

Stakeholder Communication in Infrastructure Projects

Master's Thesis in the Master's Programme International Project Management

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ABSTRACT

Stakeholder communication has the potential to affect project outcomes. If the communication is poor, the project management team runs the risk of missing out on information that could be useful for the delivery of the project. Likewise if the stakeholders experience the communication to be poor, they are likely to lose faith and confidence in the project management. This is often the reason for project failure. This phenomenon especially occurs in larger infrastructure projects where the benefits and purpose of a project are often difficult to understand for the stakeholder groups, especially the public and taxpayers. The aim of this study is to understand how project management teams at The Swedish Transport Administration view stakeholder communication and what are seen as critical factors in order to effectively communicate with stakeholders.

To collect data two types of interviews were held. Firstly, two explorative interviews in order to get an understanding of the organization at large. Secondly, eleven project members from five different projects were asked about what they think is important when communicating with stakeholders. The study has shown that information is easily defined as communication, which means that one-way communication is the most common form. Furthermore, identifying stakeholders and their needs was found to be the most important factor for successful stakeholder communication. However, it was clear that other factors such as explaining the purpose and benefits of the project also affect the communication with the stakeholders. The study recommends The Swedish Transport Administration to determine clear roles and responsibilities for stakeholder communication, educate stakeholders about the planning process, initiate early stakeholder dialogue and to tell a story for each project.

Keywords: communication, stakeholder analysis, infrastructure projects, stakeholder influence.

Intressentkommunikation i Infrastrukturprojekt

Examensarbete inom Masterprogrammet International Project Management

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SAMMANFATTNING

Intressentkommunikation kan påverka ett projekts mål. Om kommunikationen är bristfällig så finns det risk att projektledningen missar information som kan vara viktigt för att leverera projektet. Likaledes om intressenterna upplever att kommunikationen är bristande så påverkar det troligtvis deras tillit och förtroende för projektledningen. Detta är ofta anledningen till att projekt misslyckas. Detta fenomen är extra tydligt i stora infrastruktur projekt där fördelarna och syftet med projektet ofta är svårt att förstå för många intressenter, särskilt allmänheten och skattebetalarna Målet med denna studie är på att förstå hur olika projektledningsgrupper Trafikverket på intressentkommunikation och vilka kritiska faktorer som finns för att kommunicera effektivt med intressenter.

För att samla in data har två typer av intervjuer genomförts. Först har två explorativa intervjuer genomförts för att få en förståelse för organisationen som sådan. Därefter har elva projekt medlemmar från fem olika projekt intervjuats för att förstå vad de tycker är viktigt när man kommunicerar med intressenter. Studien har visat att information ofta förväxlas med kommunikation vilket betyder att envägs kommunikation är den vanligaste formen. Vidare visar studien att identifiera intressenter och deras behov ansågs vara den viktigaste faktorn för framgångsrik kommunikation med intressenter. Andra faktorer så som att förklara nyttan och syftet med projektet också påverkar kommunikationen med intressenter. avslutningsvis så presenteras följande rekommendationer för Trafikverket: Att ha klara och tydliga roller samt ansvarsområden för vem som är ansvarig för kommunikationen med intressenter, att utbilda intressenterna i planerings processen, att tidigt initiera en dialog med intressenter och sist men inte minst att sätta in projektet i ett större sammanhang i form av en berättelse.

Nyckelord: kommunikation, intressentanalys, infrastrukturprojekt.

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Glossary

Business area - Verksamhetsområde

Communications manager - Kommunikationsansvarig

Communicator - Kommunikatör

Construction document - Bygghandling

Consultation - Samråd

Consultation process - Samrådsprocessen

Consultation statement - Samrådsredogörelse

Detailed development plan - Detaljplan

Determination trial - Fastställelseprövning

Early impact assessment - Åtgärdsval

Feasibility study - Förstudie

Investment - Investering

Land use plan - Översiktsplan

Major Projects - Stora Projekt

Project director - Projektchef

Project engineer - Projektingenjör

Project manager - Projektledare

Railroad investigation - Järnvägsutredning

Responsiveness - Lyhördhet

Road investigation - Vägutredning

Road- or railroad plan - Arbetsplan

Stakeholder analysis - Intressentanalys

Target group analysis - Målgruppsanalys

The County Administrative Board - Länsstyrelsen

The four-stage principle - Fyrstegsprincipen

The planning process - Planeringsprocessen

The Swedish Rail Administration - Banverket

The Swedish Road Administration - Vägverket

The Swedish Transport Administration - Trafikverket

Translated Definitions

Stakeholder - "Intressent är en individ, organisation eller funktion som påverkas av projektet eller dess resultat. En intressent är även de som kan eller vill påverka projektet." (Trafikverket, 2012a).

Project - "Ett projekt är ett tidsbegränsat och budgeterat uppdrag för vilket ett mål har satts upp. Ett projekt planeras, styrs och genomförs av en tillfällig organisation som är skräddarsydd för projektets speciella behov." (Trafikverket, 2015a).

1 Introduction

Stakeholder communication in infrastructure projects is associated with numerous challenges (Dainty, Moore, & Murray, 2006). This is because projects tend to be composed of heterogeneous groups of individuals that come together temporarily and for a limited time with the purpose of executing certain tasks (Flyvbjerg, 2014; Major Projects Association, 2005; Maylor, 2010). In addition, a project can be defined as a unique, temporary attempt to accomplish one or more planned objectives (APM, 2012). Furthermore, Zulch (2014) states that the project manager's skills and abilities to communicate with stakeholders have an impact on the cornerstone areas of project management. Dainty et al. (2006) argue that communication ability is a crucial trait for project managers in order to ensure project success. For these reasons it is crucial to acknowledge stakeholder communication as a core process of project management.

A few decades ago, people as well as society at large were much more welcoming and almost thankful when roads or railroads were built to and from their town. Today this has changed and people are less enthusiastic if they do not understand the purpose or the benefits that the project brings at first glance. In response to this the general research field stakeholder management was created. This study looks into one of the sub fields, namely stakeholder communication.

This study investigates how project management members at The Swedish Transport Administration experience the stakeholder communication in infrastructure projects today. The study showed that the project management generally have a good idea of how to inform and communicate with stakeholders, but stakeholders themselves, especially the general public, have limited knowledge of how a project comes to life and when they are able to influence the project and how to do so. Today a major part of the communication is carried out during the planning process which the general public and sometimes even project managers within the organization tend to have trouble to understand and describe. For that reason, a great part of the discussion in this Master's Thesis therefore focuses on how stakeholder communication can be improved for two of the largest external stakeholders, the public and the taxpayer. How and what is important for stakeholders when they evaluate if a project beneficial for them.

Lastly, the study showed that communicating and informing the stakeholders from the beginning of a project are key elements when it comes to gaining acceptance and support of stakeholders. The projects that have a clear story and purpose have a much greater support than those without. Flyvbjerg (2014) states that as projects get larger and larger, it is increasingly important to do "the right projects in the right manner" (p. 8). To enable this, it is argued that communication with stakeholders is a key critical success factor in order to deliver projects that are socially, environmentally and economically sustainable.

1.1 Research Aims and Research Questions

The aim of this study is to identify what are considered to be critical factors for effective stakeholder communication in infrastructure projects seen from a project management perspective within The Swedish Transport Administration, a large organization delivering infrastructure projects. Moreover, an attempt to determine what may be drivers for increased acceptance and support for infrastructure projects is another aim. To realize the aims, the following research questions are proposed. The study aims to answer the following two research questions:

Research Question 1: What do previous literature consider to be critical factors for successful stakeholder communication?

Research Question 2: How do project members at The Swedish Transport Administration rank these factors from a project management perspective?

1.2 Research Limitations

The study focuses on experiences of the individuals and centers on the interviewees' perceptions of how stakeholder communication has been managed in their projects and business area. The interviewees of this study are limited to project management members of five different projects within The Swedish Transport Administration. The three main limitations of this study is therefore the fact that the research concerns only one organization, with a limited number of projects and involves few respondents.

The study is geographically limited to projects within Skåne and Gothenburg, Sweden, and only includes projects within the two business areas Investment and Major Projects. Lastly, the study focuses on external stakeholder communication. In chapter five the definition of external stakeholders that was adopted in this Master's Thesis is described and argued for.

1.3 Report Structure

This Master's Thesis is structured as follows:

Chapter two contains a brief overview of The Swedish Transport Administration i.e. the studied organization of this research. The emphasis here is on the organizational structure, how the organization deals with stakeholder communication in general and how projects are executed from a planning, and stakeholder perspective. Additionally the projects of the study are presented.

In chapter three the method of this study is presented. The stages that the research have gone through are described, as well as the settings and contexts for the performed interviews. Lastly, ethical considerations in the study are presented.

In chapter four the theoretical framework is presented. The first part serves as an introduction into the fields of stakeholder communication in relation to project management. Part two focuses on specific critical factors for stakeholder communication.

In chapter five the research findings are presented. Firstly, the findings of where the business areas are today in terms of communication seen from a strategic point of view are presented. Secondly, the results from the interview study and the critical factor-exercise are presented.

In chapter six the research questions are discussed in relation to the theoretical framework and the interviews. This is followed by chapter seven, in which the conclusions from the study are presented. Lastly in chapter eight a set of recommendations for how The Swedish Transport Administration can improve stakeholder communication is presented.

2 The Swedish Transport Administration: a Brief Overview

The Swedish Transport Administration is responsible for all long-term infrastructure planning of state-owned roads, railroads, shipping and aviation in Sweden. The organization is divided into five different business areas; Maintenance, Investment, Major projects, Traffic Control and Planning (Trafikverket, 2013). The Swedish Transport Administration aim to transform itself from infrastructure developer to social developer. In the new role, communication with stakeholders becomes more important (Trafikverket, 2012c). The business concept of The Swedish Transport Administration is:

We are developers of society. Daily we evolve and manage smart infrastructure. We collaborate to make life easier throughout all of Sweden. (Trafikverket, 2013, p. 7).

The organizational values are:

Responsiveness, creativity, a holistic approach (Trafikverket, 2012c, p. 1).

In common for both business areas is that stakeholder communication mainly takes place during the planning process in the form of consultations. The following laws regulate the planning process: 'Väglagen (1971:948)', 'Lagen (1995:1649) om byggande av järnväg', 'Miljöbalken (1998:808)' and in municipal areas 'Plan- och bygglag (2010:900)' and thus consultation must take place. It should be noted that projects in municipal areas could be more complex in terms of the number of stakeholders, as the road- or railroad plan must also conform to the detailed development plan and/or land use plan. In the consultation The Swedish Transport Administration initiates dialogue with stakeholders, this mainly in the form of meetings in public places (Trafikverket, 2013). This Master's Thesis focuses on how the business areas Investment and Major Projects work with stakeholder communication, see Figure 1 for an overview of the organizational structure.

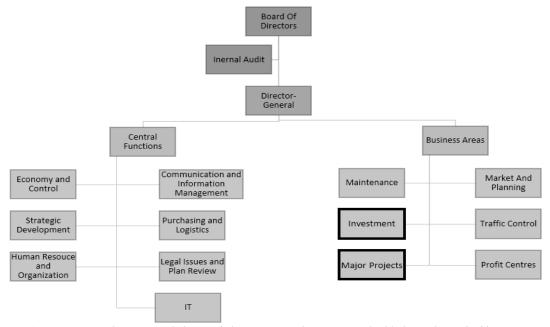


Figure 1- Organizational structure of The Swedish Transport Administration, highlighting the studied business areas.

Adapted from (Trafikverket, 2013, p. 11).

The business area **Investment** is responsible for construction projects and larger reconstruction projects budgeted up to 4 billion SEK or less. The business area usually has about 2000 projects running simultaneously. They conduct about 500 procurements each year, and have a purchase volume of approximately 12 billion SEK (Trafikverket, 2014b). In terms of resources, the communication department in business area Investment consists of 34 persons in total. For this reason, the department have developed the Small, Medium and Large model (SML model). The model was created with the purpose of making the most out of available resources and is based on 17 criteria that the communication department have developed as measures and indicators of the communication need. In practice the project manager together with a person from the communication department sit down at the start of each project and together they estimate the communication needed for the project. Depending on how the project 'scores' in the different criteria, the communication need is classified according to either Small, Medium, or Large (Trafikverket, 2014a).

Business area **Major Projects** answers for all projects budgeted over 4 billion SEK or projects with special circumstances. The business area has eleven projects running at present (Trafikverket, 2015a). Every year the business area performs approximately 120 procurements and has a purchase volume of 10 billion SEK (Trafikverket, 2014b). The business area employs in total 30 persons that work with communication in different projects within the business area. Compared with business area Investment, all major projects have their own communications manager and one or more communicators that solely work with communication within that particular project.

