that are listed in annex I to the convention. Annex I is based on Annex I in EIA Directive 85/337/EEC as amended by 97/11/EC. The methods of participation mentioned are; informing the public adequately and effectively, early in the process and to include opportunities for comments from the public. Definition for “public concerned” is the public affected or likely to be affected by, or having interest in, the environmental protection and meeting any requirement under national law.⁶⁰ In articles 6.3 and 6.4 it is stipulated that the participation process must provide sufficient time to inform the public and allow them to prepare and participate effectively at a stage where “all options are still open”. Appropriately in article 6.8 it is stipulated that decisions on

⁵⁵ Council Directive 97/11/EC amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the Environment.

⁵⁶ Glasson, John. Therivel, Riki and Chadwick, Andrew (1999)

⁵⁷ Weston, Joe (1997)

⁵⁸ Glasson, John. Therivel, Riki and Chadwick, Andrew (1999)

⁵⁹ Brady, Katy (1998)

⁶⁰ Article 2.5 Convention on Access to information, public participation in decision-making and access to justice in environmental matters.

proposed projects must take due account of the outcome of the public participation. Iceland signed the convention on the 25th of June 1998 but has still not ratified it. Consequently it is still not formally part of the Icelandic legal system. This aforementioned pillar of the Convention will most likely not require a change in legal framework regarding participation in the EIA process but it can be influential in giving guidance regarding new thinking in regarding participation.

5.4. Introduction of EIA process into Icelandic legal system.

Since Iceland signed the agreement on the European Economic Area (EEA) it has been obligated to incorporate part of European Union (EU) secondary legislation into Icelandic legal system. After signing the EEA agreement a tremendous amount of work was left to make the Icelandic legislation in conformity with the EEA agreement before enter into force on the 1st of January 1994. One of the obligations was to incorporation directives 85/337 on the assessment of the effects of certain public and private projects on the Environment, into the Icelandic legal system. First Icelandic legislation on Environmental impact Assess was accepted in 1993 and came into force on the 1. January 1994. When the EU adopted directive 97/11 it also put the duties on Icelandic government to changes the Icelandic Act so it would be in conformity with the new EU legislation. This lead to a total revision on the EIA Act from 1993, resulting in The Icelandic Environmental Impact Assessment Act no. 106 who entered into force on the 25 of may 2000. The objectives of the Act are stated in article 1, and interestingly, two of three objectives regard co-operation and public participation in the EIA process. The following sections in Article 1 of the EIA Act 106/2000 are as follows:

- “ b. to encourage co-operation of parties with interests at stake and concerned parties with regard to a project which affects the environment;
- c. to acquaint the public with information on the environmental impact of a project which may involve significant environmental effects and on mitigating measures to deal with them and give the public the opportunity to comment and contribute information before a ruling on the environmental impact assessment of a project is issued.”⁶¹

The article emphasis the importance of co-operation, that the public should be acquainted to relevant information and should be given the opportunity to comment and contribute information before a ruling on the EIA of a project.

To look more closely at the issue of participation in the EIA process in Iceland for individual projects it is necessary establish what constitutes the legal framework of EIA in Iceland. Projects that are obligated to go through an EIA according to the EIA Act are stipulated in Annexes I, projects listed in Annex 2 may be subjected to EIA if they can have significant environmental effect. Detailed provisions on the implementation of the Act are found in a regulation nr. 671/2000 on Environmental Impact Assessment (EIA). Other laws important for the EIA process in Iceland are: Planning and Building Act, 73/1997, Public Health and Pollution Control Act, 7/1998, Protection and Hunting of Wild Species Act, 64/1994 and Public Access to Environmental Information Act, 21/1993.

⁶¹ Article 1. EIA Act No. 106/2000

The following Table 2 shows the legal process regarding participation in the EIA, the different steps of the process, who should instigate the participation, who are identified as actors that should participate and what methods of participation are mandatory or suggested.

Table 2 Legal requirement for participation according to the EIA Act, minimum requirement

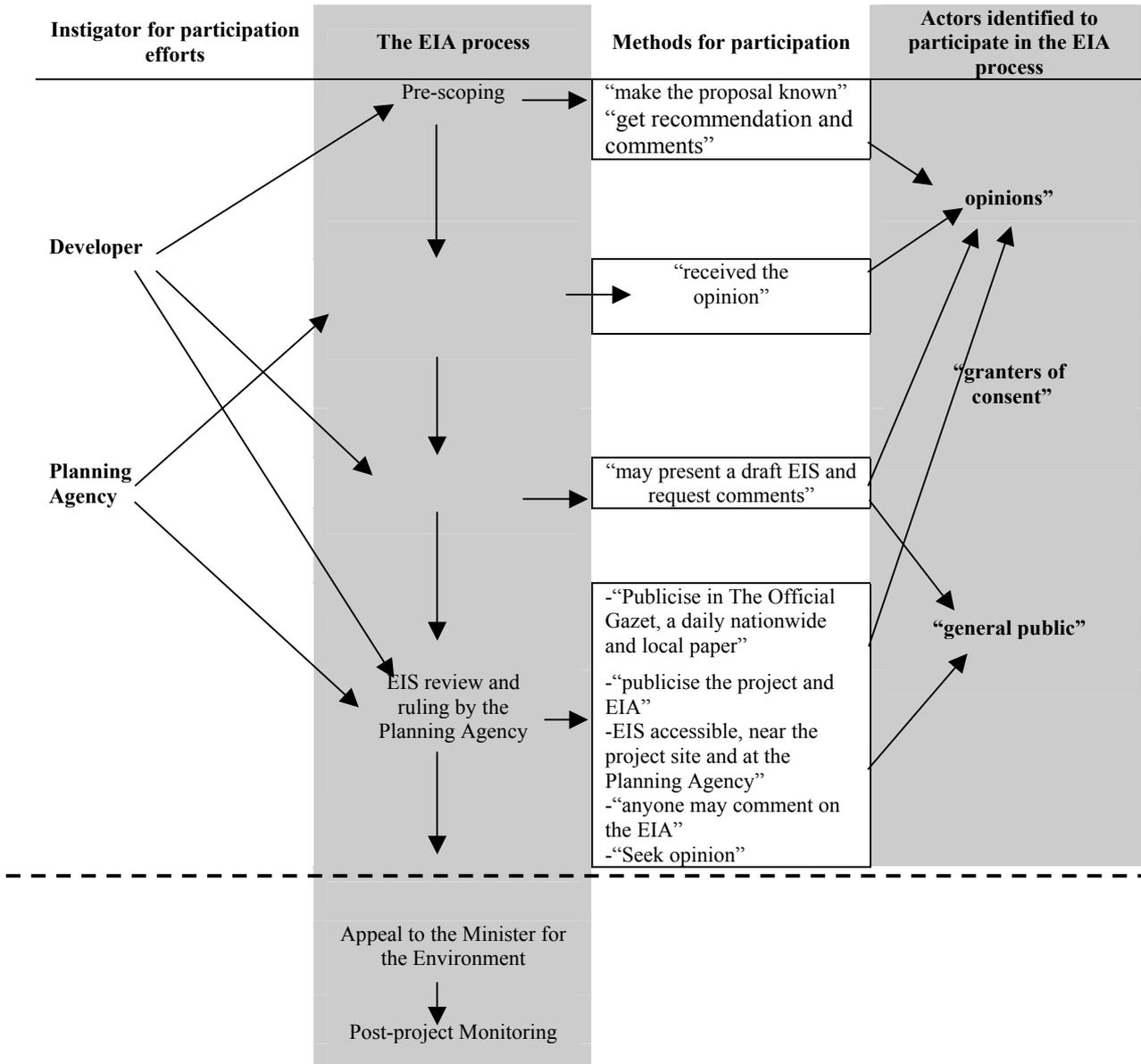


Table 2 illustrates that emphasis is on participation when the EIA has been handed in to the Planning Agency, regulation nr. 671/2000 has had a balancing effect since it puts more weight on participation in the pre-EIA work than the EIA Act. To further explain the minimum legal requirement for participation according to the EIA Act as shown in Table 2 an overview of the major stakeholders and their link to participation is given.

The Developer is a central figure in the EIA process, he starts the process, bears the cost and is responsible for making the scoping document and the EIS. The developer can be according to article 3 in the EIA Act: “ the national government, a local authority, an institution and other legal entities or individuals intending to undertake a project covered by this Act.” The EIA regulation gives further instructions about the role of the developer in the process and emphasises the role of the developer in

introducing the EIA in different stages to other stakeholders. The developer has the obligation to instigate consultation with the Planning Agency as early as possible in the EIA process and on the pre-scoping stage and EIS preparation stage. The developer shall also be the instigator to introduce the pre-scoping document and draft-EIS with the aim of getting comments and recommendations.⁶² The Developer is an internal stakeholder since he is the one that instigates and is responsible for the process.

The Planning Agency is a central actor in the EIA process, also the only stakeholder that the regulation (law) requires that the developer cooperate with. The Planning Agency has many roles according to the EIA Act, it is the main government body in charge of EIA, and the agency gives directions and cooperates with the developer in accordance with article 5 in the EIA regulation. The main role of the Planning Agency is however to make a ruling about whether:

- a. the proposed project can be accepted, with or without conditions, or
- b. the proposed project is opposed due to significant effects on the environment.”

Finally the Planning Agency has the duty to publicise its decision regarding the scoping document and the proposed project and the EIS and to give the public the opportunity to give comments. Planning Agency has many different tasks and likelihood of clashes between them is high. It is even questionable if one government agency can effectively manage so many roles. First the Agency has to cooperate with the developer, give him advice and so forth but in the end the Agency is in the role of the decision maker. It should also be noted that after an EIA has been accepted all changes to former plans are very difficult. Planning Agency can only to make minor changes to its ruling and then just if new information have changed the premises for the project after the publication of the ruling and then only if those changes where not foreseeable when the ruling was published or if the changes are deemed to improve the ruling and comply with the objectives of the EIA Act.⁶³ Although the Planning Agency takes the final decision in the end, the Agency is still here identified as an external stakeholder since it is not the stakeholder that can instigate further participation than the EIA Act stipulates.

The “granters of consent” or licensors are according to the EIA Act “competent authority which grants consent for the project”. In the pre-EIA stage the granters of consent have the duty to uphold that they don’t grant consent for projects that are subjected to an EIA or could be subjected to an EIA according to the criteria’s laid out in Annex 1 or 2.⁶⁴ When the formal EIA process begins the granters of consent usually have the same position as the “parties who are to give opinion”. After the ruling of the Planning Agency the granters of consent have the responsibility to make sure that the project is implemented in accordance with the EIA ruling. In that stage difficulties can arise because many of the licensors have no enforcement mechanism after giving the consent.⁶⁵ Granters of consent are external stakeholders.

The “parties who are to give opinion” are agencies and authorities that are lawfully obligated to give their opinion regarding projects have to go through an EIA process.⁶⁶ Much discussion has been about the role of the parties that are to give opinion. The EIA Act promotes that givers of opinion have a legal obligation to give their opinion to the Planning Agency both when the agency reviews and takes decision regarding the scoping document but also before the agency makes its final ruling. The question has been raised if the developer can demand an opinion from the givers of opinion. In article 8 of the EIA regulation it is stated that the developer shall introduce the scoping document and the draft EIS the parties that are to give opinion and to the public. In article 22 of the EIA regulation pressure is put on givers of opinion to give their opinion as soon in the process as possible, by stating that the givers of opinion have to explain especially if they think there is need for further research. This emphasises the

⁶² Article 8. EIA regulation 671/2000

⁶³ Article 11(3), EIA Act No. 106/2000

⁶⁴ Article 16. EIA Act No. 106/2000

⁶⁵ Article 17. EIA Act No. 106/2000 the ministry of energy as an example

⁶⁶ Article 3 m. EIA regulation No. 671/2000

need to push forward in the process the interaction between the developer and the givers of opinion. It is especially interesting that the parties that are to give opinion must state if they bring up new things when the EIA is at its final stages with the Planning Agency and why they did not point out that thing earlier.⁶⁷ Another interesting thing is that the parties that are to give opinion are to only give opinions about matters in their special field, the rationale behind this is presumably that the government agency has special knowledge in one area but not in others and should therefore not concern itself with matters that lie outside its speciality.⁶⁸ However this fragmentation is not in conformity with the end result that is looking at the proposed project holistically.

