Factors influencing environmental communication

The case study of Schenker AB

Susanna Vig

Supervisors

Magnus Enell

Dagmara Nawrocka

Thesis for the fulfilment of the Master of Science in Environmental Management and Policy Lund, Sweden, October 2005



© You may use the contents of the IIIEE publications for informational purposes only. You may not conviled him transmit or redictibute these
© You may use the contents of the IIIEE publications for informational purposes only. You may not copy, lend, hire, transmit or redistribute these materials for commercial purposes or for compensation of any kind without written permission from IIIEE. When using IIIEE material you must include the following copyright notice: 'Copyright © Susanna Vig, IIIEE, Lund University. All rights reserved' in any copy that you make in a clearly visible position. You may not modify the materials without the permission of the author.
Published in 2005 by IIIEE, Lund University, P.O. Box 196, S-221 00 LUND, Sweden, Tel: +46 – 46 222 02 00, Fax: +46 – 46 222 02 10, e-mail: iiiee@iiiee.lu.se.
ISSN 1401-9191

Acknowledgements

Many people have directly or indirectly supported and guided me in my research and work. Thank you for your participation and contribution of making this thesis.

First of all, I would like to thank Lars B. Johansson at Schenker AG who gave me the opportunity to learn about Schenker AB's environmental work and environmental communication. It has been a real learning experience. Thank you all at Schenker AB who gave me your time for interviews, I have learned a lot from our discussions. A special thanks to Ulla Åhrlin and Monika Jadsén Holm for all your support during my stay at Schenker AG/AB.

Second, I would like to thank my supervisors at the IIIEE, Professor Magnus Enell and Research Associate Dagmara Nawrock. Your guidance and comments helped me to find new angels and interesting approaches of the thesis. Your feedback has been invaluable.

Also, thank you Klas, Johan and Peter for letting me stay at your place during my visits in Gothenburg.

Finally, very special thanks to Carl-Gustav, my family and all my friends for your support and patience through out the whole Masters Program.

Abstract

Environmental communication is more complex and challenging today compared to ten years ago. Moreover, it is experienced that many companies fail in their environmental communication. If companies want to succeed in their environmental communication, they must have a clear understanding of their environmental communication process. The impact from individuals and organisational conditions on the environmental communication must be identified and fully understood. To help companies create environmental communication strategies, new tools and guidelines, such as ISO 14063 and the Global Reporting Initiative (GRI), are introduced.

The purpose of this Master Thesis is to examine important factors influencing environmental communication. This is achieved by performing a case study on Schenker AB's environmental communication.

The study has identified three important factors influencing environmental communication: consideration of stakeholders' needs, interests, and values, the receptiveness among stakeholders and individuals' impact on companies' image. The Master Thesis evaluates Schenker AB's environmental communication from these factors and suggests recommendations of improvements.

Executive Summary

Background and purpose

Stakeholders put pressure on companies to take environmental responsibility. In order to fulfil the needs of and requirements from stakeholders, companies must reform and conduct their business activities in a more environmental friendly way. Environmental communication can create value added on companies' environmental work, and consequently companies can make profit from communicating their environmental responsibility.

In reality, many companies fail in communicating environmental issues. To help companies with their environmental communication, standards and guidelines have been developed e.g. ISO 14063 and the Global Reporting Initiative (GRI). ISO 14063 is intended to be used as a guideline and help companies to ensure successful environmental communication. The GRI creates a common framework for sustainability reporting worldwide.

Transport of goods is an important part of the market economy today and it is expected to increase in the future. However, transport of goods also has negative effects on humans, the environment and the society. In Sweden, Schenker AB is one of the leading providers of transports and logistics.

The purpose of the thesis is to analyse important factors influencing environmental communication. This is achieved by performing a case study on Schenker AB. The aim of the thesis is to analyse the internal and external environmental communication of Schenker AB and evaluate their correlation. In addition, recommendations are given on how the company can improve its environmental communication and how it can build a more efficient internal and external environmental communication strategy.

Findings from the study

The communication process consists of five important elements: sender, message, receiver, communication channels and feedback. The communication process is often explained by models which describe how information is transported from one place to another while developing a message. During the communication process, different problems occur. They are related to: 1) the relationship between sender-receiver, 2) adjustment of the message, 3) choice of communication channel, and 4) frequency of feedback.