2.1 The Planning Process in The Swedish Transport Administration

The following section briefly describes the steps a project must go through according to the standard of The Swedish Transport Administration. Figure 2 below illustrates when, where, what and how the stakeholder can affect the planning and building of infrastructure. However, before this it is necessary to define what a project is and what a stakeholder is according to The Swedish Transport Administration. Trafikverket (2015b, p. 1) defines a project as:

A project is a time limited and budgeted commitment with aims and goals. A project is planned, steered and executed by a temporary organization which is tailored for the needs and purpose of the project.

Trafikverket (2012a, p. 1) defines a stakeholder as:

A stakeholder is a person, organization or function that affects the project or its outcomes. A stakeholder is also someone who can or has the willingness to influence the project.

2.1.1 The Planning Process

The planning process consists of six steps in which stakeholders have the possibility to influence the plans or communicate their opinions in different ways (Trafikverket, 2012b). The first step is early impact assessment. This activity is carried out according to the four-stage principle described in Appendix 1. If the first two steps of the four-stage-principle cannot solve the problem, the planning process continues to step two of the planning process, which is a feasibility study, see Figure 2 below.

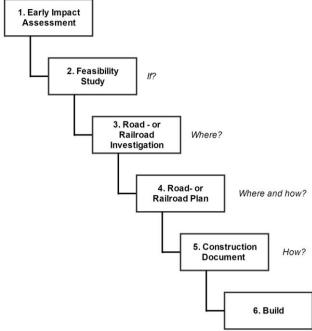


Figure 2 – The planning process adapted from The Swedish Transport Administration (Trafikverket, 2012b, p. 1).

The feasibility study aims to answer the question **if** the 'problem' needs to be resolved and describes advantages and disadvantages of different solutions. The conditions for physical measures are investigated and consultations are held to collect the stakeholders' opinions. When conducted, the feasibility report is showcased in public places such as the municipal office, public libraries and often published online at The Swedish Transport Administration's website. In summary the feasibility report consist of:

- Consultation
- A consultation report
- Decision about environmental impact and
- Decision about the continued process

The third step of the planning process step aims to answer: "where should the road or railroad be located?" and this in the form of a road or railroad investigation. In this step extended consultations are held in order to meet stakeholders. When the investigation is finished it is showcased and stakeholders have another opportunity to leave their opinions.

The fourth step is the work plan for the road or railroad plan, which aims to answer the question where will the road or railroad be located and how should it be designed. The plan should take both the public's as well as individual's interests into account. For example, it is clarified how much land that needs to be claimed along with details for the delivery such as noise reducing measures. The plan is then showcased again and stakeholders have one last opportunity to leave their opinions. This is later followed by a determination trial where there is an opportunity to appeal the plans. After that, the plan potentially gains legal status. Once the plan has gained legal status only minor changes can be made. The fifth step in the planning process is the construction document. This step aims to answer how the road/railroad will be built. The construction document usually consists of technical requirements, specifications and drawings. In this stage the project is also procured. The sixth and last step is the build or construction of the project. Here the communication is often turned into information about how the construction progress, answering practical in situ questions.

3 Method

An inductive approach was chosen for this study. Consequently a qualitative research method was chosen in order to be able to answer the 'how' and 'why' of the research questions presented. Furthermore, as the study focuses on how stakeholder communication is utilized and perceived in the organization it was necessary to focus the research on personal experiences of employees at The Swedish Transport Administration. Figure 3 clarifies a) what methodology was used, b) what purpose it served and c) what outcomes they had. Additionally, the figure focuses on illustrating how the critical factors were compiled and integrated into the interviews, which are the core of this research.

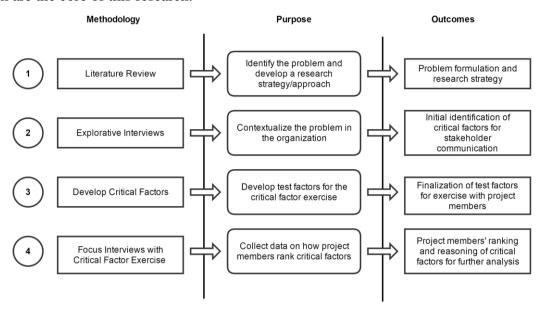


Figure 3 - Overview of the research method.

3.1 Literature Review

The starting point of this study was a review of recent literature within the field of stakeholder communication in infrastructure projects. This review was carried out in order to establish the list of critical factors used in the critical factor exercise which will be explained in 3.1.1 below. The literature for the review was searched with the help of databases such as Google Scholar, Chalmers Library, Summon and Science Direct. The main keywords that were used were Stakeholder, Communication, Stakeholder Communication, Stakeholder Management, and Stakeholder Engagement. The keywords resulted in between 20 000 and 950 000 hits. The literature search was then narrowed by looking for recent construction related articles and reading the abstracts of relevant journals. If the article passed this step it was studied in further detail and categorized according to its relevance to the subject stakeholder communication. Furthermore, if the literature referenced relevant articles that the search had not found, that material was also included. The literature review resulted in a selection of approximately 40 articles that lay as a foundation when developing the list of critical factors. In addition, the outcome of the literature review was a gained understanding of the subject stakeholder communication which allowed for the problem formulation. Moreover, as the understanding of the subject increased, further literature was sought to fill knowledge gaps of tangible solutions to improve stakeholder communication in infrastructure projects. Lastly, internal documents of The Swedish Transport Administration have also been reviewed in order to gain greater understanding of the organization and to identify problems connected to stakeholder communication.

3.1.1 Identifying the Critical Factors

As mentioned, recent literature within the field of stakeholder communication was initially reviewed with the aim of selecting state of the art literature that links stakeholder communication with stakeholder engagement and success in infrastructure projects. We analyzed the articles' abstracts, research question(s) and results in order to identify those articles that 1) treated stakeholder communication (or information) as critical factors for effective stakeholder interaction and 2) treated stakeholder communication as having an impact on project outcomes. The literature review, along with the explorative interviews explained below, landed in eleven different success factors presented below in Table 3 - Statements for critical factors Eleven statements were found as an appropriate amount of statements as the interviewee were allowed to choose quite widely at the same time as the selection process was not overwhelming. Additionally, there is a width in the statements as different phases of projects, different approaches to communication and different point of views are covered within them.

3.2 Interviews

As stakeholder communication is experienced between individuals, the data collection of this research consists mainly of interviews. According to Bryman (2012) interviewing is the most commonly used method in qualitative research because of its flexibility and ability to collect rich and detailed answers from participants. Two types of interviews have been performed in this study and are described in detail below.

3.2.1 Explorative Interviews

The purpose of the explorative interviews was to acquire a better understanding of stakeholder communication in the business areas at hand. Two explorative interviews were performed, one from the communications department in the business area Investment, and one from the equivalent department in the business area Major Projects. They were chosen based on their position and ability to give an adequate understanding of how the business area works with stakeholder communication. Once the interviewees had given their consent to participate in the study, a semi-structured interview guide was designed, see Appendix 2.

The purpose of the interview guide was to make sure the interviews considered the same subjects. This was critical in order to be able to make comparisons between the business areas. Additionally, Bryman (2012) states that interview guides can be helpful tools in order to provide structure to unstructured and semi-structured interviews. The explorative interviews allowed data and information gathering of what the two business areas Investment and Major Projects do in terms of stakeholder communication, so that the scope of the study could be narrowed.

3.2.2 Focus Interviews

The purpose of the interviews was to collect data from the two business areas and investigate how stakeholder communication is actually performed in different infrastructure projects within The Swedish Transport Administration.

The literature review indicated that there are some critical factors that have a high influence on stakeholder communication. For this reason a decision was taken to take on a similar approach, in practice this meant that we developed our own set of critical factors for stakeholder communication. The critical factors were to a large extent inspired by the articles 'Exploring critical success factors for stakeholder management in construction projects' by Yang, Shen, Ho, Drew, and Chan (2009) and 'A comparative study of factors affecting the external stakeholder management process' (Olander & Landin, 2008). After reviewing the literature a list of approximately 20 different factors was compiled, however a decision was taken to reduce

the list to eleven factors presented in Table 3 - Statements for critical factors Eleven factors were found to be an appropriate number of factors for the sake of the interviews and the critical factor exercise in which the interviewees were asked to rank five most important factors for stakeholder communication.

During the interviews the project members were given individual flash cards with the different critical factors and the claim: "For stakeholder communication it is important to..." They were then asked to pick and rank the five most important statements out of the available eleven statements that they felt best completed the claim. It should be noted that the statements on the flash cards were not numbered or organized beforehand. Moreover, once the interviewees had chosen their top five, follow-up questions were asked, see Appendix 3. The identified patterns, along with the interview answers later on assisted the discussion and allowed for answering the research questions.

Table 1 presents the five projects of this study. The projects were chosen in agreement with The Swedish Transport Administration and represent a mix of the project portfolio, as they are in different phases, of varying sizes and of different types i.e. a mix of road and railroad projects.

Business Area	Project	Phase	Type of Project	Location	Estimated Budget
Major	A	Planning	Railroad	Gothenburg	20 billion (2009 prices)
Projects	В	Under construction	Road and railroad	Gothenburg	3.5 + 1.35 billion (2009 prices)
	С	Under construction	Railroad	Skåne	490 million SEK
Investment	D	Planning	Road	Skåne	260 million SEK
	Е	Under construction	Walking and cycling route	Skåne	60 million SEK

Table 1 - Studied projects in summation.

3.2.3 Interview Setting and Context

All thirteen interviews were performed in Swedish and recorded after the interviewees had given their permission. All interviews were held between January and April 2015. Nine out of thirteen interviews were held face-to-face as this provides better ability to understand the interviewees' responses, body language etc. (Bryman, 2012). However, some interviews had to be carried out via Microsoft Lync. The reason for this was because some interviewees were located on different places in Sweden. The interviewees were used to these conditions and it should therefore not have affected the results of the interview. When all the data were collected and analyzed, written consent forms of the interpreted data were sent and signed by the respondents. Table 2 below summaries the performed interviews.

Table 2 - Summary of interviews.

Business Area	Project	Role in	Interview	Interview	Interview
		organization	Duration	Structure	Type
	N/A	Communication Strategist	3 hours	Open structure	Face-to-face
	A	Project Director	2 hours	Semi-structured	Face-to-face
	A	Project Engineer	2 hours	Semi-structured	Face-to-face
Major Projects	A	Communications Manager	2 hours	Semi-structured	Face-to-face
	В	Project Director	2 hours	Semi-structured	Face-to-face
	В	Project Engineer	2 hours	Semi-structured	Face-to-face
	В	Communications Manager	2 hours	Semi-structured	Face-to-face
	N/A	Communication Strategist	2 hours	Open structure	Microsoft Lync
<u>.</u>	С	Project Manager	2 hours	Semi-structured	Face-to-face
Investment	С	Project Engineer	2 hours	Semi-structured	Face-to-face
	D	Project Manager	2 hours	Semi-structured	Microsoft Lync
	D	Assistant Project Manager	2 hours	Semi-structured	Microsoft Lync
	Е	Project Manager	2 hours	Semi-structured	Face-to-face

3.3 Ethical Considerations

All interviewees have been verbally informed beforehand about the purpose of the study and what expectations there are on the participants. The interviews were recorded if the participants agreed to it. The audio files from the recordings have been safeguarded so that no inappropriate access could be possible. The transcripts of the audio recordings were sent to the interviewees so that they could verify and make valid that the interpretations of the interviews were correct. All the actions stated above add to trustworthiness and validation to the evidence files and allowed the participants to get personal control over the material that they have contributed with. In order to further protect the participants of this study, particular information about the projects, such as the project name, have been removed. The projects as well as the participants are either referred to as 'project', 'project A-E' or 'interviewee'.

4 Theoretical Framework

A review of the existing literature suggests a relationship between project success, stakeholder management and effective communication (Dainty et al., 2006; Olander & Landin, 2008; Zulch, 2014). The following literature presents what a stakeholder is, what may influence stakeholder behaviors, what communication is and why stakeholder communication is essential for project management.

4.1 Literature Review

4.1.1 Communication and Project Success

According to the Association for Project Management, APM (2012), project management is "the use of appropriate methods, processes, skills, knowledge and experience in order to realize the project objectives". The success of a project is dependent on many factors, some of which affect the project outcome or success to a larger degree than others. APM (2012, p. 32) has listed the following five factors as especially important for stakeholder communication:

- Defining clear goals and objectives
- Maintaining a focus on business value
- Implementing a proper governance structure
- Ensuring senior management commitment
- Providing timely and clear communication

FitzPatrick (1997) compared project management and communication management to see how they could learn from each other. He concluded that project management can learn the following from communication management: risk management, stakeholder identification, winning stakeholder support and communicating with stakeholders. What is then communication management? In short it aims to understand the views and possible response of stakeholders. Furthermore, FitzPatrick (1997) stated that: "Outside stakeholders may be naturally suspicious of proposals which they do not understand" (p. 65). For example, how loud is 30 decibels? Is it like a screaming baby or closer to the sound a pin makes when dropped on the floor? The knowledgeable stakeholder knows this and need not worry, but the stakeholder that does not know gets worried. It is in these moments that communication professionals can help in translating and adopting the message to the stakeholder's needs and skills. In addition FitzPatrick (1997) suggests that communications management can help in finding a compromise between the best technical solution and the solution that the stakeholders considers to best satisfy their interests.