The following phrases are also used in the Act “other parties, depending upon the nature of the individual question”,⁶⁹ “Other parties as appropriate”⁷⁰ and “Parties concerned”⁷¹ This grouping is used to indicate that some evaluation has to take place before a decision is taken on who to address. The actors that fall under those phrases are usually granters of consent and givers of opinion, other stakeholders like individuals, that have some formal connection to the decision, could also be included.

The concept “general public” is most commonly used in the Icelandic EIA law and by that stipulating that all have the right to take part in the EIA process. It is only in article 1 of the EIA Act that co-operation among parties with “interest at stake” and “concerned parties with regard to a project which affects the environment” are mentioned.

The Icelandic EIA Act clearly states in the objectives of the law that participation should be increased. The Act does however not state why it is important to include different actors, here called stakeholders in the process, it only gives out minimum requirements regarding the scope of the participation and methods used. The main conclusion to be drawn from this overview is that although it is clearly stated that the one of the aims of the Act is to encourage co-operation, that mainly applies to the relationship between the developer, the Planning Agency, granters of consent and parties that are to give opinion all of them being government bodies except the Developer. The public is seen as a recipient of information about the environmental impact of the proposed project that has the “opportunity to comment and contribute information before a ruling”⁷² rather than a participant in a process which they should have influence over.

6. The two case studies, a description.

This chapter will give an overview of the two case studies, Nordlingaolduveita EIA and Sultartangalina 3 EIA. A short description will be given of the proposed projects, major stakeholders identified and when and how they took part in the Nordlingaolduveita EIA and Sultartangalina 3 EIA.

The two case studies Nordlingaolduveita EIA and Sultartangalina 3 EIA have been chosen in accordance with criteria laid out in chapter 3. The same developer Landsvirkjun proposes both projects. It is however important to notice that the project leaders within Landsvirkjun were not the same nor was the same consulting agency used. Landsvirkjun is a company, jointly owned by the Icelandic state (50%), Reykjavik municipality 45% and Akureyri municipality 5%. It has since 1983 been entrusted with the task of supplying electricity to the whole of Iceland. The company produces, distributes and sells wholesale electricity to local public utilities and power intensive industries. According to Landsvirkjun Act nr. 42/1983 its aim is to promote greater utilization of Iceland's energy resources and to ensure that electricity supply is sufficient to meet demand both now and in the future.⁷³ Currently Landsvirkjun produces about 93% of the total electricity production in Iceland, it is financially independent and has been able to finance development of the power system on its own.

⁶⁷ Article 22(2) EIA regulation No. 671/2000

⁶⁸ Article 22(3) EIA regulation No. 671/2000

⁶⁹ Article 6(2) EIA Act No. 106/2000

⁷⁰ Article 8(2), Article 10(5) EIA Act No. 106/2000

⁷¹ Article 2 and 6(4) EIA Act No. 106/2000

⁷² Article 1. EIA Act No. 106/2000

⁷³ From the official site of Landsvirkjun on line www.lv.is

6.1. Nordlingaolduveita EIA.

Nordlingaalda Diversion is a project to harness the river Efri-Thjorsa by constructing a diversion at Nordlingaalda and the formation of a 29km² reservoir called Nordlingaalda reservoir, which will have a surface level 575 meters above the sea level. The water from the reservoir is then pumped through a 13 km long tunnel to the reservoir Thorisvatn. The aim of this project is to provide an increase in production of electricity, in 5 hydroelectric power plants (one not finished) in the region of the rivers Thjorsa and Tungnaarivers. The developer, Landsvirkjun, values this option, as the most efficient way of providing energy at short notice and it is also believed to be extremely economical. The diversion will increase the energy production capacity of the present system by 760 GWh/year.⁷⁴ The following Figure 2 shows the site of Nordlingaalda, currently and the Figure 3 the proposed diversion and reservoir called Nordlingaalda.



Figure 12 Site for the Nordlingaalda diversion project⁷⁵

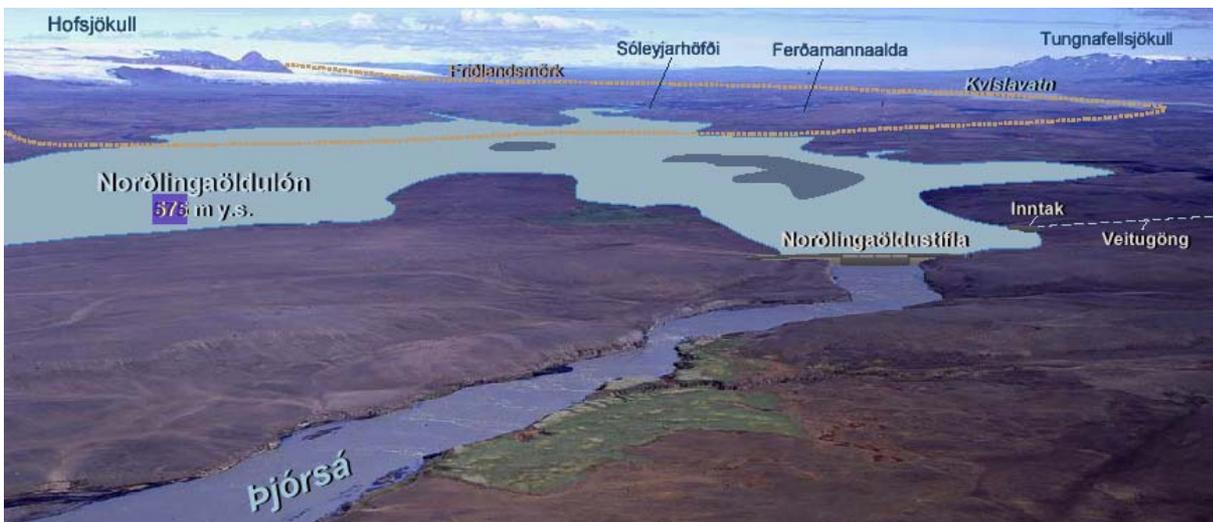


Figure 13 Overview of the Nordlingaalda Reservoir at 575 m. above sea level⁷⁶

⁷⁴ Landsvirkjun. (2002) Nordlingaölduveita sunnan Hofsjökuls. Mat á umhverfisáhrifum. Matskýrsla EIS.

⁷⁵ From the official web site of the Nordlingaalda projece. Available on line, www.nordlingaalda.is

⁷⁶ From the official web site of the Nordlingaalda projece. Available on line, www.nordlingaalda.is

The construction of Nordlingaldaveitu is subjected to EIA in accordance with article 5 of the EIA Act with reference to Item 17, Annex 1. Three main options were investigated in the EIA for the project of Nordlingalda. The difference in those three options regards different surface levels of the Nordlingalda Reservoir i.e. 575m (the main choice of the developer) 578m and 581m above sea level.

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The municipalities that are directly involved in the project are Gnipverjahreppur, Asahreppur Djupahreppur and Skeidahreppur. These municipalities have the authority to licence the project according to the Planning and Building Act no. 73/1997 with later amendments. The project also needs, in later stages, licences from a number of government agencies and ministries. According to the EIA Act no. 106/2000 it is the responsibility of the granters of consent to supervise and ensure that a project complies with the ruling of the Planning Agency.

Before going into further details regarding the EIA, the history of the project will be discussed. Ideas about energy development in the Efri-Thjorsa at Nordlingalda started in the beginning of the 1950s involving among other things a dam at Nordlingalda. It was not however until the 1970s that detailed plans were made. At the time proposed height for the reservoir was 593m above sea level. In 1981 Thjorsarver was registered as a nature reserve, area of the nature reserve is showed with dotted lines in Figures 2 and 3. In 1987 an exceptive clause concerning permission for Landsvirkjun to construct a dam at Nordlingalda forming a reservoir with a surface level 581m above sea level was granted. Providing that research shows the development will not inappropriately diminish the nature conservation value of Thjorsarver.⁷⁸ In 1981 the developer Landsvirkjun signed a contract with the Institute of Biology at the University of Iceland to conduct research on the area for over a decade.

The project of Nordlingaldaveita has been on the drawing table for many years, however the formal EIA process for Nordlingaldaveita started according to the developer in September 2001 when the scoping document was sent to the Planning Agency by the developer as shown in Table 3.

Table 3 Main steps of the Nordlingaldaveitu EIA⁷⁹

Main steps of the EIA process	Sept. 2001	Oct. 2001	Nov. 2001	Dec. 2001	Jan. 2002	Feb. 2002	Mars 2002	Apr. 2002	May 2002	Jun. 2002	July 2002
Scoping doc. Review and decision by the Planning Agency	█										
EIA report preparation and writing			█								
EIS review and ruling of the Planning Agency								█			

In the time frame of a project that supposedly has a lifetime from about 60-180 years⁸⁰ the, EIA process took a very short time. The time from when the scoping document was sent to the Planning Agency until the ruling of the Planning Agency on the 12th of August 2002, was less than one year. The Planning Agency in its ruling accepted a reservoir in both 578m and 575m over sea level since there is not a considerable difference in the environmental impacts in those projects with conditions.⁸¹ The right to appeal this decision to the Minister for the Environment was until the 18th of September 2002. The Minister for the Environment received complaints but has not ruled on them

⁷⁷ Landsvirkjun. (2002) Nordlingaldaveita sunnan Hofsjökuls. Mat á umhverfisáhrifum. Matskýrsla EIS.

⁷⁸ Notice no. 507/1987 Thjorsarver Nature Reserve

⁷⁹ From the official web site of the project. Available at www.nordlingalda.is

⁸⁰ Memorandum dated 3. July 2002 To Eysteins Hafberg, Landsvirkjun. From Sigurdi Gardarssyni VST.

⁸¹ Nordlingaldaveita sunnan Hofsjökuls. Ruling of the Planning Agency regarding the EIA of the Project. 12. August 2002

Many different actors took part in the EIA process of Nordlingaölduveita. In accordance with stakeholder theory stakeholders involved in the EIA process of the proposed project were identified. Stakeholder is defined here as an individual or group influenced by – and with ability to significantly impact (either directly or indirectly) – the topical area of interest.⁸² Stakeholders that took part in the EIA process at different stages of the process were identified as shown in Appendix II, divide into internal and external stakeholders, how they took part in the process, who instigated the participation and what methods were used for participation. An analysis of the data gathered and showed in Appendix II shows that many stakeholders are taking part in the process in different periods. This is in accordance with the EIA Act which encourages stakeholders to get involved in more than one stage of the process. In connection with discussion on the different objectives of taking part in an EIA process at different stages it must be seen as positive that stakeholders take part in more than one stage.

It is stated in the scoping document for Nordlingaölduveita EIA that emphasis, regarding introduction of the project and participation, would be on the introduction of the scoping document and the EIS. While work will be done on the EIS, participation will be sought with “givers of opinion”, interested parties, the public and the Planning Agency. It is also stated that it would be sent to the “givers of opinion” and other parties as appropriate for introduction and to give them the opportunity to comment on it. Furthermore the project, would be introduced on the internet where the public could comment on it. The developers main emphasis regarding participation is by giving information. Efforts for participation were extensive after the EIS was handed in to the Planning Agency. The Advisory committee was established in the pre-scoping stage, which consisted of members from 4 municipalities and representatives from the developer and the engineering office. They met for the first time on the 3rd of September 2001 with the last meeting on the 23rd of April 2002.⁸³ When the EIS had been handed into the Planning Agency the developer introduced the proposed project and the EIS by among other things sending in leaflets to every home in the 4 municipalities near to the project. Introductory videocassettes and a Digital Disk were available for interested parties. Further description on the participation methods used is in Appendix II. In accordance with the law on EIA in Iceland the public, givers of opinion and granters of consent were given the opportunity to hand in written comments. Since the ruling of the Planning Agency regarding the project of Nordlingaölduveita the conflicts have just been escalating. The conflict reached new heights when the discussion of whether the developer had pressured scientist to show “ the right result” was discussed in the Icelandic Parliament.⁸⁴ No consensus is foreseeable regarding the issue and it is unlikely that the expected ruling of the Minister for the Environment will resolve the conflict.