Companies are increasingly asked to meet the expectations of more and more powerful stakeholder groups. Companies should therefore identify stakeholders who directly or indirectly put pressure on the company. This is often done in a stakeholder view. The organisational structure of a company is found to be of high importance for its internal and external communication. The organisational structure of companies must therefore be understood in order to control the company's communication.

In order for the external communication to succeed, the internal communication must first work. Successful external communication requires that the same external stakeholder receives the same message from different internal stakeholders. This makes it essential for internal stakeholders to receive and understand the internal message. In addition, internal stakeholders must be aware of their role in the company's external communication.

Environmental communication is more complex and challenging today compared to ten years ago. If companies want to succeed in their environmental communication, they must have a

clear understanding of their environmental communication process. The influence of individuals and organisational impact on the environmental communication must be comprehended.

According to ISO 14063, companies should begin their environmental communication by creating an environmental communication plan. The plan should include an environmental communication policy in which the top management of the company expresses its intentions and directions with its environmental communication. The communication plan should also consist of an environmental communication strategy as well as environmental communication activities which describe and determine the implementation of the policy.

Schenker AB's environmental communication is identified and evaluated from five different perspectives: the sender, the message, the receiver, communication channels and feedback.

Conclusions

Three important factors have been identified to influence environmental communication.

- Consideration of stakeholders' needs, interests, and values
- The receptiveness among stakeholders
- Individuals' impact on companies' image

Schenker AB has performed a stakeholder view of its present communication. This stakeholder view is also used within the environmental communication. Schenker AB has used the traditional stakeholder view and not the new model launched by GRI. This could indicate that important stakeholders' relation to the society is neglected or misunderstood.

Environmental issues are continuously communicated to internal stakeholders still, some employees experience the environmental message as non existent. Reasons could be that the message is not clear enough or that employees choose to shield themselves from the environmental message.

Schenker AB is to some extent adjusting the environmental message according to different stakeholders needs, interests and values. However, since the company uses a variety of communication channels within their environmental communication, the one and the only channel is used to reach many different stakeholders. This could imply that the environmental message is not fully adjusted for specific stakeholders.

Schenker AB experiences feedback on its environmental communication as insufficient. This could depend on deficient identification and consideration of different stakeholders during the development of environmental communication.

Interest for environmental issues is experienced to be low among some employees. Young people are noticed to show more enthusiasm. Difficulties to set up "relevant" environmental targets at the branch offices and terminals also influence employees' interest and engagement in environmental issues.

Schenker AB does not seem to have a clear understanding of which internal stakeholders who communicate environmental issues to external stakeholders. Further, they do not know how employees comprehend the internal environmental message.

Historical changes within Schenker AB's organisational structure have influenced the company's environmental communication. It has been perceived that Schenker AB's (external) environmental communication have been associated with certain individuals. The resignations of these persons have had significant impact on Schenker AB's external environmental communication.

Recommendations

Schenker AB can improve its environmental communication by creating an environmental communication plan according to the ISO 14063 standard. The plan should, for example include:

- Identification of stakeholders who directly or indirectly put pressure on Schenker AB to take environmental responsibility.
- Dialogue with important stakeholders on a regular basis.
- Adjustment of environmental message and choice of communication channel according to stakeholders' needs, interests, and values.
- Encourage stakeholders to give feedback on the environmental communication.
- Active search for feedback by investigating how the company is comprehended by important internal and external stakeholders.
- Obtain an idea of employees' understanding of the company's environmental message.
- Identify internal stakeholders who communicate environmental matters to external stakeholders.
- Environmental education planned for specific internal stakeholders.