The importance of communication for project management is emphasized by Zulch (2014) who introduced Figure 4 as can be seen below. Zulch (2014) argue that communication is the foundation or platform on which the project and project management is built.

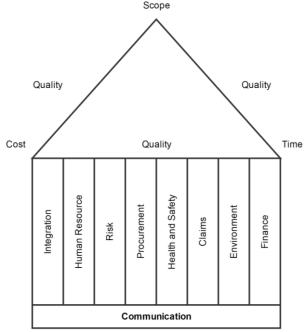


Figure 4 - Communication as a foundation of project management (Zulch, 2014, p. 1008).

As Figure 4 shows, communication can be seen as a platform that connects and integrates with the pillars and cornerstones of the project. Effectively this means that without communication it becomes much more difficult to deliver the project (Zulch, 2014). Communication is needed to effectively communicate the areas of cost, scope and time (Zulch, 2014). In addition, Olander and Landin (2008, p. 557) identified the following factors that can be linked to project success:

- Analysis of stakeholder concerns and needs
- Communication of benefits and negative impacts
- Evaluations of alternative solutions
- Project organization
- Media relations

4.1.2 Stakeholders

There is a plethora of definitions of what or who a stakeholder is. To illustrate the spectrum of definitions, two examples will be presented. A narrow description of a stakeholder can be found in the Stanford Research Institute's definition from (1963) saying that:

Stakeholders are those groups without whose support the organization would cease to exist.

This in turn can be compared with a broad definition that includes people or persons that do not directly affect the organization (Olander & Landin, 2005, p. 321):

A project stakeholder is a person or group of people who have a vested interest in the success of a project and the environment within which the project operates.

One can also divide stakeholders into internal and external stakeholders. Maylor (2010) defines an external stakeholder as:

These are people outside the 'project team' or organization. Typically, these include the people for whom the project is being provided (a customer group, for instance) or the people paying for the process (p. 77).

In contrast, Maylor (2010) define internal stakeholders as:

Those associated with the process, typically members of the project team or governance structure (p. 77).

It is now possible to compare The Swedish Transport Administration's definition of a stakeholder (see 2.1) to the definitions presented above. It can then be argued that the definitions differ in that The Swedish Transport Administration's definition focus on stakeholders who can or have the will to affect the project. In comparison, the definition presented above by Olander and Landin (2008) focus on the stakeholders interest in the project. The definition by the Swedish Transport Administration can also be argued to include both external and internal stakeholders. However it could be said that external stakeholders such as road- or rail users tend to fall through the cracks in the definition that The Swedish Transport Administration uses.

4.1.3 Stakeholder Communication

In the late nineties, Scholes and James (1998) recognized that stakeholders' ability to influence projects was on the rise, especially in terms of values, beliefs, policies and decisions. In short Scholes and James (1998) claimed that: "the era when the interests of any stakeholder group can be conveniently overlooked is fast disappearing" (p. 278). In addition, Scholes and James (1998) concluded that:

Stakeholders should not be treated as unconnected groups of people, instead organizations should try to connect stakeholder groups and build bridges between them (p. 285).

More recent studies show that project failure is often the result of 'inappropriate social interactions' with or between stakeholders, rather than the result of bad project management (Missonier & Loufrani-Fedida, 2014). Flyvbjerg (2014) further claimed that project management involves multiple stakeholders with conflicting interests. Achterkamp and Vos (2008) emphasized the relationship between project success and consideration of stakeholder interests, and further argue that all stakeholder interests should be taken into account.

In a project in the Netherlands, where the aim was to modernize a city harbor, Achterkamp and Vos (2008) showed what can happen when failing to consider all stakeholders:

Furthermore, the city council assumed that these stakeholders were just powerless bystanders, whereas it turned out that they had the means to influence at least the process, but in the end also the outcome of the project (p. 749).

Moreover, since the objectives of a project will be seen differently depending on the perspective of the specific stakeholder, the communication consequently needs to be adjusted to the specific stakeholder and the phases that the project goes through (Weiss, 2000). Dainty et al. (2006) claim that external stakeholders often find it difficult to approach project teams and to know what the project boundaries are. In addition to this, Loosemore (1999) claims that:

... In some projects, the pressures, cohesion, loyalties, focus and momentum that can develop become so intense that the construction project team effectively seals itself off from the outside world. This isolationism can be extremely damaging to the ability to set up the flexible communication channels and processes necessary for coping with the change that transcends project-based working (p. 10).

What this means is that there is a risk that the project does not communicate with stakeholders if it feels that it does not add value to the project, and that communication outside of the project is not value adding and therefore not necessary. Flyvbjerg (2014) claims that some project have chosen not to tell or communicate the whole truth about the cost and/or purpose of a project, as this could have raised negative opinions which could have stopped the project.

4.1.3.1 Stakeholder Confidence

All stakeholders are different and need to be communicated with differently (Dainty et al., 2006). Weiss (2000) claims that it is essential to emphasize the mission of the project continuously, and in different ways in order to get through to stakeholders, especially in change situations.

In addition, change often meets resistance (Lindberg Glavå, 2015). As stated by Major Projects Association (2005), people are generally reluctant to change and in order to create acceptance of a project, the stakeholders have to be guided and led through a process so that negative attitudes can be turned into either acceptance and understanding, or even positivism.

Moreover, Major Projects Association (2005) presented the following model, see Figure 5 below. The figure illustrates how stakeholders' level of confidence can change throughout different phases of a project. From the figure it can be seen that if stakeholder confidence is lost a lot of time and effort is required to increase confidence in the project again. If confidence is lost, Major Projects Association (2005) suggest that the project should formulate a new strategy that focuses on increasing the confidence step by step. This can be done by adapting the language to the stakeholder and keeping communication alive with stakeholders.

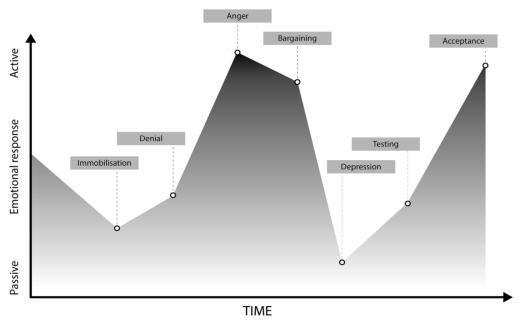


Figure 5 – Stages of stakeholder confidence, adapted from Major Projects Association (2005, p. 3).

4.1.4 Communication

Cheng, Li, Love, and Irani (2001) suggest that: "communication is about transferring information, knowledge, data, skills or technology". From this literature review it is evident that there are many models of communication and information (Foulger, 2004). For the purpose of this paper, a distinction is made between communication and information, in that communication is poly-directional - meaning that a message is sent from person A to person B, followed by person B giving feedback to person A. In contrast, information consist of a message sent from person A to person B, who receives it but is not expected to respond i.e one-way communication. However, communication do not only exist between single persons but between groups or organizations and as well (Dainty et al., 2006). According to Kautilya Society (2015), communication is an active interaction in comparison to information that is an isolated action. Moreover, American journalist Sydney J Harris exemplified the difference between communication and information as:

The two words 'information' and 'communication' are often used interchangeably, but they signify quite different things. Information is giving out; communication is getting through.

In other words, Sydney J Harris implies that when communicating, one should expect to receive some sort of feedback after 'getting through'. In contrast to this, Zulch (2014) stated that communication is a process that consist of collecting relevant information, interpreting the information and distributing the information. No implication of feedback or any kind of reception is obvious. One can therefore wonder what 'interpreting information' means in this context, and where the ensuring of 'getting through' is within this definition.

Moreover, Dainty et al. (2006) argue that effective communication can be difficult to achieve in project-based organizations as project are time limited, temporary and involve people who might come from different organizational backgrounds and who therefore uses different technical languages. According to Dow and Taylor (2008), projects commonly struggle to prevent communication from becoming straightforward information flows from one party to another. Successful communication can be seen as a social skill where effective interaction between individuals is the bedrock. However, as mentioned earlier, the understanding and implementation of effective communication can be difficult.

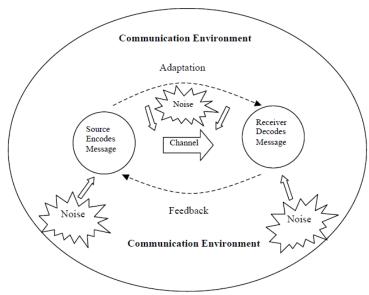


Figure 6 - Communication Environment (Crane & Livesey, 2003, p. 31).

Dow and Taylor (2008) claim that the main challenge is often the interference or noise that arises when communicating between multiple parties. For that reason, when applying the theory of Dow and Taylor (2008) on projects, the idea of managing communication becomes essential. Figure 6 above illustrate the external noise that can disturb the communication process in projects which consequently can lead to that messages from the source might not be recognized by the receiver and therefore could be neglected. The external noise can interrupt the message from any communication channel and result in communication issues.

Figure 7 illustrates how stakeholders can be connected through different networks. The grey marked stakeholders are indirect stakeholders that are separate from the focal organization in that they do not have a direct relationship. They can be considered 'friends of friends' whereas the unshaded stakeholders do have a direct relationship of the focal organization, 'friends'. Although the indirect stakeholders cannot directly influence the focal organization, they can influence the direct stakeholders. For the focal organization this means that it needs to consider this interconnectedness when communicating with stakeholders (Crane & Livesey, 2003).

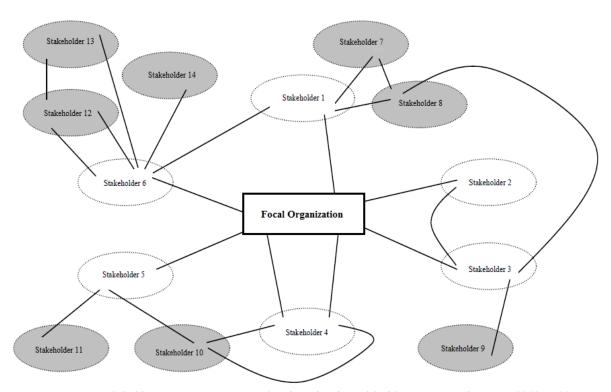


Figure 7 - Stakeholder communication networks adapted and simplified from Crane and Livesey (2003, p. 30).

The idea of a stakeholder communication network can be applied to the projects in this study. What this then means is that there are information/communication channels between the stakeholders that the project (focal organization) does not have the ability to control. In turn it can then be argued that the narrow definitions of a stakeholder does not consider the stakeholder network and its ability to communicate without the help of the project organization. For the projects this could then mean that the stakeholders form their own message based on information/communication from another stakeholder, something which could be seen as a risk if the information is incorrect. This can then be compared to the popular game Chinese Whispers which showcase how the information in a message changes as it travels from person to person.

4.2 Framework for Critical Factors

Influenced by academia such as Yang et al. (2009) and Flyvbjerg (2014) critical factors linked to effective stakeholder communication have been summarized into a comprehensible list, see Table 3 below. The critical factors highlights identified patterns and recurring themes within the literature of stakeholder communication. In other words, the factors derive from recent literature that have performed similar rankings of critical factors in infrastructure projects before, in combination with the explorative interviews at The Swedish Transport Administration. Criteria for utilization of topics/themes were e.g. recurrence in articles, level of match between theory and interviews and applicability to infrastructure projects and The Swedish Transport Administration. This section will explain the identified statements and present the theory that support them.

Table 3 - Statements for critical factors.

Statements for Critical Factors

To clearly explain the purpose and benefits of the project

To acknowledge the projects benefits and negative impacts

To analyze stakeholder influence and power of the project process

To identify stakeholders and their needs

To resolve conflicts and oppositions swiftly

To establish and maintain good dialogue and good relations with stakeholders

To formulate strategies to manage stakeholders

To utilize lessons learned from previous projects

To be responsive as well as explaining how opinions and views are taken into account

To play a part in media and actively utilize it

To engage the stakeholder in the project process

To clearly explain the purpose and benefits of the project

Winch (2000) state that it is important to communicate a clear mission, purpose and the scope during all phases of the project. The project manager must therefore have a clear view of all tasks and objectives during the project lifecycle, while also being able to explain these in an appropriate manner to stakeholders. Pinto and Slevin (1987) pointed out that clearly defining goals and directions of project mission is one of ten success factors when managing different stakeholders and in order to ensure project success. More recent scholars in the area of stakeholder management repeatedly refer to the conclusions of Pinto and Slevin (1987) and verify the linkage between clear missions and successful stakeholder communication (Davis, 2014).