6.2. Sultartangalina 3 EIA.

The proposed project Sultartangalina 3 is a new 400kw transmission line from Sultartangi Power station in the south of Iceland to Brennimelur substation. Sultartangalina 3 is going to be 120 km long and the plan is that 345 steel masts will be build, each about 21-40 meters in height at 350 m intervals. The plan is to build the line between 2003 and 2005. It is intended to supply electricity for the southwest part of the country, mainly in connection with the proposed expansion of the aluminium plant Nordural, but also as a part of a 400 kV electricity transmission net to the southwest part of Iceland. The planned transmission line crosses ten municipalities. The transmission line is mainly situated in the central

⁸² Engi and Glicken, (1995) as cited Glicken, Jessica (2000)

⁸³ 5 meetings were held in the period.

⁸⁴ Morgunblaðið 12.11.2002, Mat á umhverfisáhrifum Norðlingaölduveitu í þeim farvegi sem lög mæla fyrir um. (Translation. Daily newspaper. Nordlingaölduveita EIA in the process that the law require.)

Morgunblaðið 11.11.2002, Segjast hafa sýnt fram á að umhverfismatið var unnið með heiðarlegum hætti (Translation. Daily newspaper. Claim to have showed that the EIA was done honourably)

Morgunblaðið 11.11.2002, VG vill að umhverfisnefnd fundi með vísindamönnum um Norðlingaölduveitu (Translation. Daily newspaper. Green party wants the environmental committee of the Parliament to meet with scientist regarding Nordlingaölduveitu.)

highland, but crosses also areas where agriculture and recreational activities dominate. The construction of the transmission line is a delicate matter especially since it goes over such a large area and through many municipalities. Overview of the different options addressed in the EIA is shown in Figure 4. After the EIA process the developer has to get permission from those municipalities and changes have to be done to the master plans for all the municipalities. The Planning Agency issued on the 19th of July 2002, a ruling regarding the EIA of the proposed project Sultartangalina 3 and accepted all options that the developer proposed with conditions.⁸⁵ The extension to issue an appeal to the Minister for the Environment was until the 23rd of August 2002, but no appeal was issued. An overview of the Sultartangalina 3 EIA process is given in the following Table 4.

Table 4 Main steps of the Sultartangalina 3 EIA process

Main steps of the EIA process	Jun. 2001	July 2001	Aug. 2002	Sept. 2002	Okt. 2002	Nov. 2001	Dec. 2001	Jan. 2002	Feb. 2002	Mars 2002	Apr. 2002	May 2002	Jun. 2002	July 2002
Pre-scoping	█													
Scoping doc. Review and decision by the Planning Agency		█												
EIA report preparation and writing				█										
EIS review and ruling of the Planning Agency												█		

From the beginning it was evident that Sultartangalina 3 would be a very controversial project. Before the scoping document was ready the developer had already received three written comments and one petition with the names of 505 inhabitants and other interested parties from the municipality of Hvalfjardarstrandarhreppi. The Developer then had an open meeting to introducing a draft-scoping document in Hvalfjardarstrandarhreppi and Biskupstungum the two municipalities most affected.⁸⁶ Also 12 municipalities, 17 governmental agencies and ministries, owners of farms, owners of summer houses near the line and many other NGOs and interested parties were sent the scoping document or a letter saying where it could be reached as shown in Appendix 2. The above-mentioned parties were invited to send comments, resulting in the developer receiving 34 written comments.

The developer states in the scoping document that was sent to the Planning Agency that the project is for clarity sake divided up in 5 parts, each containing few options that are available as shown in Figure 4.

⁸⁵ Sultartangalina 3, 420 kV Sultartangi-Brennimelur. Ruling of the Planning Agency regarding the EIA of the Project.

⁸⁶ Meetings held in Hlodum í Hvalfjardarhrepp 8 and 9 of jun001 and Aratungu í Biskupstungum 15 and 16 june. 2001, also Appendix III.

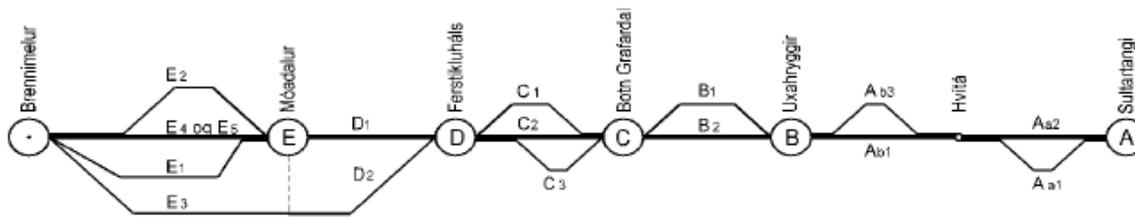


Figure 14 Different options in the 5 different parts of the 400kV transmission line Sultartangalína 3.⁸⁷

The developer also stated that they did not intend to decide which was their main choice before the EIS would be handed in to the Planning Agency. Project leaders had many “one on one” meetings and phone calls with affected farmers and other landowners with special interests before submitting the scoping document to the Planning Agency. When working on the EIS all affected municipalities were offered a meeting with the project leaders. After the submission of the EIS to the Planning Agency, open meetings where the findings of the EIS were introduced, as shown in Appendix II, especially the first choice of the developer. All in all there was much emphasis on participation in the early stages of the EIA process and the developer identified stakeholders. Different kinds of participation methods were used, giving information, consultation and interaction methods. Overall, the EIA of Sultartangalína 3 can be viewed as a success, it addressed opposition and conflicts as soon as they came up. Consensus was reached and the end result was not appealed to the Minister for the environment.

7. Comparison of cases and legal framework.

In this chapter the two case studies Nordlingaolduveita EIA and Sultartangalína 3 EIA will be analysed in the context of the legal framework. Data used in this analysis consists of primary data from the two case studies, results from the questionnaires, peer-reviewed literature and other secondary data.

When dealing with complex systems, it is necessary to have a holistic approach and a clear understanding of the linkages between the different components and how they reinforce or balance each other. The main elements affecting participation in the EIA process in the two cases studies are presented in a Causal Loop Diagram (CLD)⁸⁸ in Figure 5 so as to give a more holistic view of the process.

⁸⁷ Landsvirkjun. (2002) Sultartangalína 3. Mat á umhverfisáhrifum. Matskýrsla EIS.

⁸⁸ Causal loop diagram CLD shows a feedback relationship in a closed-loop circle that has cause and effect. The two feedback processes are marked by R, that is reinforcing loop which are “engines of growth” that can accelerate in both negatively and positively and B: balancing feedbacks, that are stabilizing, push a condition in one direction and it will bounce right back. Bender. Michael J. Simonovic, Slobodan P. (1996)

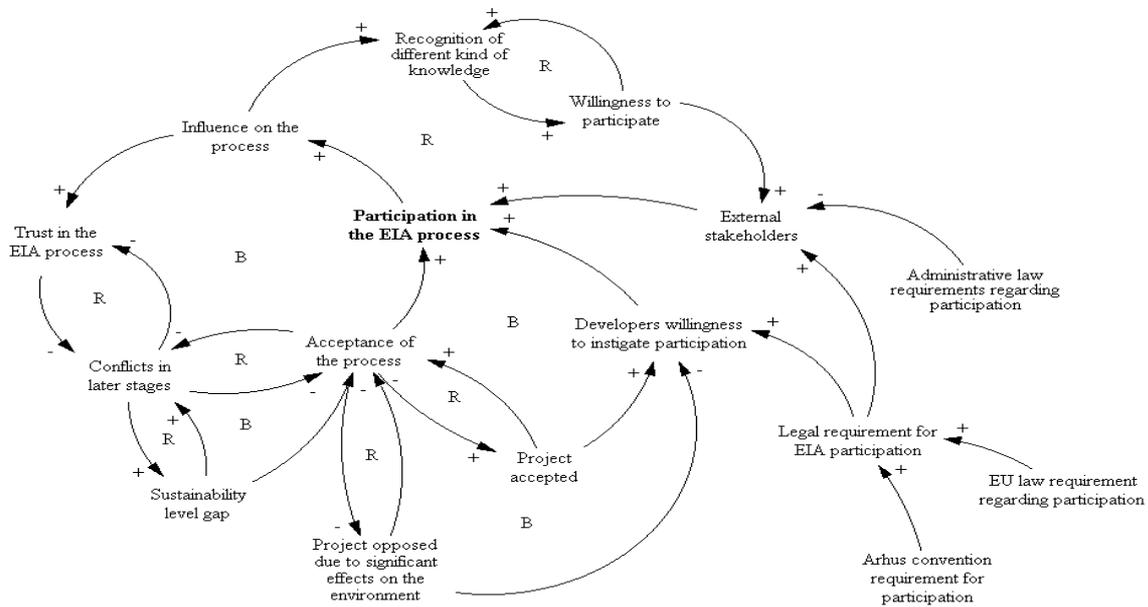


Figure 15 CLD of the participation in the EIA process

It is proposed, as shown in Figure 5, that participation of external stakeholders will affect how much influence they have on the process. The more influence external stakeholders have on the process, the more they are willing to participate, therefore reinforcing the process. How influential stakeholders are in the process will also increase trust in the process and reduce likelihood of conflicts in later stages. Less conflict will increase the acceptance of the process that can lead to the decision of the Planning Agency to oppose the project, due to significant effects on the environment, or it can be accepted. More acceptance of the EIA process will reduce the likelihood of the project being opposed. It is proposed that the developer’s willingness to participate is mainly influenced by the acceptance of the project, the success of the project and the legal requirements for participation. Each link will be further discussed in the following sections of this chapter.

7.1. The process of participation.

7.1.1. Participation, influence and willingness of external stakeholders to participate.

It is proposed that participation of external stakeholders in the EIA process will lead to an increase of the external stakeholders influence in the process. The starting point for the analyses is to look at who are the external stakeholders and what methods were used to get external stakeholders to participate in the EIA process, and the influence they have on the process, as shown in Figure 6. The recognition of different kinds of knowledge will increase the stakeholders willingness to participate. Participation in the EIA system is mandatory according to the Icelandic EIA Act. The developer is mainly responsible for instigating participation in accordance with the EIA Act as discussed in chapter 3, and the

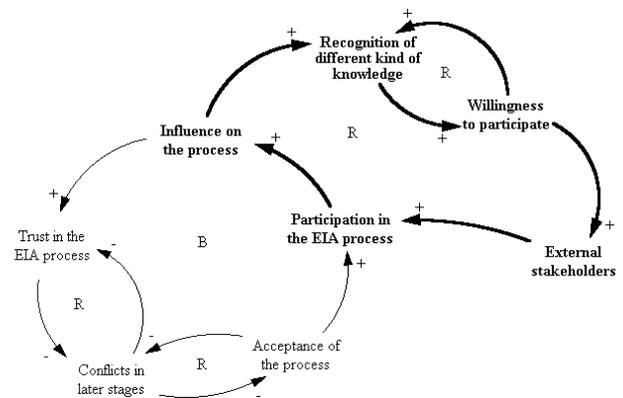


Figure 16 CLD showing participation of external stakeholders,

developer has, from an instrumental view of participation, also most to gain.

Identification of stakeholders as shown in Annex II and III was done by first establishing the division between the internal and external stakeholders. It is proposed that the developer and those who work directly for him are internal stakeholders since they have the power to instigate participation beyond the requirement of the EIA Act. External stakeholders are grouped first in stakeholder groups and then into individual stakeholders. When identifying stakeholders in stages were the Planning Agency has the instigating powers for participation, the stakeholders are grouped in accordance with the EIA Act. Only those stakeholders that took part in the process at each stage are identified other stakeholders that could or should have been addresses in the EIA processes of the two case studies are outside of the scope of the thesis.

There are many different methods available to get external stakeholders to participate in an EIA process.⁸⁹ The Icelandic EIA law gives minimum requirements for both participation efforts and what methods should be used. The main method is to advertise that information is available and that all have right to send in written comments. Some external stakeholders like “givers of opinion” get the documents sent to them with a request for opinions. In the two case studies many other methods of participation were used. The following Table 5 shows the different methods used for participation in the two case studies.

Table 5 Methods for Participation, at the bottom the lowest level of participation and the highest at the top.