Table of Contents

1	IN	NTRODUCTION	1
	1.1	Background	1
	1.2	Problem definition	2
	1.3	OBJECTIVES AND RESEARCH QUESTIONS	2
	1.4	METHODOLOGY	3
	1.5	SCOPE AND LIMITATIONS	4
	1.6	STRUCTURE OF THE THESIS	4
2	C	OMMUNICATION THEORY	5
	2.1	INFORMATION AND DIALOGUE	5
	2.2	COMMUNICATION PROCESS	5
	2	2.2.1 Communication models	6
	2	2.2.2 Communication channels	<i>7</i>
	2.3	STAKEHOLDERS	7
	2	2.3.1 The relevance of stakeholders	
	2	2.3.2 The stakeholder view	
	2.4		
	2.5	Environmental communication - ISO 14063	
		P.5.1 Background	
		P.5.2 Principles of environmental communication	
	_	2.5.3 Environmental communication policy	
		2.5.4 Environmental communication strategy	
	2	2.5.5 Environmental communication activities	12
3	О	RGANISATIONAL STRUCTURE AND COMMUNICATION	14
	3.1	ORGANISATIONAL STRUCTURES	
	3.2	DIRECTIONS OF INTERNAL COMMUNICATION	
	3.3	EXTERNAL COMMUNICATION OF THE ORGANISATION	15
4	\mathbf{E}	NVIRONMENTAL ISSUES CONNECTED TO TRANSPORTS	18
	4.1	THE WHITE PAPER - TRANSPORT IN THE EUROPEAN COMMUNITY	18
	4.2	EMISSIONS FROM HEAVY VEHICLES	19
	4.3	LOGISTICS INDUSTRY	20
	4	1.3.1 Customers' view on transports	21
5	S	CHENKER AB	
	5.1	BACKGROUND INFORMATION	22
	5.2	ORGANISATIONAL STRUCTURE	23
	5.3	ENVIRONMENTAL WORK AT SCHENKER AB	27
	5	5.3.1 Historical work and changes	27
	5	5.3.2 Environmental work within the organisation	28
	5	5.3.3 Environmental education	29
	5.4	CUSTOMERS' VIEWS AND REQUIREMENTS	29
	5.5	COMPETITORS' WORK WITH ENVIRONMENTAL COMMUNICATION	30
	5.6	STAKEHOLDERS	30
6	E	NVIRONMENTAL COMMUNICATION OF SCHENKER AB	32
	6.1	QRE	33
	6	5.1.1 Internal Communication	
	6	6.1.2 External Communication	34
	62	Land Division	35

A		K 1: INTERRELATIONSHIPS AND FLOW OF ENVIRONMENTAL	(7
A	BBREVIA	TIONS	66
В	IBLIOGR	APHY	63
8	CONC	CLUSIONS	60
	7.4.2 7.4.3	Environmental communication strategy Environmental communication activities	
	7.4.1	Environmental communication policy	
		VIRONMENTAL COMMUNICATION PLAN	
	7.3.4	Schenker AB's environmental communication process	
	7.3.3	Organisational structure and environmental communication	
	7.3.2	Needs for environmental communication	
	7.3.1	Pressure from stakeholders	
		MMUNICATION	
		ALUATION OF SCHENKER AB'S INTERNAL AND EXTERNAL ENVIRONMENTAL	
	7.2.3	Individuals influence on companies' image	
	7.2.2	The receptiveness among stakeholders	
	7.2.1	Consideration of stakeholders' needs, interests, and values	
	7.2 FAC	TORS INFLUENCING ENVIRONMENTAL COMMUNICATION	
	7.1 GE	NERAL REFLECTIONS ON ENVIRONMENTAL COMMUNICATION	48
7	DISCU	USSIONS AND RECOMMENDATIONS	48
	6.8 Feb	EDBACK	46
	6.7.4	Printed material	46
	6.7.3	The environmental and sustainability report(s)	
	6.7.2	Intranet	
	6.7.1	Internet	44
	6.7 CO	MMUNICATION CHANNELS OF SCHENKER AB.	44
	6.6.11	Research/Education	43
	6.6.10	General Public	43
	6.6.9	Competitors	43
	6.6.8	Owner (DB)	43
	6.6.7	Branch organisations	43
	6.6.6	Politicians	
	6.6.5	Authorities	
	6.6.4	Mass Media	
	6.6.3	Suppliers (BTF)	
	6.6.2	Customers	
	6.6.1	Employees	
		CEIVERS OF SCHENKER AB'S ENVIRONMENTAL COMMUNICATION	
	6.5.2	External communication.	
	6.5.1	Internal communication	
		VIRONMENTAL MESSAGE(S) OF SCHENKER AB	
		RPORATE COMMUNICATION	
	6.3.2	External Communication	
	6.3 BRA	Internal Communication	
	6.2.2	External Communication	
	6.2.1	Internal Communication	
	(21		2.5