To acknowledge the projects benefits and negative impacts

If both project benefits and negative impacts of the project are clearly explained to stakeholders, increased stakeholder interaction can be achieved (Olander & Landin, 2008). Communicating both positive and negative aspects of a project can assist in creating a base for trust, and thereby ensure open and trustworthy communication to and from stakeholders. Olander and Landin (2008) claim that: "the level of acceptance depends on two basic considerations: the concerns and needs of stakeholders and the stakeholder management process, i.e. how they are treated" (p. 559). This further motivates the arguments why project managers should present both sides of the coin and act transparently to stakeholders.

To analyze stakeholder influence and power of the project process

Stakeholder identification is crucial in order to analyze the potential power and influence of the stakeholder and assess how they can affect the project process. Olander and Landin (2005) stated that the stakeholder analysis is important as it can show what stakeholders that have an impact and influence on specific project decisions. This factor is therefore closely connected to the identification of stakeholders. The analysis should aim to guide the project manager in the overall stakeholder management process. It should provide information about the stakeholders' agenda and influence so that the project team can work on either alter or support each stakeholders' opinions and perceptions in a manner that is beneficial for the success of the project.

To identify stakeholders and their needs

Literature in the area of stakeholder communication suggest that identifying stakeholders and their needs is crucial for stakeholder management (Yang et al., 2009). Case studies made by Olander (2007) show that the project outcome can be linked to the stakeholder management processes, including stakeholder identification. Jepsen and Eskerod (2009) claim that identifying stakeholders and their needs is a central activity in project management and should be executed by the project manager. Why the identification activity is of importance is due to the fact that it can result in increased knowledge about what expectations that the stakeholders have on the project. What expectations that the project manager can have on the stakeholders and their contribution to the project are also relevant. In addition, this activity should result in a tangible list of who the stakeholders are, along with how they are, or will be affected by the project (Missonier & Loufrani-Fedida, 2014). The list thereafter lies as a foundation for a stakeholder power-impact matrix that can help in forecasting the stakeholders' power, i.e. how stakeholders can affect the project if a concern or conflict occurs as well as the stakeholders' willingness to cooperate with others (Jepsen & Eskerod, 2009).

To resolve conflicts and oppositions swiftly

Resolving conflicts and oppositions between stakeholders is another aspect that scholars frequently argue are of importance for effective stakeholder communication (Yang et al., 2009). Additionally, conflict analysis is an aspect that Freeman (1984) stated as being an important factor in stakeholder management. In infrastructure projects there are often a large number of stakeholders and various conflicts are likely to occur (Olander & Landin, 2005). Schermerhorn, Hunt, Osborn, and Osborn (2004) identified two different types of conflicts substantive conflicts and emotional conflicts. It is important that project managers have the capacity to manage and predict both types of conflicts amongst and/or with stakeholders (Schermerhorn et al., 2004). Resolving conflicts can be crucial for project managers so that decisions can be made and to enable the project to proceed in accordance with the plan (Yang et al., 2009).

To establish and maintain good dialogue and good relations with stakeholders

Crane and Livesey (2003) stated that continuous, genuine dialogue from organization to stakeholders, and vice versa, is the best solution for the management of complex problems. Gao and Zhang (2001) suggest that: "dialogue should be a two-way process where stakeholder are not merely consulted or listened to, but also responded to." (p. 243). On the other hand they also state that: "a dialogue may merely be a form of information gathering that does not allow feedback or interactive two-way communication" (p.243). In contrast, another perspective on stakeholder dialogue is to see it as a conversation between an organization and its stakeholders, in which information should be exchanged and knowledge acquired (Andriof, 2001). In addition, Yang et al. (2009) state that: "successful relationships between the project and its stakeholders are vital for successful delivery of projects and meeting stakeholder expectations" (p. 340). This is further supported by Missonier and Loufrani-Fedida (2014) who, citing Brown and Jones (1998), claim that project failure is often not the result of "lacking or ineffective project management practices, but of inappropriate social interactions between the project stakeholders" (p. 1108).

The goal of relationship building is to create a sense of trust and commitment with and among the stakeholders (Yang et al., 2009). The practices of interacting with and involving stakeholders, develops relationships and are referred to as engagement (Missonier & Loufrani-Fedida, 2014). Furthermore, Missonier and Loufrani-Fedida (2014) suggest that it is essential for the analysis of stakeholders to engage with stakeholders as early as possible in the project process.

To formulate strategies to manage stakeholders

Karlsen (2002) concluded that there are different types of stakeholder management strategies and that the core in all of them is concerned with how different stakeholders are treated by project members. This is exemplified in a study by Olander and Landin (2008) in which two railroad projects in southern Sweden are compared. From the study it was evident that one project had a 'strategy' that stated: "No decision was permitted in the project if that decision could not be made public" (p. 559). In comparison, the other project had a 'strategy' of engaging and involving the stakeholders as little as possible.

To utilize lessons learned from previous projects

Although by definition all projects are unique they still have many traits in common (Maylor, 2010). This means that it is possible to apply lessons learned in one project on another project, not to mention lessons learned about stakeholder communication. In the study by (Olander & Landin, 2008) in which two railroad projects were compared, it was clear that one project had learned that it was essential for the success of the project to early on gain acceptance by the stakeholders. This resulted in that the whole project organization was formed around the idea that communication and interaction with stakeholders was a key success factor. Olander and Landin (2008) further stated that one of the project's project organization was formed outside of the "traditional culture of the National Railroad Administration" which allowed the project to think outside the box and see other 'softer' problems than the technical and monetary issues typically identified by engineers (Olander & Landin, 2008).

To be responsive as well as explaining how opinions and views are taken into account

Stakeholder engagement is the practice of communicating with, involving and developing relationships with project stakeholders (Missonier & Loufrani-Fedida, 2014). It is also proposed that the goal of relationship building is to create a sense of trust and commitment with and among the stakeholders (Yang et al., 2009). In a study by Sloan and Oliver (2013), an interviewed project manager describes how to build trust: "To build trust you need to listen and to really understand, not only what the other person is saying but where they're coming from and what they're feeling if you can." (p. 1853).

According to Zulch (2014), there are four main factors that determine if communication is successful. These are the sender's ability to speak, write, reason and listen. The importance of listening is further supported by Dainty et al. (2006) who claim that "all human communication is inherently a two-way transaction between people, and effective listening is in fact the basis of all person(s)-to-person(s) communication" (p. 64). It can therefore be said that to listen is just as important as it is to speak.

To play a part in media and actively utilize it

Is media a stakeholder? Well, the answer depends on how you define a stakeholder. According to Olander and Landin (2008), media is not a stakeholder since it do not actually have a stake in the project. On the other hand, media has the ability to form opinions about the project, Olander and Landin (2008) stressed the importance of taking place in media and actively utilizing it is evident. One project in their study had an open approach to media and saw it as an opportunity to interact with stakeholders. The other project saw media as a problem that got in the way of their business of building infrastructure. With that, Olander and Landin (2005) concluded that negative press coverage affect the public's opinion and often lead to feelings of distrust and dissatisfaction with the information from the project. Mok, Shen, and Yang (2014) also claim that stakeholders are influenced by local media and culture, as well as by politics and regulations. For that reason, , media relations should be taken into account when dealing with stakeholder communication (Olander & Landin, 2008). However, it is not easy to appraise the exact effect of certain media involvement or specific media activities/coverage. For example, Olander and Landin (2008) concluded that:

... The main difference between the two projects in regard to media relations is that project 1 acknowledged the media as a powerful stakeholder that can be a supporter or an opponent, despite not having legitimacy. In project 2, the power of the media was underestimated by the project managers, while the media was actively used by opposition stakeholders in order for them to exert an influence over the decision-making process in the project (p. 559).

To engage the stakeholder in the project process

In an article from 1997 FitzPatrick (1997) discussed if and what project management and communication management can learn from each other, and concluded that the key learning for project management is in the field of managing stakeholders. He also proposed that to understand the needs of stakeholders, considering their interests and motivations is increasingly important. In order to achieve stakeholder engagement, FitzPatrick (1997) presented the following model presented in Figure 8 below.

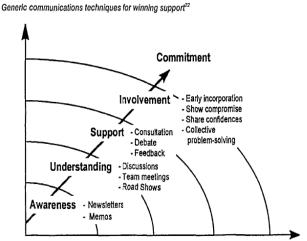


Figure 8 - Generic communications techniques for winning support (FitzPatrick, 1997, p. 68).

Additionally, Figure 9 presents a six step model for stakeholder management, which acts as a base for stakeholder engagement (Karlsen, 2002). Karlsen (2002) also suggested different strategies for the management and engagement of different stakeholders depending on their potential to affect the project and its outcome.

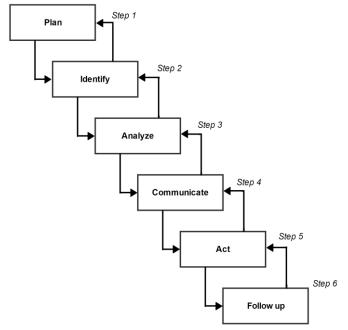


Figure 9 - A project stakeholder management process (Karlsen, 2002, p. 23).

5 Research Findings

5.1 Explorative Interviews

The business areas have different resources at their disposal for stakeholder communication. For example, one of the major projects in the study has four people with the word 'communication' in their job title working full time with communication. In contrast, the projects in business area Investment are staffed according to the SML model which means that the 'Small' project can expect 8-40 hours/year of communication assistance from a communication professional, the 'Medium' project 40-160 hours/year and the 'Large' project 160-600 hours/year.

The interviewee from the Investment business area claimed that good stakeholder communication is the foundation for achieving the project goals and driving the project in the right direction. According to the respondent, communicating with local residents is a substantial part of the project manager's everyday job via activities such as open houses, consultation, and information meetings.

As mentioned, the SML-model is one of the most substantial tool when it comes to managing communication in the Investment business area. The interviewee explained that the model is relatively new, but it is now starting to have an impact in the business area.

The stakeholder analysis was also considered as an important tool in order to communicate effectively with specific stakeholders. The interviewee stated that all projects should perform a stakeholder analysis of some sort, and it is the responsibility of the communicator allocated to the specific project that does it. The respondent stated the following about stakeholder analysis:

... The analysis is a great support for the communicators and a way for them to get a good view of what stakeholders to take into account, what channels to use and what activities to perform.

Moreover, the interviewee for business area Major Project claimed that if one has a good dialogue with local residents early in the project, the project is more likely to succeed in terms of less arguments and prolonged processes.

The interviewee explained the business area's usage of documents and standards to be quite free. When it comes to stakeholder communication within the business area the motto is "freedom under responsibility". The interviewee said:

As long as one sticks to the frameworks and graphic profile of the organization, one has quite free hands in the communication process.

Just as for business area Investment, one of the most commonly used documents and tools in Major Projects is the stakeholder analysis. The responsibility of carrying out the stakeholder analysis is allocated to the project. However, the business area lack standards of how, by whom and when it should be carried out. The respondent continued with saying that it is recommended that all project perform a workshop where the top management brainstorm about what potential stakeholders should be addressed in the communication plan.

5.2 Interview Study

The result will from now on focus on what was discussed during the interviews about each statement, business area by business area. The top five critical factors are presented in order from highest rank to lowest, and business area by business area.

Table 4 - Summary of statement ranking.

Statement	Business Area Investment	Business Area Major Projects	Total Ranking of Statements
To Identify Stakeholders And Their Needs	1	1	1
To Clearly Explain The Purpose And Benefits Of The Project	2	3	2
To Establish And Maintain Good Dialogue And Good Relations With Stakeholders	4	2	3
To Formulate Strategies To Manage Stakeholders	4	4	4
To Be Responsive As Well As Explaining How Opinions And Views Are Taken Into Account	3	5	4
To Utilize Lessons Learned From Previous Projects	8	7	6
To Acknowledge The Projects Benefits And Negative Impacts	9	6	7
To Play A Part In Media And Actively Utilize It	7	10	8
To Engage The Stakeholder In The Project Process	6	11	8
To Analyze Stakeholder Influence And Power Of The Project Process	9	8	10
To Resolve Conflicts And Oppositions Swiftly	11	8	11

From the table it can be seen that there are some differences between how the projects ranked the statements. In addition two statements were ranked equally important in the overall ranking. If the table was sorted business area by business area, then the ranking would have been slightly different.

5.2.1 To clearly explain the purpose and benefits of the project

Business Area Investment

One interviewee said that if you are able to explain the purpose of the project and make stakeholders see beyond their individual interest, then communicating is much simpler. Another interviewee agreed and said that unfortunately some people lose land and then it is especially important to get them to understand the greater good with the project. A third interviewee spoke about how negatively affected stakeholders might have an easier time to understand why they are affected, if they have an understanding of the purpose and what the project goal is.