Ladder of participation	Methods used for participation	Nordlingaolduveita EIA	Sultartangalina 3 EIA	Legal requirement
Consultation	Consultation between the developer and the Planning Agency	x	x	x
Consultation	One-on-One talks to external stakeholders		X	
Consultation	On-site-walks		X	
Consultation	Open houses	X	X	
Consultation	Open introduction meeting	X		
Consultation	Written comments	X	X	X
Consultation	Oral comments from all stakeholders	X	X	
Consultation/ Informing	Advisory committees	X		
Informing	Open access to scoping document	X	X	X
Informing	Open access to EIS	X	X	X
Informing	Brochures	X		
Informing	CD	X		
Informing	Video cassettes	X		
Informing	Information notices in newspapers	X	X	X

The term “One-on-one” meeting is used here for when developer has talks or meetings with few individuals. In the EIA process of Sultartangalina the developer instigated these “one on one” meetings with affected people living near the proposed power line. In “Open houses” introductory material is on display and people are invited to examine the material and ask questions or give comments to internal stakeholders who are present. Other methods mentioned are self-explanatory. The Table shows that

⁸⁹ Exampels of different methods proposed in the literature: Ramanathan, R. (2001) Todd, Susan (2001), Marttunen, Mika (1995) Stave, Krystyna A. (2002)

both projects fulfilled the legal requirements for participation in the EIA process.⁹⁰ The different participation methods are categorized in accordance with Arnsteins ladder of citizen participation, the highest form first and the lowest form of participation last.⁹¹ The Table 5 shows that in Sultartangalina 3 EIA more participation methods used were of a higher level of participation. While in the Nordlingaölduveita EIA more methods were used but not of as high a level when measured on the Arnsteins ladder of participation. Further description of the participation methods and who instigated them are in Appendix 2 for Nordlingaölduveita EIA and Sultartangalina 3 EIA in Appendix 3. In both case studies the method most commonly used consisted of giving information to external stakeholders about the project and to offer ways for external stakeholders to give comments back. In the Sultartangalina 3 EIA process the methods used were more participatory and interactive like “One-on-one” talks or meetings with farmers and landowners that were directly affected by the proposed project. The initial idea behind the Advisory committee in the Nordlingaölduveita EIA was to have a high level of participation. The Advisory committee that materialised was however mainly established for the purpose of being informative. The Planning Agency only instigated participation in accordance with legal requirements and did not go beyond it, which is in accordance with that the developer is responsible for the EIA process of proposed projects. In both case studies the developer did go beyond legal requirement regarding the methods of participation but it should be remembered that the legal framework puts forward minimum requirements but encourages further methods of participation. However, the number of methods used does not directly reflect the amount of influence the stakeholders had on the process in the cases.

It is proposed that the method and level of participation is a determining factor of how much influence the participants can have in the process. In the Nordlingaölduveita EIA the main methods used were in the form of providing information and bringing forth the opportunity for external stakeholders to give comments. It is stated in the scoping document as sent to the Planning Agency, that the main emphasis regarding participation was to “induce discussion about various important matters of opinions regarding the project.”⁹² The stated aim of the Advisory committee was to observe the work regarding the EIA, to advise the committee in charge of the project about publicity and to ensure that the relations to the local people while work on the project took place.⁹³ Overall there was little indication of how the developer perceived the aims that were going to be achieved by using different participation methods and how participation overall could benefit the process.

In the scoping document for the Sultartangalina 3 EIA as handed to the Planning Agency, it is stated that a draft scoping document had already been introduced and consultation taken place with givers of opinion, the public and the Planning Agency. Even before the scoping document was introduced to The Planning Agency, a number of written comments and a petition had been presented to the developer. From the scoping document, it is apparent that the developer decided to act immediately on the emerging uproar instead of waiting while work on the EIS statement was done or later. However, the scoping document implies that the external stakeholders can just or mainly give written comments but the developer used “one-on-one” meetings with external stakeholders that are directly affected, extensively. Another interesting point is that the scoping documents sets forward a variety of options and the developer clearly states that a decision about what is the developers main choice had not been taken, also that it would not be taken until all studies⁹⁴ were in and the EIS is presented to the Planning Agency. This statement gave a clear signal to all stakeholders that many options were still on the table

⁹⁰ In its decision regarding the scoping document of Nordlingaölduveita EIA the Planning Agency noted that the developer did not present plans for participation that should be instigated in the EIS preparation stage and when the EIS review and ruling of the Planning Agency stage.

⁹¹ Arnstein, S.R. (1969)

⁹² Landsvirkjun. (2002) Sultartangalina 3, 420 kV Sultartangi-Brennimelur. Scoping document Translated from Icelandic “stuðla að umræðu um ýmis mikilvæg álitamál er varða framkvæmdina.

⁹³ Landsvirkjun (2002) Nordlingaölduveita sunnan Hofsjökuls. Scoping Document. Translated from Icelandic “Markmið hópans er að fylgjast með matsvinnunni, vera verkefnisstjórninni til ráðgjafar um almennar kynningar og tryggja tengsl við heimamenn.

⁹⁴ Translation difficulties, the word “athugun” could also imply comments from external stakeholders.

and that their contribution could make a difference, although the option of building no power line at all was obviously not a preferred option of the developer. Many authors have noted that a very important part for public participation is the extent of influence that participants have on the process,⁹⁵ and that stakeholders feel discounted and/or alienated when their participation is not taken seriously.⁹⁶ The preferred outcome should always reflect the interest and concern of all affected stakeholders and developers.⁹⁷ It is also of great importance that the stakeholders know how their input will affect the final decision since it will show them how influential they are and therefore increase the willingness to participate.⁹⁸ In Sultartangalina 3 EIA it is clearly stated in the EIS that the preferred choice of the developer was after taken into consideration all the different views in the EIA, in the Nordlingaölduveita EIA the developer states that because of the EIA work of the developer the project has been changed so as to work against or to make sure that serious negative environmental impact will not occur.⁹⁹

Regarding Sultartangalina 3 EIA, it is interesting to note that answers received from the questionnaire indicate that the external stakeholders did not think that they were influential in the process. Majority of external stakeholders viewed themselves of having some to little influence in all stages of the Sultartangalina 3 EIA. When comparing the answers from the two questionnaires it is interesting that there is not a significant difference in how external stakeholders perceive their influence on the EIA processes. Main methods used were by giving written and oral comments. The only external stakeholder that view their influence as high are those who identified themselves as others, and from comments given they are mostly employees of the Planning Agency. The internal stakeholders often viewed themselves as being very influential in the stages of the EIA were they have the instigating powers. The conclusion is that the majority of external stakeholders did view their influence of being some to little in all stages of the process in both case studies.

Many methods are available to include external stakeholders in the EIA process for a project but they have different value regarding reaching the aim of increasing the influence that the external stakeholders have on the process. The more influence the external stakeholders have on the process the more their willingness to participate will increase and by that reinforcing the behaviour of external stakeholders to participate in the EIA process. Another way of increasing external stakeholder influence in the process is by recognition of different kinds of knowledge than scientific knowledge as shown in Figure 6.

Substantive rationales for participation relates to accepting the need for other kind of knowledge than cognitive knowledge. Although an EIA process is in its core based on “sound science”, EIA can never be strictly objective. There are two main reasons for this, first that the science is not as straightforward as some presume. In EIA, the decisions and choices assessed involve scientific uncertainty, ecosystem dynamics and complex scientific and technical issues.¹⁰⁰ Secondly, every decision has to address value conflicts that are non-scientific, non-quantifiable values and social dynamics.¹⁰¹ Also when dealing with risk in environmental decisions it has to be based on what is acceptable and that in turn is based on public values.¹⁰² The need for knowledge other than cognitive or technological knowledge, is apparent because problems cannot be solved in the realm of “sound science”. Furthermore, from a democratic point of view the public has an inherent role in decision-making that can affect them,¹⁰³ especially if the stated aim of the proposed project is to increase public

⁹⁵ Hampton, Greg (1999)

⁹⁶ Glicken, Jessica (2000)

⁹⁷ Hampton, Greg (1999)

⁹⁸ Hampton, Greg (1999)

⁹⁹ Landsvirkjun (2002) Nordlingaölduveita sunnan Hofsjökuls. Mat á umhverfisáhrifum. Matskýrsla. EIS.,

Landsvirkjun (2002) Sultartangalina 3. Mat á umhverfisáhrifum. Matskýrsla. EIS.

¹⁰⁰ Wirth, David A. (1996), Stave, Krystyna A. (2002)

¹⁰¹ Stave, Krystyna A. (2002)

¹⁰² Bacow & Wheeler (1984) as cited in Shepherd, Anne and Bowler, Christi (1997)

¹⁰³ Mitcham, Carl (1997)

welfare or public good. There is a need for including experimental knowledge and value-based knowledge in the EIA process.¹⁰⁴

In the EIS of the proposed project of Nordlingaolduveita, the discussion was very centered about “science”, scientific certainty and how to interpret scientific knowledge.¹⁰⁵ Comments given to the Planning Agency had statements that implied that since a respected scientist in one field made claims that the project was not “acceptable”, therefore the issue of its environmental impact generally was also not acceptable.¹⁰⁶ The EIA Act in Iceland clearly states that many other aspects that natural science are of importance when addressing if impacts are acceptable or not. All in all, the discussion in the EIA process of the project was, and is still, on a very scientific level. External stakeholders, like the public, therefore have difficulties in challenging the validity of the claims of the scientists since they have not the scientific expertise.¹⁰⁷ Proposals and discussions have to be less threatening, technology depended and more readable so that external stakeholders will know that their knowledge is also valuable. Participants will generally distrust a process that regards information that they provide not equally valuable as the knowledge provided by the scientists.¹⁰⁸ In the context of the Nordlingaolduveita EIA, it is apparent that value-based knowledge and experimental knowledge is important since one of the biggest problems to address in the EIA is whether the proposed project will lessen the value of the Nature Reserve of Thjorsarver.

In the questionnaire the participants were asked to mark two statements regarding the value of scientific information in the process. The answers received are shown in Table 6. and indicate how the internal stakeholders and external stakeholders regarded the influence of scientific information.

Table 6 Showing the high belief both internal and external stakeholders have on the importance of scientific information.¹⁰⁹

Questions regarding the importance of scientific information in the EIA process	Nordlingaolduveita EIA		Sultartangalina 3 EIA	
	Internal stakeholders N=13	External stakeholders N=26	Internal stakeholders N=13	External stakeholders N=26
3. D. Final decision in the EIA process is “better” when local knowledge and values are included and when experts knowledge is publicly examined	Agree 75 %	Agree 65 %	Agree 88 %	Agree 100 %
	Disagree 25 %	Disagree 35 %	Disagree 12 %	Disagree 0 %
4. F. Public participation delays the implementation of a project and force the project to be revised.	Agree 85 %	Agree 62 %	Agree 63 %	Agree 69 %
	Disagree 15 %	Disagree 38 %	Disagree 37 %	Disagree 31 %

The answers from the questionnaire as shows in Table 6 shows that both internal and external stakeholders regard gathering of scientific information as the most important thing but also that the final

¹⁰⁴ Glicken Jessica (2000)

¹⁰⁵ Memorandum dated 04.07.01 regarding answers of local people to participate in a participatory method. One point was that they themselves had access to scientists and that after listening to them they where sure that the environmental impact of the project would be negative. Also that feelings did not matter most but that respected scientists have argued negative impact.

¹⁰⁶ Of 39 participants in the questionnaire for Nordlingaolduveita EIA 7 identified themselves as independent scientists as shown in Table 1.

¹⁰⁷ Palerm, Juan R. (2000)

¹⁰⁸ Glicken, Jessica (2000)

¹⁰⁹ The answers ”strongly agree” and ”agree” are taken together and shown as ”agree” in the table. Answers “disagree” and “Strongly disagree” are also taken together as “disagree”.

decision will be “better” if local values and knowledge is included and the knowledge of the experts publicly examined.

Both case studies fulfilled the requirement for participation as stipulated in the EIA. The developer in both case studies instigated participation with different stakeholders beyond the legal requirements by using many different participation methods. Some methods used in Sultartangalina 3 EIA were on a higher level in the ladder of participation than methods used in Nordlingaolduveita EIA, giving indications that it is not the amount of methods used but rather what methods used that determine how influential external stakeholders are in the process. The answers for the questionnaire do not indicate a difference in how external stakeholders view their influence between the case studies. A way to increase the influence of external stakeholders in the process is acknowledge other kinds of knowledge than scientific knowledge. If a discussion in an EIA process just revolves around scientific knowledge it will discourage stakeholders that have not the scientific knowledge to take part in the process.

7.1.2. Increasing trust in the EIA process by empowering the stakeholders.

It is proposed that an increase in the influence of external stakeholders will lead to increased trust in the process, which will reduce the likelihood of conflict.