List of Figures

Figure 2-1 The general linear communication model	6
Figure 2-2 The contextual communication model with a contextual factor and feedback	6
Figure 2-3 The traditional stakeholder view	9
Figure 2-4 The new stakeholder view	9
Figure 3-1 Functional oriented organisation.	14
Figure 3-2 How organisations often picture the responsibilities for communication	16
Figure 3-3, The chaos behind the dividing up of responsibilities for communication within an organisation.	16
Figure 4-1 The growth of goods transport by mode of transport in EU-15: 1970-99	19
Figure 4-2 The flow of products and the logistical control of transports.	20
Figure 5-1 Organisation structure of Schenker AB Group.	24
Figure 5-2 Organisation structure of Division Land.	25
Figure 5-3 Organisational structure of the department of Marketing and Processes	26
Figure 5-4 Organisational structure of the environmental department	26
Figure 5-5 A stakeholder view for Schenker AB's "general" communication	31
Figure 6-1 An overall picture of Schenker AB's internal and external environmental communication	32
List of Tables	
Table 4-1 shows the different Euro-classes for heavy vehicles	19
Table 6-1 lists contacts between Schenker AB's internal and external stakeholders	41
Table 6-2 shows a list of communication channels, which are used in the environmental communication activities.	44

1 Introduction

This chapter provides an introduction to the thesis. In the first section, background to environmental communication and the studied problem is presented. Thereafter, the objectives and research questions are explained followed by methodology, scope and limitations. Finally an overview explaining the structure of the thesis is described.

1.1 Background

Companies today experience pressure from different stakeholders to take environmental responsibility. Though, while companies manage their responsibilities they also face demands of profitability. It has been shown that companies' work with environmental matters is not enough to manage needs and requirements from stakeholders; the engagement must also be communicated. It was reported that companies' environmental communication to important stakeholders can create value added on their environmental work (Collin, 2004, p.12). In other words, companies can make a profit from communicating their environmental responsibility.

For a company to work with environmental issues there must be an incentive to do so. Waddock et al. discuss three types of stakeholders who push companies to act in a more responsible way (Waddock, Bodwell, Graves, 2002, p.132). The first type is the so called primary stakeholders e.g. owners, employees, customers and suppliers, who according to the writers can be viewed as being on the inside of the company. The second group is the so called secondary stakeholders e.g. NGOs (Non Governmental Organisations), communities and governments. According to the writers, these demand greater corporate responsibility. The final source of pressure is general trends and institutional expectations i.e. "the steady emergence of global principles and standards that define expected levels of corporate responsibility, and new initiatives to publicly report the triple bottom lines for measuring economic, social, and environmental performance" (Waddock et al., 2002, p.132).

In order to fulfil needs of and requirements from stakeholders, companies must reform and conduct their business activities in a more environmental friendly way. Environmental management systems (EMS) have been proved to be a commonly used tool in companies' environmental work. The most used standard is the international EMS standard, ISO 14001 (Almgren, Brorson, 2003, p.6).

The ISO 14001¹ emphasises the importance for companies to communicate to internal and external stakeholders. Paragraph A.4.3 states: "Internal communication is important to ensure the effective implementation of the environmental management systems. [...] When considering external communication about environmental aspects, organizations should take into consideration the views and information needs of all interested parties". Companies must express their views on environmental issues as well as present and explain environmental implications of their activities, products and services (ISO, 2005, p.V). However, in reality, many companies fail in communicating environmental issues.

ISO has developed a new standard for environmental communication, ISO 14063. The standard should not be used for certifications or registrations. Instead, it is intended to be

¹ ISO 14001 refers to the reviewed standard for environmental management systems from 2004.

used as guideline and help for companies to ensure successful environmental communication (ISO, 2005, p.1). The Global Reporting Initiative (GRI) was established to create a common framework for sustainability reporting worldwide (GRI, 2002, p.1).

1.2 Problem definition

Market economy relies to a large extent on transport of goods. In 2010, transport of heavy goods in the European Community will increase by nearly 50% over its 1998 level, unless measures are taken (EC, 2001, p.13). The share of goods' transport on road has constantly increased from 41% in 1990 to 44% in 1998. If no action is taken, it is expected to reach 47% in 2010.

Transports of goods also have downsides. As an example, the increase of transports leads to more congestions, accidents and environmental nuisance. These have a negative impact on humans, the environment and the society (EC, 2001, p.2). Another problem is that many companies do not include their transport of goods when they calculate their environmental performance. Consequently, they do not put pressure on their conveyers.