Another respondent said that: "Not all stakeholders can be content and they cannot see that we do our best for each individual stakeholder. At those times it is important to have a clear reason of why the project should progress." One interviewee said that: "In this project we have had consultations according to the planning process, but instead of doing it the traditional way, we had an open house before a consultant was contracted. We did this because we felt that if we can get input from stakeholders before we start drawing up the path of the road, then we can

take those into account early, instead of having to come back with a drawing and then get lots of questions and complaints." The respondent added that a lot of time was saved by doing this.

Business Area Major Projects

To clearly explain the purpose and benefits with the project was a statement that business area Major Projects also ranked high. One respondent said that the purpose and benefits of the project is a message that the organization have to formulate." Another stated: "When it comes to communicating the purpose and benefits of a project, a lot of other stakeholders and cooperation partners are involved. All must take responsibility for their standpoints and views of the benefits and purpose of the project." This was a general perception amongst the interviewees. It was also stated that one of the projects have not fully succeeded with communicating the benefits and purpose of the project. One respondent said: "Unfortunately, the receiver of information tends to get lost in the dialogue as the project has unintentionally twinned itself into too many and complex words."

5.2.2 To identify stakeholders and their needs

Business Area Investment

One respondent said that the foundation for starting a project is to find out who is affected and what their needs are. After that you have to shape the project accordingly in order to have a successful project. One interviewee added to this and said that it is the foundation of the entire project, if you do not know who your stakeholders are then how do you approach the project? Another interviewee said that it is important to ask yourself two critical questions: Who are the stakeholders? And what are their needs? Another respondent said that if you are to have any kind of communication with the stakeholders then the first step is to identify them and then think about how to communicate with them, it is difficult to do it any other way.

Additionally, one interviewee spoke about what can happen if you fail to identify a stakeholder, and said that: "If you fail to identify an important stakeholder the whole project can be at stake, as anyone can stop or delay a project (by appeal) in the planning phase."

Business Area Major Projects

To identify what stakeholders are involved in the project, affected by the project and/or can have effect on the project was the factor that the respondents within Major Projects also regarded as important amongst the statements. The interviewees all agreed that it is crucial to analyze what stakeholders are involved in projects, otherwise it is not possible to engage with them and meet them in the dialogue.

When discussing stakeholder analysis and stakeholder expectations one respondent said that; "We cannot meet all the needs and expectations of all stakeholders, that is not feasible in these types of major projects". In addition, the same respondent claimed that: "The organizational mission when it comes to stakeholder communication is to stand balanced between what we must deliver according to the law (public consultation) and to satisfy all stakeholders' needs".

Some of the interviewees had been in the projects since the start. However, amongst those who had not, it was common that when asking questions about what had been done when it comes to stakeholder communication analysis before their time they did not know. A common comment was: "It was executed before I came into the project."

5.2.3 To establish and maintain good dialogue and good relations with stakeholders

Business Area Investment

One interviewee said: "To establish good dialogue you first need to identify the stakeholders, and then explain the purpose and benefits. When you have done this you need to keep the stakeholders informed by explaining what is happening, how far we have come. If you do this they feel involved all the time and then they don't need to wonder or worry."

On the other hand, one interviewee was skeptical if it was possible to both have good dialogue and good relations with stakeholders. The importance of good dialogue was emphasized, but the respondent questioned if good relations are possible, especially when stakeholders are negatively affected. The interviewee said that: "Historically, one or two decades ago, it was common to promise land owners things that couldn't be kept, which certainly didn't create good relations".

A third interviewee said the following about the statement: "It is important to have a dialogue, but everyone does not need to agree with what we think or, what others think. But if you have a dialogue and people feel welcome to participate and that we answer them, it does a lot for the project. If you can have a dialogue with the stakeholder early on then it is easier to agree upon principal solutions so that the project progresses instead of getting stuck on detailed solutions. Another respondent commented that, sometimes I get the impression that we, The Swedish Transport Administration, is bad at this as sometimes people are happy just because you called back or answered an email."

Business Area Major Projects

One respondent in Major Projects said: "Good dialogue is what I see as a primary goal. In an organization like this it is all about the principals of democracy, openness and transparency. The aim is that people know what we do, if one asks us a question – the person should be sure that he/she gets an answer." The rest of the interviewees agree on the above comment on the topic. The fact that one should try to be clear and rapid in the communication with stakeholder, i.e. answering all questions and opinions as soon as possible and thereby answer only with facts was stressed.

"In another project where I had the role as project director we had reoccurring meetings with the local residents in addition to the regular consultations. Information to stakeholders are often about what are ahead in the project. In other words it is about preparing the stakeholders on an honest and clear way – this with the potential risk of getting criticism. These meetings are important as our trustworthiness are strengthen" one interviewee claimed." One of the interviewees said. Other ways of meet stakeholder and establish opportunities for good dialogue is throughout external newsletter, information on the website and household information. These actions, as well as the consultation process described above, are initiated in the planning process.

Furthermore, all interviewees agreed that the communication and dialogue with stakeholders must occur early on in the project. Yet one interviewee stated: "I believe that the whole organization can continue working on the 'good' in dialogue and relations with stakeholder—in practice we lay a lot of time and resources on just answering all the viewpoints that comes in. To achieve the "good" it is important that we meet the stakeholders on new arenas. That is a step we have to take on organizational level and we are discussing at internally at the present."

5.2.4 To formulate strategies to manage stakeholders

Business Area Investment

One interviewee said that this is something one should do early on in the project, preferably after identifying the stakeholders. Of course the strategy will depend on the project scope and the number of stakeholders, but if you don't have a strategy your communication is likely to be random and of varying quality.

Business Area Major Projects

In both the projects in business area Major Projects the stakeholder analysis is considered as a strategy. The compulsory communication plan is another tool to understand how the stakeholders must be managed, as well as a 'surrounding world analysis' e.g. a PESTEL. Another type of strategy is to physically meet with stakeholders in other activities than the consultation process. Showrooms on major public places where project members meet with the general public to talk about the project is one appreciated action. One of the projects has also initiated lectures for companies and in public forums in order to gain acceptance and understanding amongst stakeholders. A common response after the lectures is: "Why have no one given this side/informed us about these aspects before? Now I see the benefits and purpose of the project more clearly!"

5.2.5 To be responsive as well as explaining how opinions and views are taken into account

Business Area Investment

One interviewee spoke about this in terms of the importance of explaining the planning process. How are opinions taken into account? What can stakeholders influence? It was also stated that it often is unclear where or whom you should turn to if you have an opinion or any questions. The project management seemed to feel like there was a need to educate the stakeholders in how the project and planning process works and when and how the stakeholder is able to influence the project. It was also highlighted that it essential to be responsive in the planning process because it is there that the project premises are set, it is in that time that each citizen can appeal. Once the plans are determined it is too late to appeal.

One interviewee stated that: "If you can keep people informed they are often happy, but if you don't do this they can turn negative." Another interviewee said that everyone is entitled to have an opinion and to be listened to and then it is up to us in the project to tell them how it is taken into account, e.g.by explaining the project objectives or how the stakeholders' opinions collides with another interests. All interviewees agreed that it is important to be clear and state that some things cannot be changed, while at the same time showing understanding towards people's feelings. Many interviewees emphasized the importance of being honest, and not making empty promises.

Business Area Major Projects

In addition to the organizational values, respondents see responsiveness as a fundamental democracy aspect. As all the governmental process can be complex and difficult to understand as an external stakeholder it is of great importance to be responsive towards that. Interviewees stress the fact that it can be difficult to communicate the fact that it might be too late to consider alternative solutions in certain questions as the process now is in another phase or that some aspects require political decision and are for that reason not a decision to take from The Swedish Transport Administration.

6 Discussion

In this chapter, theory is compared with the results from the interviews and critical factor exercise in order to find consistencies as well as potential gaps in the literature. The discussion is largely divided into two parts: part one reflects upon the critical success factors for stakeholder communication that the project management of the studied projects ranked the highest, in order to answer Research Question 1: What do previous literature consider to be critical factors for successful stakeholder communication. The second part discuss Research Question 2: How do project members at The Swedish Transport Administration rank these factors from a project management perspective? Both part one and part two focuses on the similarities and differences of the business areas.

6.1 Discussion part one

As more and more resources are committed to projects, the need to deliver the right projects, in the right manner and with the right benefits is becoming more and more important (Flyvbjerg, 2014). The following discussion centers on what other factors influence stakeholder communication and how they contribute to project success.

The Swedish Transport Administration aim to transform itself from infrastructure developer to social developer. In the new role communication with stakeholders becomes more important. Why communication becomes increasingly important is because The Swedish Transport Administration or the project does not communicate with the stakeholders how can they know: a) What to build/develop? b) What the project goals are? And c) Determine if the project was successful or not? Simply put: Can you have a goal without knowing who your stakeholders are and what they desire?

For the people affected by the project or for the people using the infrastructure, project success is about how well the project took their individual interests into account, how well their interests were satisfied, and if the interests could not be satisfied how was it communicated that those interests could not be met?

The literature contain a plethora of definitions of what a stakeholder is. Some definitions are broad and some are quite narrow. A challenge in stakeholder management is therefore to decide which definition to use and be consistent in the way it is applied (Davis, 2014). The broad definition presented in the theory is likely to involve too many stakeholders to get an overview and successfully satisfy all their needs. On the other hand, the narrow definition involves too few stakeholders to fully understand and satisfy all parties properly. In addition, involving the right amount of stakeholders is essential for project success and thereby maximizes stakeholder value (Olander, 2007). Olander and Landin (2005) stress the fact that stakeholders can affect construction projects implementation and execution if negative thoughts and attitudes are present. The potential effects that they can have are e.g. cost overruns, getting behind time schedule, which in turn affect project quality.

Lastly we again highlight the importance of open and trustworthy communication from the project to the stakeholders. Hirschman (1967) stated the following argument against open and trustworthy communication which is recounted in Flyvbjerg (2014):

...if people knew in advance the real costs and challenges involved in delivering a large project, 'they probably would never have touched it' and nothing would ever get built; so, it is better not to know, because ignorance helps get projects started, according to this argument (p. 12).

This approach to stakeholder communication might have worked then and traces of this point-of-view can still be seen in various projects. However, we strongly discourage projects from enacting this line of reason and instead follow the strategy of one of the projects in Olander and Landin (2008) which stated that: "No decision was permitted in the project if that decision could not be made public" (p. 559). This strategy contributed greatly to the project's success and especially in terms of its stakeholder management.

Clear Division of Roles and Responsibilities

One similarity between the business areas is the fact that most projects in both business areas have an unclear division of roles and accountability when it comes to various stakeholder communication activities and processes. Scholes and James (1998) suggest that stakeholder identification, stakeholder analysis and other similar tools are important for a strategic and professional approach to stakeholder communication. With this in mind, it is questionable if it is acceptable that these tools are not regularly updated, especially as both business areas in the study ranked the statement: To identify stakeholders and their needs, as the most important for stakeholder communication.

Project Isolation and Over Commitment

Two major risks for projects are over commitment and isolation, which are two phenomena that are closely linked to each other and stakeholder communication. Flyvbjerg (2014) claimed that too early commitment to a certain project is dangerous for the stakeholder communication as it can lead to that the project management fails to listen to stakeholders that are not in support of the proposed project. This may be what have happened in one of the studied major projects and why there is resistance against it. By committing to one solution to quickly, projects run the risk of evaluating benefits and shortcomings of the different project alternatives in a biased manner (Flyvbjerg, 2014). Earlier in the discussion the idea of communicating both advantages and disadvantages in order to gain acceptance and thereby enhance stakeholder communication were mentioned as a critical success factor for stakeholder communication. This further emphasizes the potential consequences of over commitment.

There is also a great risk that by isolating the project from the outside world, some stakeholders become invisible to the project. In response to the isolation, stakeholders that feel left out or neglected often turn to media, in order to make themselves and their opinions heard. In addition to this Loosemore (1999) stated that:

... in some projects, the pressures, cohesion, loyalties, focus and momentum that can develop become so intense that the construction project team effectively seals itself off from the outside world. This isolationism can be extremely damaging to the ability to set up the flexible communication channels and processes necessary for coping with the change that transcends project-based working (p. 10).

In other words, the ideas of over commitment and isolation can be troubling for the projects in their communication with stakeholders. As mentioned above, communication is an interaction between two parties that requires active listening, feedback and of course talking.

Media

The view and attitudes towards media is another factor that differ between the two business areas. When it comes to Investment, the general perception amongst the project members where that media should be utilized more frequently in order to reach out to stakeholders. In contrast, several interviewees from Major Projects argued that media tend to form the messages and missions for them, and pointed out that the organization cannot rely on media to be a channel for reaching out to stakeholders. The interviewees meant that the channels that the organization own or control are the channels that should be utilized the most. The consequences of not considering the importance of media and the role it can play e.g. in forming opinions about the project is highlighted in the following quote from Olander and Landin (2008):

... The main difference between the two projects in regard to media relations is that project 1 acknowledged the media as a powerful stakeholder that can be a supporter or an opponent, despite not having legitimacy. In project 2, the power of the media was underestimated by the project managers, while the media was actively used by opposition stakeholders in order for them to exert an influence over the decision-making process in the project (p. 559).