The main rule is that trust is hard won and easily lost. Methods such as decide-announce-defend (DAD), in which experts make decisions and then try to tell people that this decision is good for them, will not increase trust between stakeholders and does not lead to a long lasting support for decisions.¹¹⁰ It is not just about the trust between the developer and external stakeholders, it is also about building up trust or understanding of concerns and values between the external stakeholders. Thus increasing rather than decreasing unity regarding the proposed project by changing attitudes of participants as they learn from each other.¹¹¹ For example local people could argue that the proposed project will increase their welfare and by that giving a scientist the opportunity to recognize other values and vice versa.

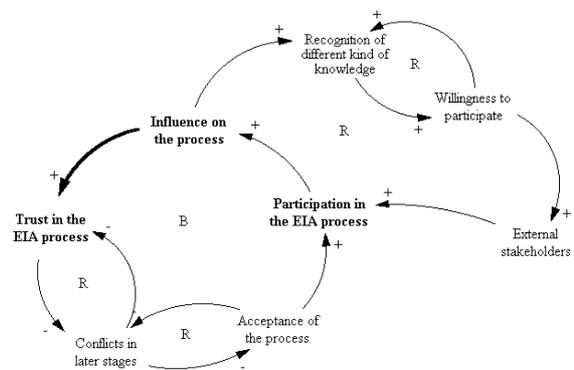


Figure 17 CLD showing the link between influence and trust in the EIA process

and vice versa.

The need to develop and nurture a trusting relationship can be done by honest negotiations and by replacing distrust of the project with open communication, credibility and trust.¹¹² It is a part of developing a sense of project ownership that can carry over to later stages of the project. In Sultartangalina 3 EIA a distrust of the project was apparent when a petition was handed in to the developer before a scoping document was presented to the Planning Agency. The developer then started to introduce the proposed project and build up trust with the affected stakeholders. Distrust was recognized and dealt with, and trust was established in the end.¹¹³ The importance of building trust is of increased value for a developer, like Landsvirkjun, that will propose more projects in the future in accordance with its duties laid out in Landsvirkjun Act. Trust is here both in short term, that is within the EIA process but also to the next project, having in mind that trust is hard won and easily lost.

¹¹⁰ Stave, Krystyna A. (2002)

¹¹¹ Palerm, Juan R. (2000)

¹¹² Shepherd, Anne and Bowler, Christi (1997)

¹¹³ Bier, V. M. (2001)

7.1.3. Conflict in later stages.

Participation is also perceived as a means to an end, that it is the instrumental aspect of participation. By applying participation there will be less conflict in later stages and more acceptance of projects. This parameter is important both regarding conflicts in later stages within the EIA process but as important is the conflict in later stages after the EIA process is over. Conflicts that are not resolved in the EIA stage will often just come up again when applying for permits or in the implementation stage of the project.

Conflict can be expected in every EIA process, the conflict in itself should not be avoided, but dealt with in a constructive way. The stakeholders have to know the pros and cons of the available options and methods regarding how to address them. Conflicts can be addressed before documents are prepared and decisions are made¹¹⁴ as in the Sultartangalina 3 EIA, where there apparent conflicts were dealt with before going to the next step. The following Table 7 shows an interesting difference in how the internal stakeholders of Nordlingaolduveita EIA and Sultartangalina 3 EIA perceived the participation efforts in the processes.

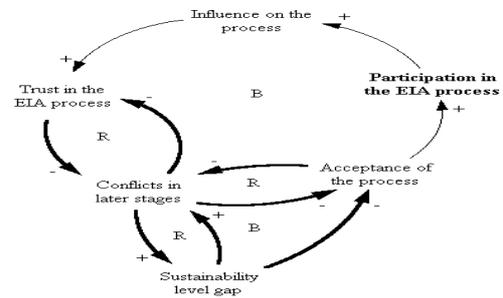


Figure 18 CLD showing conflict and sustainability level gap

Table 7 Internal stakeholders view of participation efforts in Nordlingaolduveita EIA and Sultartangalina 3 EIA.¹¹⁵

Questions:	Strongly agree		Agree		Disagree		Strongly disagree	
	Nordlinga-olduveita	Sultart. lina 3	Nordlinga-olduveita	Sultart. lina 3.	Nordlinga-olduveita	Sultart. lina 3	Nordlinga-olduveita	Sultart. lina 3
4. C. The developer had clear goals with public involvement in the EIA	0 %	50 %	77 %	36 %	8 %	13 %	8 %	0 %
4. D. Developer identified interested parties, their concerns and values surrounding the proposed development.	15 %	88 %	39 %	13 %	39 %	0 %	0%	0 %
4. E. All interested parties were given the opportunity to participate in the EIA process.	54 %	75 %	31 %	25 %	0 %	0 %	8 %	0 %
4. F. Gathering of scientific knowledge about the project and affected area is the most important thing in the EIA process.	7.5 %	75 %	54 %	25 %	0 %	0 %	15 %	0 %

This data acquired from the questionnaires indicate a difference in how the internal stakeholders in the two case studies thought about how they handled the participation process. The internal stakeholders that took part in the EIA of Sultartangalina 3 are far more positive towards their own participation efforts than the internal stakeholders in Nordlingaolduveita EIA. In conjunction with what

¹¹⁴ Shepherd, Anne and Bowler, Christi (1997)

¹¹⁵ Internal dropout in the questionair is regarding Nordlingaolduveitu EIA 4.C 8%, 4.D. 8 %, 4.E 8% ,and 4.F. 8%, Sultartangalina 3 4.C 0%, 4.D.0% 4.E 0% and 4.F 0%

has been said earlier about the difference in the participation method used, it can be said with some confidence that the internal stakeholders in Nordlingaolduveita EIA recognized that the participation process was not a success.

As shown in Figure 8 it is proposed that conflicts in later stages are related to the gap in sustainability levels that different stakeholders see as acceptable. The concept of sustainability is a difficult one as discussed in chapter 2. It is used here as encompassing social, economic and environmental concerns. Therefore a decision is a sustainable one if it integrates social, economic and environmental issues and finds a sustainable solution to the problem.¹¹⁶ What is the right balance between these issues when taking a decision is one factor that fuels conflicts regarding proposed projects, here called the level of sustainability gap as shown in Figure 8. Reaching this balance is one of the aims of the EIA process. An example of how differently stakeholders view sustainability is that Landsvirkjun, the developer, views his actions in Nordlingaolduveita project as sustainable since it increases renewable energy and by that lessens the strains of non-renewable energy sources. While other stakeholders see the construction of the dam and the reservoir as destroying an important nature reserve, which has intrinsic value and should not be destroyed.

Recent examples show how unsolved conflicts escalate, like regarding the highly controversial project of Karahnjukavirkjun¹¹⁷ where those who are against the project keep on campaigning against it with variety of actions. Icelandic NGOs have also asked for international support to influence the negotiations between the Landsvirkjun who produces the energy and a potential buyer ALCOA with the aim of trying to influence them to not make a deal with Landsvirkjun and the Icelandic government. In the case of the Nordlingaolduveita EIA conflicts have just been escalating. Now the conflict has even gotten the attention of the parliament, which is unusual when the minister for the environment has not made a ruling regarding complaints.¹¹⁸ To conclude, it is worth noting that all efforts in later stage by the developer to minimize conflict is very difficult since the external stakeholders know that participation so late in the EIA process they will not have real influence. Stakeholders that are still determined that the proposed project must be stopped will therefore resort to methods like issuing a complaint to the minister, going to courts with the case or even issue a complaint to the EFTA Surveillance Authority (ESA)¹¹⁹ and also non official ways mentioned before.

¹¹⁶ Miller, Tyler G. JR. (2002)

¹¹⁷ Proposed dam, and reservoir in the highlands of northern Iceland.

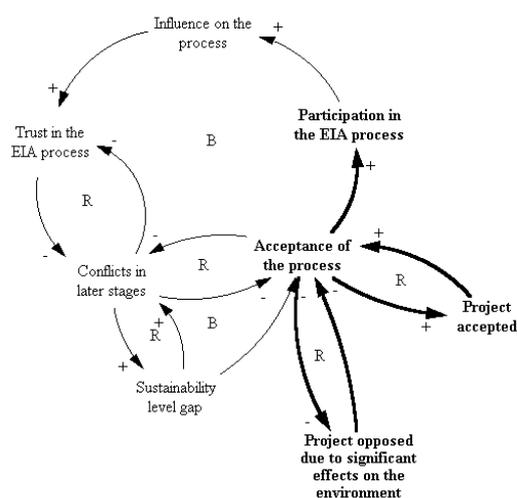
¹¹⁸ Morgunblaðið. 19.7.2002 VG fordæmir ákvörðun um að hefja framkvæmdir við Kárahnjúka. (Translation. Daily newspaper. Green party condemns the decision of beginning the construction of Kárahnjúka dam.

Morgunblaðið 28.6.2002 WWF fordæmir fyrirhugað álver í Reyðarfirði Bandarísku náttúrverndarsamtökin World Wildlife Fund (WWF) hafa sent frá sér tilkynningu þar sem álfraamleiðandinn Alcoa er hvattur til að hætta við byggingu álvers í Reyðarfirði. (Translation. Daily Newspaper. WWF condemns the decision of proposed Aluminium Plant in Reyðarfirði. The American nature conservation organisation World Wildlife Fund have sent a memorandum where they condemn the decision of the aluminium producer Alcoa to stop the proposed building of aluminium plant in Reyðarfirði.)

¹¹⁹ "EFTA SURVEILLANCE AUTHORITY (ESA): The EFTA Surveillance Authority shall ensure that Iceland, Liechtenstein and Norway respect their obligations under the EEA Agreement and that enterprises abide by the competition rules. The Authority can investigate possible infringements either on its own initiative or on the basis of complaints." Further information on ESA available on line at: www.efta.int

7.1.4. General acceptance of the EIA process affects the end result.

The main driver for further participation within the EIA process is the acceptance of the process in whole. The outcome of the process, ending with a ruling of the Planning Agency, can go two ways. A proposed project can be accepted with or without conditions or opposed due to significant effects on the environment as shown in Figure 9. These concerns will affect the acceptance of the process and if a project is opposed or accepted by the Planning Agency. Both acceptance and rejection of the proposed project will have a reinforcing influence on the acceptance of the process but in opposite ways. The higher acceptance of the process will lead to less likelihood of a proposed projects being opposed, the more projects that are opposed, will generally lead to less acceptance of the EIA process in each individual case. Having in mind that when a project is opposed there is generally little acceptance of the process. However higher stakeholder acceptance of the EIA process will increase the possibility of the overall acceptance of a project, which in return reinforces the acceptance of the EIA process.



In most EIA processes it is apparent from the beginning that all stakeholders will not agree to the decision reached in the end. Consensus based on shared understanding between stakeholders on the overall benefits of the project in the interest of the common good is a more reachable goal. Given that stakeholders are in agreement of what is the common good or what constitutes for a sustainable decision. Some argue that there is a fundamental problem in assuming that stakeholders have shared visions of what is the “common good” since in a modern plural society these shared vision may not be present. If the goal of participation is reaching a shared understanding, oppressed groups may be asked to put aside their differences for the sake of the common good.¹²⁰ Related to this are certain norms, which are considered to be moral issues by some stakeholders, but not by all.¹²¹ In a relatively mono cultural society like Iceland this problem is not as apparent as in countries that are multi cultural.

The Planning Agency accepted the proposed projects of Nordlingaolduveita and Sultartangalina 3 with few conditions. A complaint was issued to the minister for the environment in accordance with article 12 of the EIA Act regarding the EIA of Nordlingaolduveita. The Sultartangalina 3 EIA was however not appealed. The appeal part of the EIA process is outside the scope of this thesis, but the fact that Sultartangalina 3 EIA was not appealed gives a strong indication that stakeholders accepted the overall EIA process especially having in mind the amount of protest that stirred up in the pre-scoping stage as shown in Appendix III. The following comment from a stakeholder taking part in the Sultartangalina 3 EIA questionnaire, who identified himself as a member of the public living near by, shows that even though an overall consensus was reached, some were not pleased with the process; “The developer, Landsvirkjun, did not take into consideration any (not one) comment from the public.”¹²²

7.1.5. Procedural rules.

One of the advantages of using a stakeholder theory is that it makes factors that stakeholders have in common and also factors they have not in common, more apparent. This makes a need to address

¹²⁰ Palerm, Juan R. (2000)

¹²¹ Palerm, Juan R. (2000)

¹²² In Icelandic: “Framkvæmdaraðili, Landsvirkjun, tók ekki tillit til neinna (ekki neinna) athugasemda almennings”

different stakeholders with different methods more apparent. It is proposed that procedural rules in accordance with the Administration Act¹²³ will influence the willingness to participate of stakeholders that are bound by them.