Schenker AG is today one of the leading international providers of transports and logistics solutions in Europe. In Sweden, the Swedish company – Schenker AB – has been seen as one of the leading companies within environmental work and performance. Within the Schenker AG group, Schenker AB is one of the leading companies, in terms of environmental work.

Schenker AB's environmental profile is perceived as unclear and much weaker compared to a few years ago. It appears to be a gap between the company's actual environmental performance and different stakeholders' perceptions.

1.3 Objectives and research questions

The aim of the thesis is to analyse the internal and external environmental communication of Schenker AB and evaluate their correlation. In addition, recommendations are given on how the company can improve its environmental communication and to get a more efficient internal and external communication strategy.

The two objectives of the thesis are:

- to evaluate Schenker AB's internal and external environmental communication and examine the link between them; and
- to suggest how to effectively communicate environmental information to Schenker AB's internal and external stakeholders.

In order to fulfil the objectives, the thesis sets out four research questions to be answered. They are to identify:

- theoretical communication models on how to communicate to internal and external stakeholders in the best way;
- reasons, within the theory of communication, why companies might fail in their external communication;
- the internal and external environmental communication of Schenker AB; and
- factors influencing the environmental communication process.

1.4 Methodology

This section describes the research conducted in order to answer the objectives of the thesis. The study was conducted in May-September 2005.

Two types of research were employed; literature review and semi-structured interviews. Literature searches were done for library books in the library catalogue of Lund University (Lovisa) and the national Swedish library catalogue (Libris). Articles were searched for in Lund University's electronic library information navigator (Elin). Additional research was done on the internet. The literature review can be broken down into three sub-levels.

Initially, a literature review was performed to learn more about general communication theories and principles. This made it possible to examine relevant elements and problems in the communication process. The purpose was to identify theoretical reasons why organisations might fail in their internal and external communication as well as receive a conceptual base for the continuing work. The literature review also included the definition of reasons to communicate and cooperate with different internal and external stakeholders.

An additional literature research was carried out to learn more about environmental communication and principles. As part of this, the recently launched ISO standard 14063, Environmental communication – Guidelines and examples, was studied. Further information about environmental problems facing transport of goods was collected from the "White Paper – European transport policy for 2010: time to decide". Finally, information was also gathered about logistics.

Next, semi-structured interviews were conducted with employees at different positions and levels in Schenker AB's organisation. A set of questions was established to ensure that all perspectives and main elements of Schenker AB's environmental communication were covered during the interviews. Depending on the interviewee's position in the company, different questions were chosen from this set. Questions were also further elaborated during interviews.

The choice of semi-structured interviews can be motivated by the interviewees' varying knowledge and involvement in Schenker AB's environmental communication. It also made the interviews more dynamic. Interviews lasted between 30-90 minutes, depending on the interviewees' involvement in the company's environmental work and environmental communication. The majority of interviews were performed face-to-face. Some were performed by telephone. Complementary questions were addressed by email.

Further information about Schenker AB was collected from the company's published internal and external material e.g. internet, intranet, sustainability report and other printed material such as newsletters and information sheets.

Interviews were also held with external experts within relevant fields: communication, transport and companies' environmental communication and work with transport issues. The purpose of these interviews was to develop a deeper understanding of how companies communicate environmental issues and problems facing the transport industry.

Finally, the ISO standard was used as a checklist evaluating the way environmental communication is performed by Schenker AB. The standard helped to give recommendations how the company can create an environmental communication plan.

1.5 Scope and limitations

The thesis focuses on environmental communication performed by Schenker AB. Additional limitations are made within the organisational structure of Schenker AB (see Section 5.2 for further structure). Figure 5-1 shows that the study only covers the Land Division and Marketing and Processes. Figure 5-2 indicates that Domestic is the only business area and Region South is the only unit included in the study. Further, Figure 5-3 implies that only Quality, Risk and Environment (QRE), Corporate Communication (CC) and Key Account Management (KAM) are comprised.

It should be noted that in the thesis, Schenker AB's environmental communication is described from the company's perspective. Although, the perspective from stakeholders is very important, it is not studied in depth. The reason is that Schenker AB has not identified all its stakeholders for the company's environmental communication. It should also be mentioned that the purpose was not to analyse the actual environmental performance of Schenker AB, but its internal and external environmental communication.