In addition, one can wonder if the political status and amount of differentiated opinions towards a project have something to do with the attitudes towards media and the viewpoint of its potential impact on stakeholders. Controversial projects with a large negative public opinion tended to be more critical to media and its potential to reach many of the stakeholders.

Social media could be another way to interact with stakeholders as it is such a big part of people's everyday life. Therefore an interesting finding was that none of the business areas saw being active in social media as so important that the additional cost can be motivated by better interaction and engagement with the stakeholders.

Politics

Politics is another factor that influence stakeholder communication and how much time and resources have to be allocated to stakeholder communication. As per the interviews with the business areas there is a general consensus that the projects that Investment undertake are highly desired by both politicians and the general public. This in contrast to many of the projects undertaken by Major Projects, which often are politically controversial as they affect such a large group of people. This view is also presented in the theory (Flyvbjerg, 2012, 2014). Flyvbjerg (2012; 2014) argues that large projects serve as monuments for politicians: something to be remembered by, politicians actively seek after this type of publicity and exposure.

There is also a risk that projects become so controversial that politicians does not dare to debate and discuss with stakeholders whether or not a project should be performed or not. One of the projects in the case study can be argued to have been hit by this risk. As a consequence much of the stakeholders' confidence in the project has been lost. The project, which is in the railroad plan stage at the present, also scramble to reestablish stakeholders confidence in the project. This is a painstaking process according to Major Projects Association (2005).

Uniqueness Bias and Standardization

Another difference between the business areas is the percieved level of uniqueness bias of the projects. For instance, one can resemble the projects as different individuals. At the moment Major Projects has eleven projects running, or in other words eleven different individuals that has to be taken care of. As has been identified during the interviews, the processes and tasks in the different projects are regarded as so unique that they cannot be standardized and applied for future projects, which complicates the standardization, knowledge transferring and effectiveness in stakeholder communication. This mindset is not unusual though. Flyvbjerg (2014) state that:

Technology and designs are often non-standard, leading to "uniqueness bias" among planners and managers, who tend to see their projects as singular, which impedes learning from other projects (p. 9).

With this in mind it is interesting to reflect upon what happens to stakeholder communication if a more standardized process is enforced. Business area Investment recently started with packaging of smaller projects into larger projects. It would therefore be interesting to look into how the stakeholder communications have worked in some of these projects. Did it improve between the projects in the package? Moreover one of the studied projects repeatedly referred to the technical lessons learned from projects such as 'Götatunnel'. This is great, but what are the lessons learned in terms of stakeholder communication and stakeholder management?

Storytelling

As mentioned earlier, the project management has a major responsibility to adequately communicate the purpose and benefits of a project, but how can that be achieved in practice? According to Lindberg Glavå (2015) it is important to have a story when it comes to communicating the reasons and purpose of a project that affect many individuals' lives. For stakeholders it is important to have a context that explains why a certain project is being carried out (Lindberg Glavå, 2015).

When applying the idea of storytelling on stakeholder communication in infrastructure projects it is interesting to see that many of the previously presented critical success factors can be turned into something that is more comprehensible and easily understood.

More specifically, a story consists of five parts: the characters, the setting, the plot, the problem, and the resolution (Penguin, 2015). The characters are the individuals or stakeholders the story is about. The setting is the location of the project and the plot is the story around which the entire book is based – i.e. the project. Moreover, the problem is the focus of the plot and can be translated into the purpose or motive of the project. Lastly, there is the resolution i.e. the way the problem is solved. From this research, the resolution is considered to be the dialogue and communication with stakeholders.

The point is that the story has the ability to put the project into perspective and make it understandable for all stakeholders, not only those who have the necessary 'know-how' of the planning process. In that way greater acceptance may be gained, and the confidence for The Swedish Transport Administration as an organization can be increased amongst stakeholders.

The Planning Process and "The Gap"

One key enabler for stakeholder communication is when it starts. As previously presented, the earlier stakeholders are involved, the more ownership they have for the project and, the more ability they have to affect the design and location of the project. It is common in projects to talk about the cost of changes over the project lifecycle. Figure 10 below describes this relationship.

In Figure 10 below it can be seen that the cost of changes increase as the project goes from planning towards delivery. In contrast the ability to make changes decrease at the same rate. We suggest that the same is true for stakeholder communication. By starting to communicate with stakeholders early in the project process, the communication itself can add value to the project. For example, one of the studied projects initiated a dialogue with the stakeholder before the consultant was contracted, and by doing so, the project manager argued that it increased both the project's and the consultants' ability to 'get it right the first time'. Unfortunately for this study it is too early to tell if this approach follows the curve in Figure 10 below, and reduce the number of conflicts.

If the downward sloping curve is labeled 'potential to add value', then it follows from the graph that the ability to add value to the project decreases as the project goes thru the planning process, the greatest ability to add value is in the early impact assessment, followed by the *if* (feasibility study) and so on. At one point the curve intersects with the upward sloping 'cost of change' curve at which point any further changes (that would add value) cost significantly more.

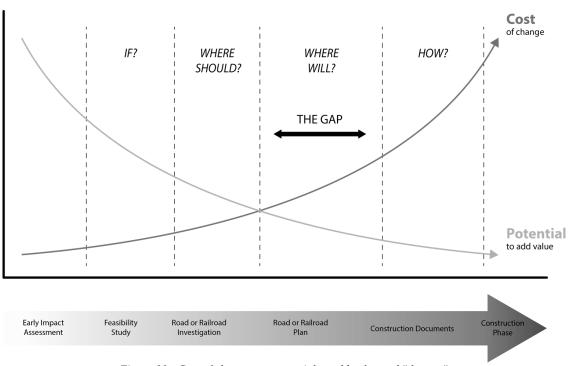


Figure 10 - Cost of changes vs. potential to add value and "the gap".

In the planning process all changes made up until the road or railroad plan gains legal status needs to be communicated with the stakeholders which means that if the project is able to communicate with the stakeholders early on, the ability to add value is high and the cost of changes is low. On the other hand, after the plan gains legal status, only minor changes can be made. If the changes are larger than the process needs to be repeated at great cost both in terms of monetary but also time.

As mentioned earlier there is a gap in the planning process. The gap exists because it is not clear who is responsible and accountable for taking discussions with stakeholders. Many of the interviewees argued that it is not the organization's responsibility to take discussions with stakeholders before a project is in the late stage of the planning process. Instead they argue that it is the politicians that should take these discussions. This is an interesting paradox because it is well known and recognized that the project and especially the project manager/project director is the one person with the greatest insight and knowledge of the project. With this in mind it would be logical if the project manager/project director took the discussion, as he/she should be able to answer most questions and present accurate facts. However many discussions are not about facts but rather about opinions which translates into politics and this is not the role of the project manager/project director. As for politicians they are well suited to take on any discussions but often lack the necessary knowledge about the details of specific projects to be able to answer questions from stakeholders.

If practice is in accordance with theory then early stakeholder communication has the ability to reduce the time from idea to finished project, which in turn reduce the cost of the project. The Swedish Transport Administration is already looking at early contractor involvement, so why not look into early stakeholder involvement?

6.2 Discussion part two

The focus of the research was to identify potential critical success factors for stakeholder communication in infrastructure projects, from a project management point of view. The top five critical factors identified in both business areas have been summarized and are presented below.

In summary, all statements below are of importance to enhance effective stakeholder communication within infrastructure projects. However, a couple aspects should be highlighted. Firstly, not all the respondents have organized the statements in a process, therefore the ranking should be viewed as building blocks from which effective stakeholder communication is built, and that the ranking more resembles the size of the building blocks in which a highly ranked statement such as the statement ranked as number one would represent a larger building block. A lower ranked statement would then represent a smaller building block and so on. In this context, it is important to recognize that both building blocks are equally important when putting together the building. In other words, it is completely different from how you put together IKEA furniture, in which there is a clear order and if you do not follow that order – it is difficult to put it together.

To identify stakeholders and their needs

The highest ranked statement was to identify stakeholders and their needs for business area Investment. This conforms well to the theoretical framework. Although the statement was ranked highly there are some areas that can be improved here, namely: Who should identify the stakeholders? Who is accountable? How should it be done? When/How should it be updated? In fact, in one project this had not been done and in another one the project manager was unsure if it even had been done. In both these cases the current project manager had taken over the project from another project manager. This suggests one or two things 1) The documentation is poor or outdated/irrelevant 2) The documentation is not read by the new project manager.

To identify stakeholders and their needs was ranked as the most important by the project members in Major Projects as well. In addition, all respondents claimed that all stakeholders are equally important to take into account. This support the theory, e.g. Achterkamp and Vos (2008) claimed that the relationship between project success and consideration of stakeholder interests should be taken into account and that all stakeholder interests must be acknowledged. Despite this, the interviews showed that there are not so many processes for stakeholder analysis within the business area, i.e. the same problem as were mentioned about business area Investment. However, it is stated within the business area that a stakeholder analysis should be done in every project, yet the roles and responsibilities in the work is not stated or clear enough.

Summary

Performing stakeholder analysis was the one activity that both business areas and most project members found as the most significant factor in order to achieve good stakeholder communication yet the result show that both business areas lack clear division of roles when it comes to this activity. This could suggest that the projects do not consider the stakeholder identification as a 'core' activity that is essential for the project. Another reason, and perhaps the more likely one is that the projects do not have the necessary time or resources to perform a solid stakeholder identification. No matter what reasons are at hand, researchers such as Zulch (2014), Flyvbjerg, Bruzelius, and Rothengatter (2003) claim that stakeholders and communication are key parts to successful project management.

To clearly explain the purpose and the benefits of the project

To clearly explain the purpose and benefits of the project was ranked as the second most important factor in business area Investment. Most interviewee's reason that this is very important to do this when stakeholders are negatively affected, for instance individual stakeholders that lost property thru expropriation. In relation to this, Pinto and Slevin (1987) suggests that it is equally important to explain the purpose and benefits to all stakeholders - not just those negatively affected. So why is there a difference? The difference could derive from different perspectives. When you are in a project, you need to keep it moving and you are forced to prioritize as your resources are limited. It can also be an active choice from the project manager or project team to focus on those that can hinder or halt the project the most. In theory, these prioritizations and choices do not need to be made, as the resource restrictions cannot be applied to a general theory.

To clearly explain the purpose and the benefits of the project was ranked as the third most important factor in business area Major Projects. A significant part of the discussion centered on the concept "stakeholder acceptance". Interviewees frequently mentioned that and meant that is crucial in order for a project to run smoothly. This conforms to the theory, e.g. Olander and Landin (2008) that stresses the importance of communicating the disadvantages or negative impacts of a project as well. By doing so, even greater confidence can be gained, and negative attitudes towards a project may be turned into acceptance, and potentially even support. This is also in line with what Major Projects Association (2005) claimed about the stakeholder confidence and change presented in section 4.1.3.1.

Major Projects Association (2005) also claimed that projects can be in different stages during the project lifecycle when it comes to stakeholder confidence, and that stakeholders consequently behave differently during the different phases of the project. One can argue that the studied project in the planning process should be placed around the 'anger' top as a considerable number of the stakeholders can be considered to be in this stage. In comparison, the other studied major project has not had any major demonstrations or opinions against it and should therefore be located around the 'acceptance' top as the majority of stakeholders can be considered to be in this stage.

Summary

This statement differs between the business areas as Investment prioritizes this statement higher than business area Major Projects. It was also discussed that one specific project in business area Major Project have failed a bit on that aspect and consequently when it comes to the stakeholder communication. This project is also the most controversial project of the studied projects, as well as the largest and most costly one.

Figure 5 about stakeholder confidence illustrates the problem well. As mentioned above the stakeholder of studied projects are in different phases hence on different locations in the figure. This applies for all projects within both business areas. The key to achieving a high level of stakeholder confidence is openness, transparency and responsiveness, all which come together when the purpose and benefits of a project is explained clearly and understood fully by stakeholders. Additionally, when it comes to change, one of the project managers illustrated the concept of openness, transparency and responsiveness with an example of the feelings of The Swedish Transport Administration employees who are being relocated from a traditional office to an open office landscape: "We force some pretty big changes on people, but we have a hard time to let go of our office".

The above quote says a lot about the importance of actively listen to and actively communicate the purpose and benefits of such a big change with stakeholders.

To establish and maintain good dialogue and good relations with stakeholders

To establish and maintain good dialogue and good relations with stakeholders was closely tied with statement number 7 in business area Investment and ranked as the fourth most important factor. The studied projects had different reasoning on this statement, one project questioned if it was possible to have good relations with stakeholders and the purpose of having good relations. A very different view than that presented by Yang et al. (2009) who say that: "successful relationships between the project and its stakeholders are vital for the successful delivery of projects and meeting stakeholder expectations" (p. 340).