Governmental agencies and municipalities are bound by both procedural rules in accordance with the EIA Act but also with the Administration Act. Let us first start with discussing the procedural rules in accordance with the EIA Act. It has already been pointed out in chapter 5 that the EIA Act gives detailed instructions about participation between the givers of opinion (mostly governmental agencies) and granters of consent (can be municipalities, governmental agencies, ministries or the Parliament) with the Planning Agency. The question has been raised by developers if givers of opinion and granters of consent have the same obligations towards the developer as they have towards the Planning Agency. In other words, if the developer has the right to demand that the above-mentioned parties participate in the EIA process when the Planning Agency is not involved? In article 7 EIA regulation, it is stated that the givers of opinion have the right to give comments on the draft scoping document and the draft EIS that is, they have the right to do so but no obligation. As stated before the givers of opinion have this duty regarding the Planning Agency within the limits of their competent areas. According to article 8 of the EIA regulation, it is the responsibility of the Developer to instigate both consultation¹²⁴ with the Planning Agency, but also to introduce the draft scoping document and the draft EIS to the givers of opinion and the public with the aim of getting tips and comments. The conclusion to be drawn regarding the legal framework according to the EIA act and regulation, is that the givers of opinion and granters of consent have a direct obligation to give the Planning Agency their comments, but only a right to give comments to the developer, it is in their discretion.

The Administration Act also contains procedural rules that have to be taken into consideration when addressing participation in the EIA process. The Act sets down general rules of procedures that government bodies having administrative powers regarding decisions, that can affect individuals or legal persons, have to follow. The question here that is of most interest is, if an individual can lose his competence to give opinions to the Planning Agency, or to take a decision in later stages, if he has participated in the EIA process in earlier stages such as when the draft scoping document being made. Article 3 in the Administrative Act stipulates that an individual can lose his competence if:

- the individual employee is directly connected to the case or a relative of his/hers,
- the individual taking part in a decision at a lower level of government loses his competence to take part at an appeal stage,
- if there are any other circumstances than could imply that his/her objectivity is doubtful

These rules do not apply if the stakes in the matter are small or the nature of the case is in such a way or that the part of the employee is so insignificant that there is no danger that an unobjective viewpoint will affect the decision.

One member of the advisory committee established in the EIA process of Nordlingaolduveitu resigned from the committee giving two reasons for his decision. First, because of a principal disagreement between the developer and the municipality (Gnupverjahreppur), he was representing,

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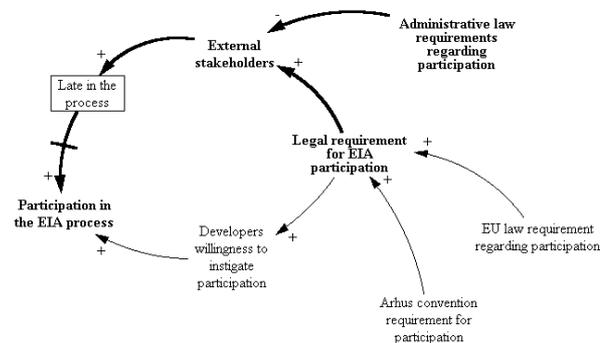


Figure 20 CLD showing how procedural rules effect external stakeholders

¹²³ Administration Act nr. 37/1993

¹²⁴ In the Icelandic legal text it is "samráð"

about the project. He felt that therefore he should not take part in the participation process as laid out for the Advisory committee. Secondly, he doubted that a representative of a municipality who would later act as a giver of opinion and a giver of consent has the right according to the Administrative act to take part in such a process. Also that information between the parties should be assured in the introduction process as laid out by law.¹²⁵ The developer got a legal opinion¹²⁶ regarding the argument that by taking part in the Advisory committee the representative of the municipality was breaking the Administrative Act.¹²⁷ The overall conclusion in the legal opinion was that by taking into account the aim of the Advisory committee, it was not likely that a member of a municipality would lose his competence to address the matter in later stages.¹²⁸ This conclusion is very plausible but has disturbing consequences regarding increasing participation in the EIA process. It follows from this argument that a member of a municipality will not lose his competence just by taking part in a committee with such a limited scope. But what if the scope of the committee was wider? Could then a giver of opinion or a giver of consent not take part in such a committee? No attempt will be made here to give guidance of where the boundaries are, but this uncertainty is a factor that will work as a slowing factor in the process of increased participation. This legal uncertainty should however be addressed to ensure that it will not work as a hindrance for further participation in accordance with the aim of the EIA act.

On a practical level law has three basic normative functions; material norms that gives the rules of what can or can't be done, procedural norms that answers the question of how things should be done and norms that constitute power or who should be doing what.¹²⁹ The EIA Act is very procedural in its essence and gives few material norms, which is natural since it would be extremely difficult because of the site and time specific nature of the EIA process. It is interesting to note that the norms in the EIA legislation regarding when participation takes place are very clear regarding who and when participates, when the Planning Agency shall instigate participation, but not as clear when the developer has the instigation powers. The lack of material norms makes the need for procedural norms, and norms that constitute power even more apparent.

7.2. The driving forces of increased participation among stakeholders.

Now that the main elements of the participation process have been explained, attention will be turned on establishing who are the driving forces in the system. That is finding the components that can increase participation in the EIA process. More precisely who are the components that will increase the participation process rapidly and who will not affect the process as strongly although being of importance for the process as a whole. It is proposed as shown in Figure 5 that the main driving factors in the process are, the timing of participation, the legal requirement and the developers willingness to increase participation.

7.2.1. When in the EIA process participation takes place.

The slogan "early and often" is commonly used in literature¹³⁰ regarding participation in the EIA process. In other words it matters how many times participation methods are used and what methods as established in section 7.1.1 but also when the participation methods are used in the EIA process, having in mind the goal of increasing the acceptance of the EIA process and in the end increasing participation. It is proposed that the time factor when the participation took place is the most important factor and gives some explanations why the participation in the EIA process of Sultartangalina 3 was more

¹²⁵ Haraldssyni, Mar. Letter, Gnuhverjähreppi to VSO consulting company dated 4.12.2001 Arnes

¹²⁶ Memorandum dated 17 of desember 2001 from Margreti Vala Kristjansdottir hdl. To Gudjons Jonssonar VSO and Ragnheidar Olafsdottur Lv.

¹²⁷ In the end the matter was resolved and the representative of the municipality of Gnuhverjährepp continued to participate in the Advisory committee

¹²⁸ Memorandum dated 17 of desember 2001 from Margreti Vala Kristjansdottir hdl. To Gudjons Jonssonar VSO and Ragnheidar Olafsdottur Lv.

¹²⁹ Åström, Karsten. (1988)

¹³⁰ Glasson, John et.al. (1994) Glicker, Jessica (2000) Shepherd, Anne and Bowler, Christi (1997)

successful than in Nordlingaolduveita. Before going on to discuss this in further detail it is necessary to revise shortly what has been argued before regarding the success of the two case studies. Firstly, the internal stakeholders in the EIA process in Sultartangalina 3 were more pleased with the participation process than internal stakeholders in the EIA process of Nordlingaolduveita thus giving an indication of how successful the two processes were. Secondly, although many of the same participation methods were used in both projects an important distinction is that in Sultartangalina 3 more efforts were put into using methods of a higher level in the ladder of participation as shown in table 5.

In the EIA of Sultartangalina 3, the main effort regarding participation methods were when work on the scoping document took place but in Nordlingaolduveita EIA it was on the EIS preparation stage and when the Planning Agency examined the EIS as can be seen in Appendix 2 and Appendix 3. As stated previously it has been noted that it is important when the participation take place. Sometimes as a general rule,¹³¹ in connection with how often participation should take place¹³² or to how substantively¹³³ they should take part. Others have pointed out that criteria's like participation should be "early and often" and that "all" stakeholders should be involved and "communicate effectively to on-target audience" has failed in its objective of assuring the stakeholders about the legitimacy of the project.¹³⁴ Also that participation efforts starts too early they will disrupt communities equilibrium that are effected more and extend the period of uncertainty and that a balance must be reached in this respect.¹³⁵ The first argument relates to one fundamental problem with participation especially in environmental decision-making, that is there is no guarantee that the efforts will give the desired result. The second argument is that it is not good for communities to experience uncertainty for a long time. This is probably very true but when weighing the pros and cons of living in uncertainty or having influence in decision making most stakeholders would probably choose to have influence.

It has also been pointed out that participation of stakeholders late in the decision making process is one of the main reason why participation does not succeed. Mainly because if participation is late in the decision making stages it revolves around either defending a decision that has already been taken or asking for comments that are subsequently dismissed.¹³⁶ Another time factor related to when the participation takes place is when developers try to rush projects through the requirements to avoid delays in the project implementations.¹³⁷ In both case studies the time frame that the developer proposed for the EIA process was short and did not hold. The time frame is especially interesting when the time that an EIA takes is put in context with the lifetime of a project. Starting when the idea is put on the table and ends when the project is demolished if possible.

The Planning Agency is bound by very strict time limits regarding how much time it has to take a decision regarding the scoping document and the EIS. Interestingly, and to further strengthen the control that the developer has over the process, it is stated in 2. paragraph of article 23 in EIA regulation that the developer has at least a week to give his comments on the written comments that the Planning Agency has received, however, if the developer wants to take a longer time to go over the comments the developer can, but then the time that the Planning Agency has to rule will be extended for the same amount of time.¹³⁸

¹³¹ Hampton, Greg. (1999), Palerm, Juan R. (2000)

¹³² Wolfe, Amy K. Kerchner, Nichole and Wilbanks, Tom (2001)

¹³³ Shepherd, Anne and Bowler, Christi (1997)

¹³⁴ Wolfe, Amy K. Kerchner, Nichole and Wilbanks, Tom (2001)

¹³⁵ Wakefield, Sarah and Elliott Susan J. (2000)

¹³⁶ Shepherd, Anne and Bowler, Christi (1997)

¹³⁷ Shepherd, Anne and Bowler, Christi (1997)

¹³⁸ According to Article 10(4) and (6) of the EIS Act nr. 106/2000 the public can make comment within 6 weeks after the EIS was sent to the Planning Agency, after that time period has passed the developer has at least one week to react to the opinions and comments presented.

It is proposed that one of the main differences in the participation processes between the two projects is when the participation efforts took place as shown in Figure 11.

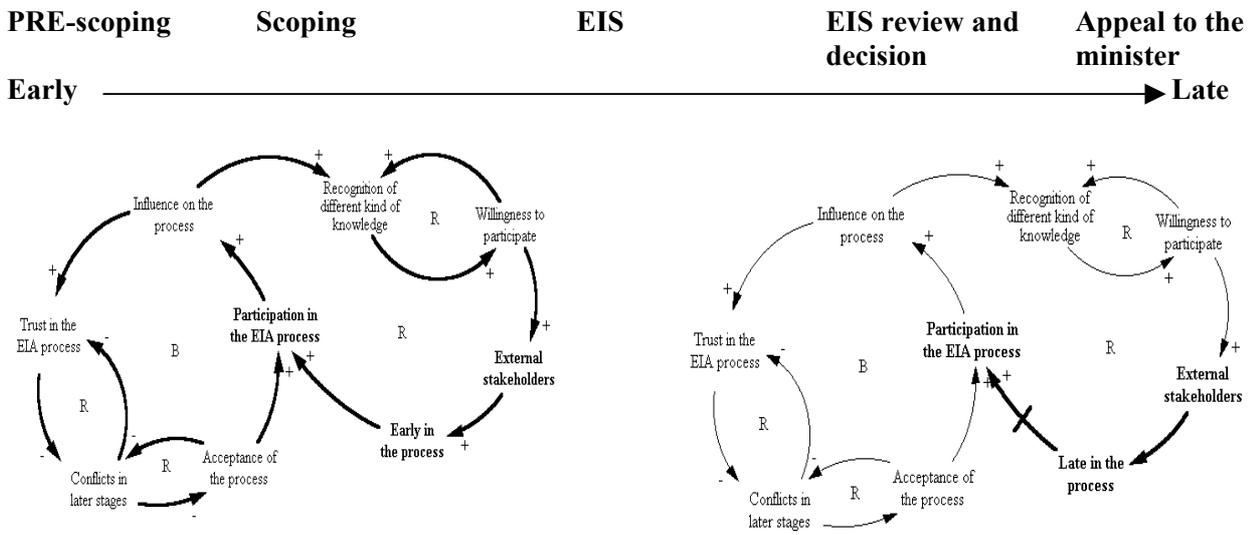


Figure 11 CLD showing the difference of the processes when participation is early and late in the EIA process

The conclusion to be drawn is that the main difference between the two case studies is when the main participation efforts took place. Participation early in the process has a stronger influence on how influential stakeholders are in the EIA process. Leading too more trust in the process, less conflict and a higher probability of acceptance of the EIA process and in the end result. This factor is reinforcing and therefore leads to more willingness of external stakeholders to participate further. Participation efforts late in the EIA process do not have the same effect as when done early in a process. The benefits gained by effective participation in the EIA process should be nurtured. Participation process that started in the early stages of EIA should therefore also extend to the implementing and operational stage of a project.