Interviewees are representatives of their organisations and are not representing a large sample size. Therefore, they might have had biases and/or information gaps when presenting the information.

1.6 Structure of the thesis

Chapter 2 gives a theoretical introduction to the issue of communication. Important elements and models, which define the communication process, are described. Stakeholders' impact on companies' communication and problems during the communication process are also explained. Furthermore, the new ISO standard on environmental communication is presented.

Chapter 3 explains the impact of organisational structures on companies' environmental communication. Organisational structures and directions of communication within an organisation are described. Problems related to communication in organisations are also presented.

Chapter 4 introduces trends and problems connected to transport of goods in the European Community. The logistics industry and related environmental problems are also presented.

Chapter 5 presents Schenker AB. The chapter includes a description of the company's history, organisational structure, environmental work and important competitors and stakeholders.

Chapter 6 describes the internal and external environmental communication of Schenker AB. The chapter is divided into five different perspectives of Schenker AB's environmental communication: the sender, the message, the receiver, communication channels and feedback.

Chapter 7 discusses and evaluates Schenker AB's environmental communication. Environmental communication in general and factors influencing the environmental communication process are presented and argued.

Finally, conclusions are presented in Chapter 8.

2 Communication Theory

This chapter gives a theoretical introduction to communication. In the first section, information is distinguished from dialogue. In the next section, important elements and models which make up and describe the communication process are explained. Stakeholders' impact on companies' communication is thereafter discussed followed by problems during the communication process. The last section presents important principles and elements within environmental communication which have been underlined in the new ISO standard 14063 — a standard which covers companies internal and external communication

The definition of communication is generally expressed as;

"A process through which people acting together, create, sustain, and manage meanings through the use of verbal and nonverbal signs and symbols within a particular context"

(Conrad, Poole, 2002, p.5).

2.1 Information and dialogue

Before explaining the definition of communication it is important to distinguish dialogue from information.

Information is the product exchanged in the communication process and which helps people to understand and interpret their surrounding word (Kreps, 1990, p.14). Further, information can be seen as a one-way communication process whereas dialogue is described as a two-way communication process. The two models are described in Section 2.2.1 and 2.2.2. Today, organisations experience an increased demand for dialogue (Larsson, 2001, p.37).

2.2 Communication process

This section describes five important elements in the communication process: sender, message, receiver, feedback and communication channels. The communication process is often explained by models which depict how information is transported from one place to another while developing a message.

Sender – The sender is person(s) behind the message. Their task is to formulate a message and choose a language which simplify for the receiver to understand the correct message. Often it seems simple to decide who the sender is, but "if we look more closely at a specific communication situation, however, it becomes apparent how vague and unclear the concept can be" (Windahl, Signitzer, Olson, 1992, p.9).

Message – The message could be verbal or non-verbal signals transferred in the communication process and according to Windahl et al. it can be seen in three different dimensions: 1) surface aspects such as the combination of words, 2) symbols or pictures for example seen in an advertisement, and 3) the meaning of the message the sender communicates, and the meaning of the message received by the receiver (Windahl et al., 1992, p.11).

Receiver – The receiver is person(s) receiving the message. Not only those to whom the message was initially intended to, but also those who receive the message by "mistake". In the opinion of Windahl et al., the sender-receiver relationship is crucial since the outcome of the communication process depends on whether and to what extents the sender considers the receiver's needs, interests and values (Windahl et al., 1992, p.103). Further, they underline the

risk with senders normally having no control over the receiving situation since the receiver can choose to ignore the message completely.

Feedback – Feedback it the verbal or non-verbal reaction to the message send by the sender (Windahl et al., 1992, p.16). Often, feedback is only regarded as the message or reaction which reaches the sender, however if the receiver is anonymous the sender must derive the feedback from other occurrences.

2.2.1 Communication models

Earlier, communication was seen as a one-way communication process where a sender sends out a message which is received by a receiver (Windahl et al., 1992, p.91). The process is presented in the so called general *linear model* of communication (see Figure 2-1) (Dimbleby, Burton, 1995, p.37). The communication process is seldom that simple and has therefore been further developed in the so called contextual model (see Figure 2-2).