The difference could be explained by the planning process and the laws that regulate the construction of a new road or railroad. In this process, the project is allowed access to land as soon as the Road- or Railroad Plan is gains legal status thru the 'Expropriationslag (1972:719)'. In practice this means that the project does not need to be in agreement with the landowner over the price of the land before they start the project. This also means that the project does not need to worry about having good relationships with the stakeholders once the plan has gained legal status, because after that such disputes cannot stop or delay the project. What this means is that once the plan has gained legal status, any conflict about for example the value of land and compensation is likely to be settled in court. For this reason it could then be argued that the projects interest in communicating with, and educating the stakeholders is close to a catch 22 situation. Because, when the stakeholder knows too much about the planning process then it increases the stakeholders' ability to influence the project. However if the stakeholder knows little of the planning process then the stakeholder is less likely to have an impact on the project process.

A concrete example of this can be found in the city of Gothenburg and the proposed railroad tunnel underneath the city, for a long time the public was kept quite poorly informed about the project and any alternatives as well as how the planning process works. However as negative opinions about the project has been given room in media more and more stakeholder are starting to question the project as they feel left out.

Just as in the business area Investment, the interviewees in Major Projects had varying reasons for why stakeholder dialogue and good stakeholder relationships are crucial for stakeholder communication. Many interviewees focused on this statement and claimed that it may in fact be the core of stakeholder communication - which further explains why this statement was ranked as the second most important in Major Projects.

Summary

All projects agreed that it is important to have a good dialogue with stakeholders, yet the reasons varied. Some projects said that by having a dialogue with stakeholders early on in the process it is easier to agree upon principal solutions, and that this is good because then the project can move forward instead of getting stuck on details. Another view is similar to that of Gao and Zhang (2001) and said that: "It is important to have a dialogue, but everyone does not need to agree, with what we think or, what others think. But if you have a dialogue and people feel welcome to participate and that we answer them, it does a lot for the project." (p. 244). In comparison Gao and Zhang (2001) also said that: "dialogue should be a two-way process where stakeholders are not merely consulted or listened to, but also responded to" (p. 243).

Communication is a two-way process as it involves an exchange between two parties. Furthermore, it is the basis of relationship building. With this in mind, the complicated planning process offers the stakeholders few possibilities to influence the project, something which affect the ability to establish dialogue and the building of relationships.

Another way to improve the stakeholder dialogue is to consider it as a continuous process that must be taken care of during the entire project, a factor which numerous of research have shown (Andriof, 2001; Crane & Livesey, 2003; Gao & Zhang, 2001; Missonier & Loufrani-Fedida, 2014; Yang et al., 2009). The theory also assert that this is the source of lost or gained confidence and engagement amongst stakeholders, another topic that this research has shown is closely connected to stakeholder communication.

To formulate strategies to manage stakeholders

In business area Investment, the statement *To formulate strategies to manage stakeholders* was tied on fourth place along with the statement *To establish and maintain good dialogue and relations with stakeholders*. In the theoretical framework, Karlsen (2002) concludes that there are many strategies of how to manage stakeholders but that they all revolve around the question of different stakeholders are treated by project members. In the studied projects it was said that a strategy should be formed early on, and that if you do not do this then it is likely to make your communication 'random' and of varying quality. The projects also mentioned that a strategy depends on the project scope and the number of stakeholders. It is unclear if the projects think that the scope and number of stakeholders affect the strategy or if just affect the number of stakeholders that the strategy needs to cover.

In interviews with Major Projects, this statement were closely linked to statement number 6 too. Despite this, the strategies utilized seemed quite unclear and very much on a strategic level – not on an operational level. The project management considered the stakeholder analysis and the communication plan as important tools for implementation of stakeholder communication strategies. As previously mentioned the roles and responsibilities of these tools are somewhat unclear. In other words, this is quite contradicting to the reality. The respondents believe that this is an important factor for stakeholder communication, and might even be on a strategic level. However, the visions might not have been transferred into operational levels, to the people that actually carry out the communication with stakeholders. Scholes and James (1998) emphasized the importance of taking on a strategic and professional approach to stakeholder communication.

Summary

In both business areas the statement were closely connected to establishing good relationship and stakeholder dialogue. As mentioned above, Karlsen (2002) stated that most strategies aims to give the project management team guidelines on how different stakeholders should be treated. During the discussions about this critical factor, most projects referred to the communication plan. We are however a bit hesitant to the idea of letting the communication plan be the strategy. Instead we encourage the projects to first identify the stakeholders' needs then develop a stakeholder analysis from which a strategy that fits those needs can be formulated. This means that there will not be one strategy that fits all. For instance, the strategy should be different for stakeholders that support the project and stakeholders that are against the project. To be successful the strategy must reflect this. Scholes and James (1998) suggest that the projects should build bridges between stakeholders and also (among other things):

- Align needs instead of satisfy individual groups i.e. don't play stakeholders against each other.
- Listen to the stakeholders and plan responses instead of guessing and firefighting.

To be responsive as well as explaining how opinions and views are taken into account

To be responsive as well as explaining how opinions and views are taken into account was ranked as the third most important factor in business area Investment. The reasoning of the projects concur quite well with that presented in the theory, which state that trust is built by listening and understanding what the other party is saying and feeling (Sloan & Oliver, 2013). As an example, in one of the studied projects one project member felt that there is a need to educate the stakeholder in how the planning process works and how the stakeholder is able to influence the project. This creates a dilemma for the project team - if the stakeholder knows 'too much' then he/she can impact the project more, and if the stakeholder knows 'too little' he/she is likely to feel left out, forgotten or ignored. Hirschman (1967) argued that if people knew about all the costs and challenges of a project they would not have started the project (Flyvbjerg, 2014). If that happens, the stakeholder might take on a negative view of the project and feel that the project team is not trustworthy or honest, which negatively affect the relationship between the project and its stakeholders.

To be responsive is something that was seen as crucial for stakeholder communication amongst the respondents in business area Major Projects too, and it was consequently ranked highly. The interviewees stated that responsiveness is about listening, being open and transparent to stakeholders. Moreover, all interviewees mentioned that a significant amount of time is allocated to answering questions and opinions. In one of the studied projects the questions are more about the practical issues as the project is in the construction phase. In comparison, another project, which is in the planning phase, has to answer more questions about the purpose and motive of the project. Interviewees from both projects did however claim that the questions are often not relevant for the phase that the project is in at the moment or not a question for The Swedish Transport Administration – rather a question for another authority e.g. the city.

Another interesting finding about responsiveness is that the interviewees claimed that all stakeholders are equally important to take into account and listen to. On the other hand, the project management in one of the projects discussed the difficulty in being able to listen and explain i.e. communicate with stakeholders that does not want to engage in a conversation. The conclusion of the discussion was that one cannot communicate with those stakeholders. This viewpoint somewhat goes against the fact that all stakeholders are equally important to listen to, which makes it a major challenge for the project.

Summary

To be responsive is, as mentioned earlier, one of the organizational values. With a greater insight and understanding of the planning process the stakeholder's questions and concerns could be answered in the right phase of the project. If this is achieved then the stakeholders would feel more involved in the project and the engagement might increase. Just as FitzPatrick (1997) argues, engaging stakeholders in the project is crucial for stakeholder communication. This makes us reflect upon the statement: To engage the stakeholder in the project process. This statement however, was ranked the lowest of all statements. Maybe there can be a connection between those two parameters and be an explanation to why the stakeholder communication might not be optimum in the organization today. Another reason could be that the interviewees included the statement about engaging with stakeholders in other statements which they ranked as more important.

6.3 Method Limitations

We consider that the findings of this study contribute to the stakeholder communication literature directed to the infrastructure sector, we see limitations of the study in retrospect. For instance it was clear when analyzing the data that it would have been beneficial to perform a pilot study of the critical factor exercise before carrying it out on the interviewees. This was evident as many interviewees claimed that some statements were unclear and they interpreted them in their own manners. Luckily we were present during the exercise and could answer interpretational issues/questions etc. This would in other words have been more of an issue if this was a quantitative study. Another reflection is that it would have been preferable if the interviewees got the chance to read the theoretical framework in advance - this in order to prevent potential interpretational issues. Additionally looking in retrospect, the statements could have been more 'unique'. We saw a tendency that interviewees included some statements in other, and that some interviewees only addressed one part of the statement during the discussions i.e. excluded the other part and therefore may not have thought that the other part was as important. With that, a revision of the method presented in Figure 3 above would have been preferable thus adding a pilot study.

One can also wonder if performing the critical factor exercise one-by-one and not in groups would have resulted in more honest and pure answers. Due to time constrains this was however not possible for this study. The same applies for including only project management members of The Swedish Transport Administration. Looking back it would have been advantageous to interview an external part, e.g. the city, the general public. In addition, it would also have been preferable to perform all interviews face-to-face and not via Microsoft Lync. Just as Bryman (2012) imply, context, facial expressions etc. easily get lost via digital sources. This should not have affected the research of this study. The factor exercise was performed in Swedish, yet the results are presented in English which means there is a slight risk of translation error, however this should be a rather low risk as it has been reviewed by both authors who are fluent in Swedish as well as English.

Lastly, a project is by definition a unique, and temporary Maylor (2010) and it is therefore difficult to assess whether or not the result of this paper is representative to all projects of similar type and scope in Sweden.

7 Conclusion

It is important to see stakeholder communication as a dynamic and interchangeable process. It needs constant revision and updating as the surrounding world change and thereby circumstances change as well. For that reason, it is simply not enough to do a communication plan, stakeholder identification or stakeholder analysis at the onset of a project to just 'tick the box'. The activities and procedures should be carried out systematically and it should be recognized that stakeholders change - as well as their thoughts, attitudes and opinions.

Of all eleven statements, identifying stakeholders and their needs was picked as the most important one by both business areas. The stakeholder analysis is in other words an important and powerful tool when it comes to stakeholder communication in projects. To identify the stakeholders and their needs is therefore the first step towards successful stakeholder communication.

A stakeholder analysis often shows that all stakeholder have different views of the project as well as different ability to influence and affect it. It is therefore necessary for the project management to understand the stakeholders as this gives the necessary insight that allows for understanding the stakeholders actions. With this understanding a suitable strategy can be formed. The strategy should focus on those stakeholders that have the necessary power and interest to affect the project outcome.

Although media is often not considered as a stakeholder, it has the ability to affect the opinions about the project. Media should therefore be seen as an important factor to consider in infrastructure projects and see potential to influence stakeholder communication must be recognized.

In common for many of the infrastructure projects that are or have been questioned by stakeholders is that the projects have failed in explaining and communicating the purpose and the benefits of the project. It is also important to recognize that all stakeholders cannot be satisfied with the project but everyone must be listened to and communicated with. In addition, the planning process is quite complicated and difficult to understand. The interviews have shown that much of the communication between the project management and stakeholders are about explaining how the planning process works. As a consequence input from stakeholders usually come late in the process when changes are costly or too late, as seen in Figure 10.

The study has shown that in order to build support and acceptance for the project, it is important to gain stakeholders confidence. The stakeholder confidence is built up from day one and activities that are carried out with responsiveness, clearness and transparency influences stakeholders. Furthermore the study has shown that once a stakeholder has lost confidence in either the project or the project management, it takes a lot of resources to reestablish the confidence.

It is evident that large project often are objects of big politics. This increases the importance of clear communication from the project to the stakeholders over the entire project lifecycle from idea to delivery. Today the responsibility of this is unclear and much of the communication with stakeholder falls through the cracks. It is also clear that projects in which, the purpose and benefits are not easily understood are questioned more often and therefore are more likely to become targets of political debate.

8 Recommendations and Future Research

8.1 Recommendations for The Swedish Transport Administration

All business areas have different amount of resources allocated for stakeholder communication, yet all projects have claimed that they have too little resources than what they wished they had. This should be recognized by the organization, as stakeholder communication requires time and effort and should be resourced accordingly.

Tell a story for each project

When a project is criticized the opposition often forms its own story or context about the purpose and benefits of the project. A project without a story, as opposed to one with a story, is likely forced to kill myths and go on the defense. Therefore we suggest that The Swedish Transport Administration should focus on building a story for each project that explains the project, its benefits, its conflicts and why it is needed. This should be done early in the planning phase and communicated to stakeholders. A guiding question for the project may be: 'what is the moral of the story?'

Educate stakeholders about the planning process

Knowledge is power and therefore we recommend The Swedish Transport Administration to simplify the way the planning process is described so that stakeholders could easily understand how and where to come with input and opinions. A complex process which runs the risk of shutting people out and prevent them from being able to affect what is happening in their backyard in a democratic way. If stakeholders have greater understanding of the process, the stakeholder dialogue could improve. An increased understanding of the process would therefore enable stakeholders to influence projects in the 'right' stage and in the 'right' manner before it is too late.

To educate the stakeholder about the planning process should be done during consultation at the latest or preferably before in e.g. media, brochures etc. This material should also be available in multiple languages, not only Swedish.