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7.2.2. Legal requirements for participation in the EIA process.

Although law and legal frameworks can induce change, it is apparent in the Icelandic legal system regarding the EIA process of proposed projects, just set minimum requirements for participation. The EIA Act mainly addresses the requirements of the Planning Agency towards notification and receiving comments from external stakeholders. However, the Planning Agency also has duties to participate with the developer, but those duties are compromised by the fact that in the end the Agency stops being an advisor and participant in an interactive communication and gives a ruling. Making every advise given have a decision like nature. This was

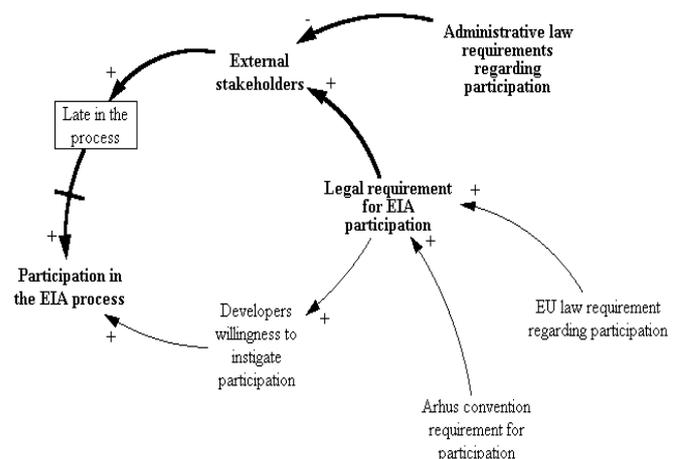


Figure 12 CLD showing the effect legal requirements have on external stakeholders

¹³⁹ Shepherd, Anne and Bowler, Christi (1997)

evident regarding the participation between the developer and the Planning Agency in Nordlingaolduveita EIA were minutes of meetings were sent back and forward to and on explanations and comments. Neither the EIA Act nor the EIA regulation gives much guidance regarding participation that is instigated by the developer. Although the developer is mainly responsible for the participation process and is the only one that can instigate a higher level of participation methods than is obligated by law. A related issue is when participation is mandatory in the EIA Act. The main emphasis is when the Planning Agency is reviewing the EIS. As discussed in section 7.2.1. the timing of when the participation takes place is crucial regarding the potential success of the participation process. The EIA Act does however not encourage early participation.

In accordance with stakeholder theory the government has a responsibility to create the opportunity for participation of all stakeholders, especially in matters that concern the “common good”, like the environment. The government can obtain these objectives of inclusion by lawmaking or by voluntary cooperation, in this case from the developer. The EIA Act has clear aims regarding public participation, but they do not give the developer much guidance in different methods of participation or when to pursue participation. As discussed before, there is legal uncertainty regarding to what extent a person working for a giver of opinion can participate in the EIA process for a proposed project without risking losing competence to take a decision in later stages. This uncertainty has a negative effect on the potential strength of the legal system as a driving force towards increased participation. To conclude it can be pointed out that the legal requirements are not as strong driving force for participation as they potentially can or should be.

7.2.3. Developers willingness to instigate participation.

It has been established that it is the developer who is responsible for the EIA of a proposed project and also the main instigator of a participation in the EIA process. It is claimed as shown in Figure 13 that the developers willingness to instigate participation among stakeholders is a driving force to increasing participation in the EIA system. Increasing the willingness of the developer to participate will eventually produce better acceptance of the EIA process and increase probability of project acceptance. This leads to the question of what parameters will increase the willingness of the developer to increase participation with external stakeholders.

As shown in the Figure 13 the main causes of increased willingness of the developer to instigate more participation with stakeholders are:

- increase in acceptance of the EIA process
- increasing in project accepted
- decrease in project opposed
- legal requirements

It is proposed that all these points will lead to an increase in the developers willingness to instigate participation. The legal requirements must, for example give better guidance regarding when and how a developer could increase his participation efforts. The EIA Act can however not give more than guidelines because of how site and time specific EIA processes are. The legal requirements still have to push forward the idea of participation in conformity with democracy and be in conformity with the obligations that the Icelandic state has signed in the international arena.

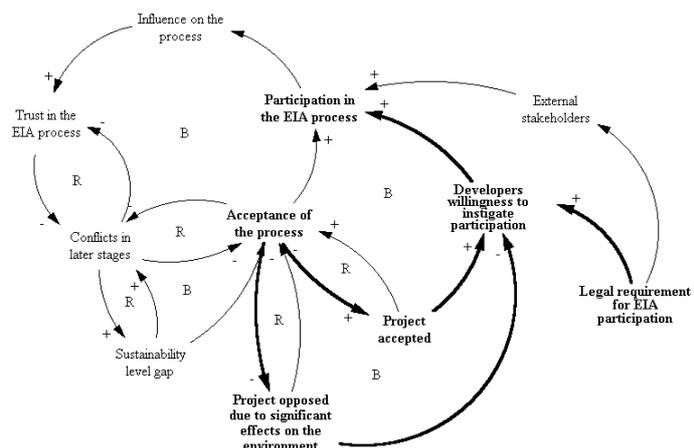


Figure 13 CLD showing developer willingness as a driving force for increased participation

In Sultartangalina 3 EIA the developer recognised, from the beginning that the proposed project was highly controversial and the concerns of the affected parties were identified and dealt with before moving onto the next step in the EIA process. In the Nordlingaolduveita EIA process, there were initially innovative approaches towards participation of stakeholders, but they did not materialise.¹⁴⁰ In a memorandum, regarding the feedback that internal stakeholders got from local people regarding proposed participation methods in the pre-scoping stage, it is stated that local people thought that the proposed participation method was one year too late, that they were already convinced that the impact of the proposed project would be negative, that nobody wanted to decide who should take part in the proposed participation method. Lastly, but importantly that the participation method proposed should be used for the next project that the developer was planning in the area.¹⁴¹ In the decision of the Planning Agency it is stated that the developer had not presented his plan for participation in the scoping document and that he was required to do so soon.¹⁴² To sum up, the developer instigated participation methods in both case studies. There is good indication the participation of external stakeholders in Sultartangalina 3 EIA is one of the main reasons that, despite a rocky beginning, the project had a smooth landing. In Nordlingaolduveita EIA participation with external stakeholders was instigated late in the process and did not increase trust, or decrease conflict in the EIA process.¹⁴³ The conflict was not resolved and even escalating having in mind recent discussions in the Icelandic Parliament regarding if scientist were pressured by internal stakeholders.

8. Conclusions and recommendations.

The participation process in EIA process for proposed projects in Iceland has been identified analysing two case studies, Nordlingaolduveita EIA and Sultartangalina EIA. Both case studies fulfilled the requirements for participation according to the EIA Act. Sultartangalina EIA was more successful in the respect that the ruling of the Planning Agency was not appealed to the Minister for the Environment and gained support of stakeholders despite a rocky start. The main reason for this gain of support is how internal stakeholders handled participation, when participation was initiated and what participation methods were used. In the Nordlingaolduveita EIA participation efforts started late and the methods used were not on a high level on the ladder of participation as put forward by Arnstein.¹⁴⁴ Discussion were on a very scientific level even though the underlying issue in the Nordlingaolduveita EIA is weighing the value of a nature reserve against economically feasible renewable energy option. Instead the issue of how to present and evaluate scientific information became the central issue. Overall the internal stakeholders were not as pleased with their participation efforts in the Nordlingaolduveita EIA as in Sultartangalina 3 EIA.

The starting point for the participation process in the EIA is recognition of external stakeholders. It is claimed that the more external stakeholders participate in a process the more influential they will be on the process. The amount of influence external stakeholders have on the process will increase trust towards on the process itself. When stakeholders trust the process the likelihood of conflicts in later stages decreases, leading to an increase in acceptance of the process. The difference in how stakeholders perceive what is sustainability will also increase the conflicts. Participation of all stakeholders can reduce the gap between how they perceive sustainability, or at least create understanding of different perceptions of sustainability of stakeholders. More acceptance of the EIA process will then lead to an

¹⁴⁰ Memorandum dated 12.07. 2001 from VSO Consulting Agency regarding proposition for a consulting process.

¹⁴¹ Memorandum dated 24.07.01 from VSO Consulting Agency regarding answers form the affected public to the offer of participation.

¹⁴² Nordlingaolduveita sunnan Hofsjokuls. Decision of the Planning Agency regarding the scoping document of the Project. 17. October 2001

¹⁴³ Further reading regarding successful examples of participation in EIA process in the energy sector. Hobbs, Benjamin, F and Horn, Graham T F. (1997) McDaniels, Timothy L. Gregory, Robin S. and Fields, Daryl (1999) Bender. Michael J. Simonovic, Slobodan P. (1996) Palerm, Juan R. (1999)

¹⁴⁴ Arnstein S. R. (1969)

increase in the probability of projects being accepted and decreasing the probability of the project being opposed.

Three main driving forces to increase participation in the EIA process were identified. The first one is when participation takes place in the EIA process. The second driving force is legal requirements and the third is willingness of the developer to instigate participation of stakeholders. The timing when participation efforts take place has a substantial influence on the acceptance of the process. Comparison between the Nordlingaolduveita EIA and Sultartangalina 3 EIA supports the claim of the importance of early participation. Participation should start as early as possible so as to involve stakeholders when decisions have not been taken. If participation starts late stakeholders will get the feeling that the developer is defending a decision that has already been made or the developer is just asking for comments that subsequently will be dismissed. Early participation will affect the EIA process and lead to a better EIA process and increase likelihood of project acceptance.

The second main driving force is legal requirement, the requirement that the legal framework sets forward for participation. It is an underlying claim that it is the democratic duty of the government to increase participation in the EIA process. Empirical findings point out that the legal framework regarding the EIA process, only gives minimum requirements regarding participation in the EIA process. The legal requirements also do not give the developer good guidance regarding when and how participation should take place or how to include value-based knowledge and experimental knowledge. The EIA process is always site and time specific, therefore, the law will not be able to give detailed material norms regarding participation. However procedural norms should be in such a way as to increase participation in the EIA process. It has also been argued that there is legal uncertainty regarding when a stakeholder, having decision-making power in later stages, can lose his competence because of participation in earlier stages. This uncertainty has negative effects on increasing participation in the EIA process.

The final main driver towards increasing participation in the EIA process is the willingness of the developer to instigate participation among the stakeholders. Four components affect the willingness of the developer to instigate participation; they are an increase in the acceptance of the EIA process, and a decrease in project opposed, an increase in project acceptance and legal requirement. It has been established that the developer has the main responsibility for the EIA process and that the developer is also the stakeholder that benefits the most from the participation process by lessening the risk of conflicts in later stages and by increasing the acceptance of the project by developing project ownership that can carry over to later stages of the project. The developer should expect conflicts and address them when they come up, so that unresolved conflicts will not escalate in the next levels when they are more difficult to address.

A few recommendations regarding how to increase participation in the EIA process will now be put forward. Regarding the legal requirement it is necessary to address the legal uncertainty regarding the objectivity of the decision-maker after taken part in an EIA process. The EIA Act needs to give better guidance in its procedural rules regarding when most efforts should be put into participation and what methods should be used so as to fulfil the stated aim of the EIA Act regarding participation. General recommendations to the developer on how to increase the likelihood of a successful participation in the EIA process are; start participation efforts early, identify stakeholders and their main concerns, choose participation methods in accordance with stakeholders concerns, state how external stakeholder participation information and knowledge will be used, have clear aims with participation and most importantly, keep the participation process simple and clear.