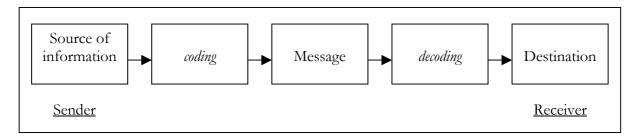


Figure 2-1, shows the general linear communication model (Dimbleby et al., 1995, p.38)

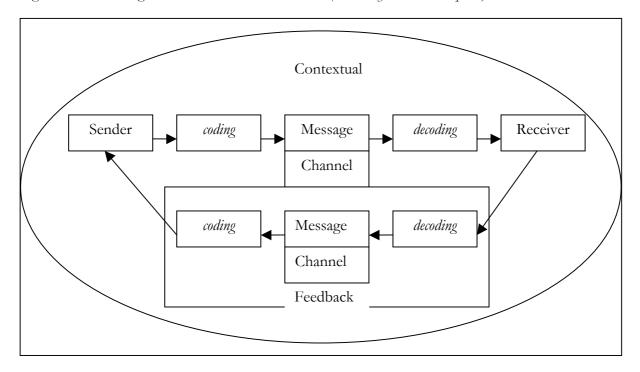


Figure 2-2, shows the contextual communication model with a contextual factor and feedback (Dimbleby et al., 1995, p.40).

Feedback has been added in the *contextual model* which emphasises that communication is a two-way process where senders and receivers are constantly shifting roles in a dialogue and the communication process can not be isolated with beginnings and endings (Windahl et al., 1992, p.85). In addition, the situation in which the communication process takes place as well as the surrounding environment is added as important factors. In the rest of the paper the communication process will refer to the contextual model, since it best describes the reality.

2.2.2 Communication channels

The communication channel is an instrument or medium used to transmit the message and has little to do with the meaning of messages (Windahl et al., 1992, p.221). According to several theorists, the capability to convey information is highly dependent on the choice of communication channel, which makes it to one of the most complex and controversial factors in the communication process (Miller, 1995, p.274; Windahl et al., 1992, p.152). "The complexity of today's communication industry with its new roles and shifting combinations of different sender roles, will confuse audiences further and make them less willing to listen" (Windahl et al., 1992, p.10).

Simonsson emphasises that communication shall not solely become a technical issue, if so the resources are used wrongly (Rågvik, 2003, p.8). She is positive to use new techniques such as internet, however there is an existing risk to believe that new techniques will solve all problems related to communication. It is important to remember the high value related to the daily oral communication. Further she discusses the so called information stress caused by new communication techniques. So far, there might have been a focus on how to find the most efficient way to transfer information, but not enough discussion regarding the content of the information. An essential question should be how the new techniques can complement different forms of communication.

2.3 Stakeholders

This section defines stakeholders i.e. any persons or group of persons that have a close link to an organisation and who can affect or be affected by the organisation's performance. Stakeholders can be seen as either internal (shareholders, employees, managers, board members) or external (customers, suppliers, local communities, the general public) (Enell, 2005, May 4). The first part of the section discusses the relevance of stakeholders and thereafter the new and old stakeholder views are described.

2.3.1 The relevance of stakeholders

In the communication process, stakeholders' roles constantly shift between being senders to being receivers.

Today, companies are increasingly confronted with the need to meet the growing power from different stakeholder groups. Scholes and Clutterburg have listed eight factors which have resulted in the need for companies to consider their stakeholders to a larger extent e.g. globalisation, the rise of the professional investor, the rise of the empowered employee, the information revolution, organisations' own wish to influence society and governmental support (Scholes, Clutterburg, 1998, p 227).

According to Scholes and Clutterburg "It is the spectre of a damaged reputation – of having to make costly reversals in policies or practices as a result of stakeholder pressure, or, worse, as a consequence of a self-inflicted wound – that overhangs the urgency with which integrated

stakeholder management now needs to be treated" (Scholes et al., 1998, p.229). A study made in 1994 with 25 of the leading companies in England states that "the company of tomorrow" must "have the skill to acknowledge and balance all stakeholders interests - customers, suppliers, employees, shareholders and the society" (Bruzelius, Skärvad, 1995, p.86). The importance of companies regarding all stakeholders is striking, in addition is the interaction with different stakeholders getting more extensive and time consuming for the companies.

2.3.2 The stakeholder view

The relationship between the organisation and its stakeholders is commonly described in a so called stakeholder view (see Figure 2-3). Some stakeholders only have an indirect contact with the organisation. These should be included in the model anyway since they could have an affect on the organisation's performance and vice versa (Enell, 2005, May 4). In addition, companies should consider the needs and interests of all their stakeholders when making decisions. Sometimes this can be problematic since different stakeholders might not have consistent goals and interests.