Determine clear roles and responsibilities for stakeholder communication

The study shows that to: identify stakeholders, their needs and to develop a strategy that satisfies these needs are essential tools to successful stakeholder communication and therefore project management. The recommendation is therefore to clearly define the roles and responsibilities for these tools and to make sure that they are regularly updated and always reflects the stakeholders' views, as these changes over time.

Initiate early stakeholder dialogue

Another advice is to initiate the dialogue with stakeholders early on in the planning process, preferably before the first consultation. Early stakeholder dialogue allows the project team to meet with stakeholders and together define and design the project. This in turn engages the stakeholders and allows them to be a part of creating the story.

To realize this, the projects need more support on communication early in the project, again it is best to be proactive rather than reactive. This is especially true today when all stakeholders can create opinion against a project with the help of a phone and social media.

8.2 Implications for Future Research

This research have focused on external stakeholders and how to communicate with them. As a consequence, most of the examples are related to individual stakeholders such as landowners, local residents and local business owners etc. who often are negatively affected by the project (at least in the short term). This implies that there is room for more research on the topic, for instance how would different stakeholder group's rank, the statements and how does this compare to the ranking of the projects?

As the research focused on business areas Investment and Major Projects, it would be interesting to investigate how the other business areas within the organization work with stakeholder communication. Additionally, it would be interesting to perform a quantitative study with the critical factor exercise in order to see if the result is representative for the entire organization.

It would also be interesting to follow up on projects that held open houses before a consultancy firm was contracted. On the same topic it would be interesting to research why the Swedish Transport Administration are testing out early contractor involvement, and not early involvement of other stakeholders. What are the advantages and disadvantages of focusing on the early involvement of contractors as opposed to stakeholders in general?

Last but not least, one topic that has not been mentioned at any point in this study is Building Information Models, BIM. Another interesting area for future research would therefore be to investigate the potential of BIM seen from a stakeholder communication perspective. Questions such as: how can BIM contribute when interacting with stakeholders? Is it possible to create open source models in which stakeholders could suggest where the road or railroad should be located etc.? This has for example been done in the project 'Blockholm', in which a computer model of Stockholm has been created in Minecraft which allows users to create their Stockholm (Blockholm, 2015).

9 References

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10 Appendix 1-4

Appendix 1

The Four-Stage Principle

On January 1st 2013 a new planning process was implemented, it is this new planning process that is described in the section below. Some of the reasons why the planning process was replaced with a new one was because it could be more streamlined and efficient. The planning process is regulated in the following laws: 'Väglagen (1971:948)', 'Lagen (1995:1649) om byggande av järnväg' and 'Miljöbalken (1998:808)', the laws differ slightly depending on if it is a road project or a railroad project.

The four-stage principle

The four-stage principle is based on four stages in order to solve problems and take on projects. In the first stage, **Rethink** a set of questions such as can the need for transportation be reduced or can other means of transportation be used instead are asked. If rethinking is not enough to solve the problem the second stage is investigated, **Optimize**. Optimization means to search for improvements in efficiency in the existing transport system for example, variable speed, traffic regulation etc. If none of the two previous stages are believed to be successful in solving the problem stage 3 is investigated. **Rebuild** looks at how the existing transport system can be adopted to fit the new needs and demands. Perhaps smaller construction such as widening of a road or extending a train platform is enough. The last step **Build** new is the last to be considered as solution to the problem. It typically involves building an entirely new stretch of road or railroad.





Measures that can influence the need for transportation and choice of transport mode



2 Optimise

Measures that rationalise the use of existing infrastructure and vehicles



Rebuild

Limited reconstruction measures



4 Build new

New investments and major reconstruction measures

Figure 11 - The four-stage principle -(Trafikverket, 2013).

Typical cases 1-5

Depending on the size, scope, complexity etc. of the project it is classified according to one of five possible typical cases. The classification has a funnel? Approach which means that a small project that has little impact on the surroundings goes through a relatively simple and short process before construction can begin. More complex projects or projects with significant environmental impact are automatically classified as 2-5 which means that steps are added to the planning process to ensure that the project affects the environment as little as possible as achieves as much benefits as possible.

Consultation

Consultation is the practice of inviting stakeholders to a dialogue to discuss their views and local knowledge that can affect the project delivery. The overarching goal of the consultation is to:

Define the project aims and project goals

To conduct consultation and start work on the consultation statement. This document summarize all views and knowledge of the project that has been collected during the consultation.

To collect basic data and knowledge according to the character of the project.

Consultation can be held in a variety of ways but there is one element related to the typical cases (above) that affects the scope of stakeholders involved/invited, this difference is described in the heading below.

Consultation in typical case 1

Projects that are classified as typical case 1 has a very small stakeholder circle. Generally it consists of landowners /property owners and sometimes also County Administrative Board and local municipalities.

Consultation in typical case 2-5

Projects that are not classified as typical case 1 has a wider stakeholder circle, simplified it can be said that the circle is increasing with the higher typical case. For example typical case 5 has a much wider stakeholder circle than typical case 2. Practically this means that the consultation is larger and more extensive in the higher typical case numbers.

Appendix 2

Interview Guide Phase 1

Presentation

- 1. Explain the purpose and agenda of the interview (WHY this interview? Tell that one person will be talking and one observing)
- 2. Get OK for audio recording
- 3. Go through the topics for the interview

Topic 1: Background of interview person

- Title/position in the organization?
- For how long have you been on this job?
- What have you been doing before??
- Wrap up anything to add?

Topic 2: How is the division Communication design on your business area?.

- Organizational structure where are you?
 - What is your role in the communication process?
- What resources do the business area have? (Budget, personnel, time etc.)
- How many employees are working with communication in your business area? Amount of employees locally and nationally? How do you collaborate?
- Do different regions meet and discuss general questions/issues of communication?

Topic 3: What is STA's definition of a stakeholder?

- Do the definitions differ amongst the different business areas?
- Do the definitions differ amongst the different projects?
- Who perform the stakeholder analysis? How is the process for this?
- What internal stakeholders are there in the organization? How do one communicate with these?
- Who is the costumer for you?

Topic 4: What is STA's definition of communication?

- Do the definitions differ amongst the different business areas?
- Do the definitions differ amongst the different projects?
- What is the difference between information and communication?
- How do one follow up and give feedback?

Topic 5: So what is STA's definition of stakeholder communication?

- What should stakeholder communication result in?
- What factors affect the stakeholder communication?
- What is the stakeholder's responsibility? Obligations?
 - How active is a stakeholder expected to be in the communication process?
 - How/where do one meet with stakeholders? How do one initiate contact? Who is responsible?
- Do you have any examples of how/when stakeholder communication has changed or affected the project outcome and/or process?
- Are there any differences between road and railroad projects?
- Are there any differences between urban projects or on the countryside?
- What motivates The Swedish Transport Administration to work proactive and effective with stakeholder communication? What are the benefits?

• Are there any organizational goals for stakeholder communication within The Swedish Transport Administration or within the business area?

Topic 6: What standards/documents do you utilize for stakeholder communication?

• Are there any guidelines? What are these? Are they followed properly? Give examples!

Topic 7: How do Communication help/support the projects and project managers?

- Are there any guidelines? What are these? Are they followed properly? Give examples!
- Do The Swedish Transport Administration use any kind of PmBok? (Are there any standards for project management and stakeholder communication?
- Do you think that project managers value stakeholder communication and sees it as an important aspect to ensure rapid, safe and effective performance of the project?
- How is the relationship between project managers and communicators?

Topic 8: Reorganization

- How do you feel that the role of communications have changed since The Swedish Transport Administration was established?
- How do you think that your position/role will change when it comes to stakeholder communication as The Swedish Transport Administration aim to work towards a 'renodlad beställarroll'?

Topic 9: BIM

- What is your opinion about BIM in relation to stakeholder communication?
- Are there any benefits of implementing BIM in terms of stakeholder communication?

Closure

- Do you have anything to add or clarify?
- Do you have any questions for us?

Appendix 3

Interview Guide Phase 2

The structure of the interviews was to first allow for the interviewees to describe their background and role in the project. After that the interviewees were asked to describe the project of study. Third, the interviewers presented the interviewee with the success factor exercise. Fourth, after the exercise the interviewers had some follow up questions. After the interviews the authors listened to the interviews and summarized them.

- How much time to you spend on stakeholder communication? Are you happy with the result?
- What lessons learned from this project will you bring with you to future projects? How are lessons learned within The Swedish Transport Administration transferred to/from other projects?
- Can we have a look at the communications plan for this project?

To clearly explain the purpose and benefits of the project Att förklara motivet och nyttan med projektet	Why is this important? What is benefits? How can this be seen in this project? Are there differences between road and railroad? Urban and suburban areas?	To acknowledge the projects benefits and negative impacts Att förklara både för- och nackdelar med projektet	Why is this important? How can this be seen in this project? How is this communicated?
To engage the stakeholder in the project process Att engagera intressenterna I projektprocessen	Why is this important? How have you engaged stakeholders in this project? Who are they?	To utilize lessons learned from previous projects Att använda sig av erfarenheter från tidigare projekt	Why is this important?
To resolve conflicts and oppositions swiftly Att lösa konflikter och motsättningar skyndsamt	Why is this important? Which responsibilities does the stakeholder have to make him/her heard? Which conflicts occur most frequently? Whose task is it to solve conflicts?	To establish and maintain good dialogue and good relations with stakeholders Att skapa och upprätthålla god dialog samt goda relationer med intressenter	Why is this important? How is this done? Are there differences between road and railroad? Urban and suburban areas? How can you gain/earn trust?
To formulate strategies to manage stakeholders Att utforma strategier för att hantera intressenter	Why is this important? Communication plan? Stakeholder analysis? Are there differences between road and railroad? Urban and suburban areas? Who does this?	To analyze stakeholder influence and power of the project process Att analysera intressenternas inflytande och påverkan på projektprocessen	Why is this important? Stakeholder analysis? SWOT? GAP? How are the stakeholders prioritized in terms of their power/ability to affect? Are there any guidelines?
To identify stakeholders and their needs Att identifiera projektets intressenter och deras behov	Why is this important? Who are the stakeholders? Internal? External? Why are they stakeholders? How do they affect the project? How was it concluded that they are stakeholders? What does their needs look like? Are there differences between road and railroad? Urban and suburban areas?	To play a part in media and actively utilize it Att ta plats I media och aktivt använda sig av media för att nå ut till intressenter	Why is this important? Proactive vs reactive? Social media as a tool? In which way are you showcased/visible in media? First shovel throw? Inauguration?
		To be responsive as well as explaining how opinions and views are taken into account. Att vara lyhörd samt förklara hur åsikter och synpunkter förs vidare	Why is this important? What does it mean to be responsive? How can this be seen in the project?

Appendix 4

Tables of results

Major Projects

The following tables show how the respondents ranked the statements from the critical factor exercise individually. From the tables it can be seen that the ranking varies in between the statements and that some project members ranks things differently. This could be because the projects were in different phases and/or that the project members interpreted the statements in different ways. It can also be seen that some statements were not ranked by any project members and that some were frequently ranked. Quite surprising is that the statement To engage the stakeholder in the project process was not chosen at all in Major Projects and only by one person in Investment. This is especially interesting as if you want to communicate with someone it is often easier to do it when they are engaged.

Table 5- Ranking Major Projects.

Statement	Respondent					
	A	В	C	D	E	F
To clearly explain the purpose and benefits of the project	1	2	3	-	3	5
To acknowledge the projects benefits and negative impacts	4	-	-	-	-	3
To analyze stakeholder influence and power of the project process	-	-	-	3	-	-
To identify stakeholders and their needs	2	4	1	1	1	2
To resolve conflicts and oppositions swiftly	-	3	-	-	-	-
To establish and maintain good dialogue and good relations with stakeholders	3	1	5	2	4	1
To formulate strategies to manage stakeholders	-	-	4	5	2	-
To utilize lessons learned from previous projects	-	-	2	-	-	-
To be responsive as well as explaining how opinions and views are taken into account	5	-	-	4	5	4
To play a part in media and actively utilize it	-	5	-	-	-	-
To engage the stakeholder in the project process	-	-	-	-	-	

Investment

Table 6 - Ranking Investment.

Statement	Res			spondent		
	G	H	I	J	K	
To clearly explain the purpose and benefits of the project	2	2	3	3	4	
To acknowledge the projects benefits and negative impacts	-	-	-	5	-	
To analyze stakeholder influence and power of the project process	-	-	5	-	-	
To identify stakeholders and their needs	1	1	1	1	-	
To resolve conflicts and oppositions swiftly	-	-	-	-	-	
To establish and maintain good dialogue and good relations with stakeholders	3	4	4	-	5	
To formulate strategies to manage stakeholders	-	-	2	2	-	
To utilize lessons learned from previous projects	-	3	-	-	-	
To be responsive as well as explaining how opinions and views are taken into account	4	5	-	4	2	
To play a part in media and actively utilize it	5	-	-	-	3	
To engage the stakeholder in the project process	-	-	-	-	1	