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Appendix I.

Questionnaire regarding the attitude of participants towards the EIA of Nordlingaolduveita/Sultartangalina 3

1. Mark one of the following groups that you would categorize yourself within.

- A) Developer (also if working for the developer, t.d. in a consulting agency or as a independent scientist)
 - B) Public living near the project site
 - C) Public not living near the project site
 - D) Giver of opinion
 - E) Granter of permits
 - F) NGOs
 - G) Scientist (for example with university organisation or independent)
 - H) Others
- Comment-----

2. The question is in 5 sections, each dealing with different parts of the EIA process. The question regards you participation in the process

A. *Did you participate in the process before the scoping document is sent to the Planning Agency*

--Yes --- No

If no then you don't have to answer sections i. and ii..

i. *How much influence do you think that you had on the Pre-EIA*

---- very influential ----influential -----little influence ----No influence

ii. *What was the nature of the your involvement, it is possible to mark more than one column. Does also apply to other sections marked ii.*

---Written comments ----Attended open house ---Public meeting --- oral comments --comments in public media ---other Comments-----)

B. *Did you take part in the EIA process when the developer reviewed the scoping document.*

--Yes --- No

If no then you don't have to answer sections i. and ii..

i. *How much influence do you think that you had on the Pre-EIA*

---- very influential ----influential -----little influence ----No influence

ii. *What was the nature of the your involvement.*

---Written comments ----Attended open house ---Public meeting --- oral comments --comments in public media ---other Comments-----)

C. *Did you take part in the EIA process when the developer worked on the EIS report.*

--Yes --- No

If no then you don't have to answer sections i. and ii..

i *How much influence do you think that you had on the Pre-EIA*

---- very influential ----influential -----little influence ----No influence

ii. *What was the nature of the your involvement.*

---Written comments ----Attended open house ---Public meeting --- oral comments --comments in public media ---other Comments-----)

D. *Did you take part in the EIA when the EIS was reviewed by the Planning Agency.*

--Yes --- No

If no then you don't have to answer sections i. and ii..

i. *How much influence do you think that you had on the Pre-EIA*

---- very influential ----influential -----little influence ----No influence

ii. *What was the nature of the your involvement.*

---Written comments ----Attended open house ---Public meeting --- oral comments --comments in public media ---other Comments-----)

E. *Did you take part in the EIA after the Planning Agency had taken decision regarding Nordlingaolduveitu/Sultartangalina 3*

--Yes --- No

If no then you don't have to answer sections i. and ii..

i. *How much influence do you think that you had on the Pre-EIA*

---- very influential ----influential -----little influence ----No influence

ii. . *What was the nature of the your involvement.*

---Written comments ---Attended open house ---Public meeting --- oral comments
---Other (Comments-----)

3. Following statements regards the purpose of the public taking part in EIA for a project. Mark if you strongly agree, agree, disagree, strongly disagree the statements.

- A. Public participation is proper, fair and democratic way of influencing EIA process of a project.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - B. Public participation is a way to ensure that proposed projects meet citizens needs and are suitable to the affected public.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - C. Public participation gives projects more legitimacy and less hostility.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - D. Final decision in the EIA process is “better” when local knowledge and values are included and when experts knowledge is publicly examined.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - E. Public participation makes the EIA process more expensive and takes unnecessary long time.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - F. Public participation delays the implementation of a project and force the project to be revised.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
- Comments-----

4. Following statements regard the EIA process for the project of Nordlingaolduveita/Sultartangalinu 3 in general Mark if you strongly agree, agree, disagree, strongly disagree the statements.

- A. Public participation plays a important role in the EIA process.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - B. EIA law gives sufficient guidance about the aim of public involvement.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - C. The developer had clear goals with public involvement in the EIA.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - D. Developer identified interested parties, their concerns and values surrounding the proposed development.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - E. All interested parties where given the opportunity to participate in the EIA process.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - F. Gathering of scientific knowledge about the project and affected area is the most important thing in the EIA process.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - G. Givers of opinion have much influence in the EIA process.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - H. Offers given by the Developer to participate where genuine.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
 - I. Offers given by the Planning Agency to participate where genuine.
---Strongly agree ---Agree ---Disagree ---Strongly disagree
- Comments-----

Appendix II.

Identification of stakeholders involved in the Nordlingaolduveita EIA, how they were involved and who instigated the involvement.¹⁴⁵

Stakeholder involved		Stakeholder involvement activity Form of communication	Instigator
Pre-scoping			
Stakeholder group	Stakeholder		
Internal stakeholder			
	-Project manager, -corporate management, -shareholders, -engineering office EIA -engineering office project design -scientists -lawyers	<i>Meetings, informal letters, informal talking e-mail.</i> <i>Not so clear.</i>	-Project manager Landsvirkjun, -Project manager consulting engineers, here after Project managers
External stakeholder			
Local Community		Introduction meeting in Burfelli og Hrauneyjar 8 of august 2001	
Government	Orkustofnun, Landvernd, Landgræðsla ríkisins, Thjorsarveranefnd	3. introduction meeting in Árnesi, Laugalandi and Reykjavik Project leaders asking about what permits they have to apply for, what is know about the proposed development site.	Project leaders
NGOs	Bird life International	Trying to put pressure on the government Formal letter	Bird life international
Other	Scientist who had worked in the proposed development site.		Project leaders
Review of scoping document by Planning Agency			
Stakeholder group	Stakeholder		
Internal stakeholder			
	-Project managers, -corporate management -scientists	-meetings -e-mails -written comments	Planning Agency Project managers
External stakeholder			
Local Community		-Public meeting Public meeting at Arnesi (local) 20 sept 2001	-Project leaders
Government	Givers of opinion	-Asking for opinions -13 written comments	First by the Developer but later also formally by the Planning Agency
	Municipal	-Advisory Committee. 5 meetings held in the period of 3 sept 2001 to 23 april 22002	-Project leaders
	The Planning Agency	Formal meetings, formal letters, (E-mails) formal minuetts	-The Planning Agency -Project leaders
NGOs	International, national and local	--Publicising the scoping document, available on line -5 written comments	-The Planning Agency
“Public”		--Publicising the scoping document, available on line -3 written comments (2 members of the parliament)	-The Planning Agency

¹⁴⁵ The tables are made from official published data, data gathered at Landsvirkjun headquarters and at the official website of Nordlingaolduveitu available on line on www.nordlingaolduveita.is. The table is intended to give an overview of stakeholders and stakeholders activities, and is not exhaustive of all stakeholders and participation methods.

EIS preparation by the developer			
Stakeholder group	Stakeholder		
Internal stakeholder			
	-corporate management, -shareholders, -engineering office project design -scientists -Lawyers	<i>Meetings, informal letters, informal talking and e-mail. Not clear Scientist go over their part in the EIS</i>	-Project leaders
External stakeholder			
Government	Local municipalities Parlement The Planning Agency Other government agencies that give opinions	-Advisory Committee. 5 meetings held in the period of 3 sept 2001 to 23 april 2002 -letters regarding the standing of the municipalities regarding expansion of thorsarver. - Parlement resulation regarding to expand the Thorsarver friðland -Formal Meetings, formal letters, informal talks, e-mail -Formal letters regarding going over the draft EIS -meetings	Parlement committee -Project leders
EIA review and ruling of the Planning Agency			
Stakeholder group	Stakeholder		
Internal stakeholder			
	-Different branches of the company -Consulting engineering office project design -Scientists working for the Developer	-Meetings, -formal letters, -e-mails	-The Planning Agency -Project managers
External stakeholder			
Local Community	Inhabitants of the local municipalities.	-Advertisement in Official Gazette and national newspaper 30 April 2002 local newspaper 1. Mai 2002 -7-8 May 2002 Introduction meeting -30 April- 11 June 2002 EIS on display in municipalities and Planning Agency -10 written comments, maid aware of the opportunity to give formal comments to the Planning Agency -Leaflets into every home, cd introduction disk maid available and also a video cassette.	-The Planning Agency -Project managers
Government	Givers of opinion Minestries	-Letters asking for written comments -14 written opinions -received EIS	-The Planning Agency Project managers
“Public”		-Advertisement in Official Gazette and national newspaper 30 April 2002 local newspaper 1. Mai 2002 -22. May Open house in Reykjavik -4 June 2002 NGO public meeting -30 April- 11 June 2002 EIS on display in municipalities and Planning Agency -91 written comments	-The Planning Agency -Developer -NGO
NGOs		-Advertisement in Official Gazette and national newspaper 30 April 2002 local newspaper 1. Mai 2002 -30 April- 11 June 2002 EIS on display in municipalities and Planning Agency -11 written comments -Public meeting held by NGOs	-The Planning Agency -NGOs

Other	Scientists	Giving their opinions by approaching the Planning Agency, and in the media Formal letters to the Planning Agency, Formal letters to the developer, Asking for information, articles in public newspapers, Sitting in general meetings about the project given by the developer. (Possible direct contact to the public in the municipals.	-Scientists
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Appendix III.

Identification of stakeholders involved in the Sultartangalina 3 EIA, how they were involved and who instigated the involvement.¹⁴⁶

Stakeholder involved		Stakeholder involvement activity Form of communication	Instigator
Pre-scoping			
Stakeholder group	Stakeholders		
Internal stakeholder			
	-Project manager, -corporate management, -shareholders, -engineering office -scientists	-meetings, formal and informal -e-mails, -written comments -other	-Project manager Landsvirkjun, -Project manager consulting engineers, here after Project managers
External stakeholders			
Local community	Farm owners, Cottage owners, recreational users,	-petition from 505 individuals -Involvement in open house on the 8-9 June 12. June and 15-16 June 2001 -Written comments, -“One on one” talks	Local community Project managers
Government	12 municipalities 17 gov. agencies 1. ministry 31 other gov. agencies, companies and interest based organisation	-Received letter inviting them to send in written comments, -Walking the site -Meetings	Project managers
NGOs	11 NGOs	-Involvement in open house on the 8-9 June and 15-16 June 2001 -Written comments,	Project managers NGOs
Review of scoping document by Planning Agency			
Stakeholder group	Stakeholders		
Internal stakeholder			
	-Project managers, -corporate management -scientists	-meetings -e-mails -written comments	Planning Agency Project managers

¹⁴⁶ The tables are made from official published data, data gathered at Landsvirkjun headquarters and at the official website of Landsvirkjun available on line on www.lv.is. The table is intended to give an overview of stakeholders and stakeholders activities, and is not exhaustive of all stakeholders and participation methods.

External stakeholders			
Government	-Givers of opinion	-Asking for opinions -26 written comments	Planning Agency
“Public”		--Publicising the scoping document, available on line -2 written comments	Planning Agency
EIS preparation by the developer			
Stakeholder group	Stakeholders		
Internal stakeholders			
	-Different branches of the company -Consulting engineering office -Scientists working for the Developer	Meetings, formal minutes of the meeting, formal letters to scientists	Project managers
External stakeholders			
Local community	Farm owners, land owners	-Open house with the aluminium company 20 March 2002 -One on one meetings, -phone calls	Project managers
Government	Local municipalities Government agencies,	-Walk along the line site 18. and 26 of September 2001 with givers of opinion. -Meetings with all the municipalities that wanted.	Project managers
	The planning Agency	-E-mails, -Meetings	Project managers
	Nature Conservation Agency	-Introduction meetings 22. March and 5 April 2002	Project managers
	The Planning Agency	-Formal Meetings, formal letters, informal talks, e-mail	
EIA review and ruling of the Planning Agency			
Stakeholder group	Stakeholders		
Internal stakeholders			
	-Different branches of the company -Consulting engineering office -Scientists working for the Developer	Meetings, formal letters, e-mails	-The Planning Agency -Project managers
External stakeholders			
Government Local community	Givers of opinion Local residents	-Letters asking for written comments -Involvement in open houses on the 11 th and 15 th May 2002 -Advertisement in Official Gazette, national and local newspaper on the 8. Mai. 2002 -8-19 June 2002 EIS on display in municipalities and Planning Agency -10 written comments, -Written comments	-The Planning Agency -Project managers -The Planning Agency
Government agencies	Agencies that are to give opinions and licensors like local municipality		The Planning Agency
NGOs “Public”		-Written comments -Advertisement in Official Gazette, national and local newspaper on the 8. Mai. 2002 -written comments	-The Planning Agency The Planning Agency