A new type of stakeholder view, where the society instead of the organisation is in the centre, is supported by the Global Reporting Initiative (GRI) (see Figure 2-4) (Enell, 2005, February 18). This is considered to be the general way of effectively working with the concepts Sustainable Development and (Corporate) Social Responsibility. In this model, companies are seen as stakeholders within the society in the exact same way as all the other stakeholders.

If organisations use the traditional model when viewing its stakeholders they might perceive that stakeholders are more aware of the organisation's activities and performances compared to what is perceived with a more modern stakeholder view. When using the new model, organisations are to a higher degree required to identify its different stakeholders and its relations to the society. This will consequently have an affect on how organisations define, value and prioritise different stakeholders' influence on its activities and or performances and vice versa. In addition, it will have an impact on the communication process.

Since the environment, in which organisations exist, constantly changes independently on which stakeholder view used, organisations must constantly reflect, question and change the relations to its stakeholders. Since different stakeholders might have conflicting views concerning what is important for the organisation. It is important for the organisation to achieve a balance among the different interests. In addition, many stakeholders do have common goals and interests which can contribute to strengthen the organisation's position.

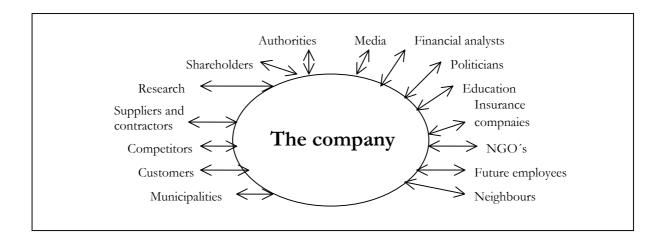


Figure 2-3, shows the traditional stakeholder view (Bruzelius et al., 1995, p.76; Enell, 2005, February 18)

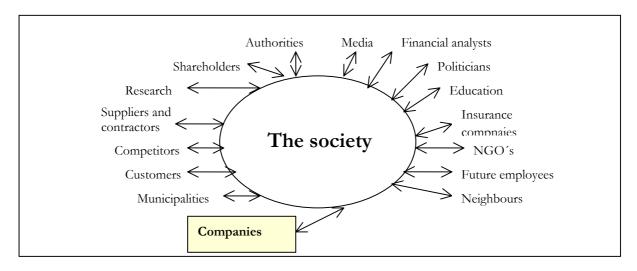


Figure 2-4, shows a newer way of viewing the stakeholder (Enell, 2005, February 18)

2.4 Problems during the communication process

During the communication processes problems often occur. This section describes four common problems which are emphasised within the communication theory.

The first problem concerns the goal of senders' message and how senders choose to code the message (Jacobsen, Thorsvik, 1995, p.269). The sender can manipulate both the information and the choice of message and channel in order to achieve its goal. Further, words and expressions can be interpreted differently depending on the situation. "It is very important in many cases for the audience to know who is communicating with them. Too often is communication rejected because of an unclear perception of who is sending it; this can cause the audience to question the authenticity and legitimacy of the message" (Windahl et al., 1992, p.10).

Another common problem is related to influences on senders' choice of communication channel and how the message is transferred (Jacobsen et al., 1995, p.269)? Communication channel is often chosen considering the characteristics and aim of the message. The relation between the sender and receiver might also influence the choice of communication channel

i.e. in case of conflict, rivalry or insufficient social competence. Special consideration must for example be taken if the receivers' have a negative attitude (Rågvik, 2003, p. 10).

The next problem concerns receivers' interpretation of the message and related problems (Jacobsen et al., 1995, p.271). For example, the same word or expression could have different meanings depending on the receivers' background, expectations or beliefs. Also, the relationship between the receiver and the sender might have an impact on the interpretation, confidence and credibility of the message.

The last problem is associated with the feedback which is gained from the message (Jacobsen et al., 1995, p.272). The choice of communication channel and organisational structure might have an impact on the level of feedback to the sender. Windahl et al. emphasises the need of gaining information of the receivers before initiating communication with them. The writers called it *feedforward*. "The more one knows beforehand about the receivers and their needs, the greater the chances for effective communication" (Windahl et al., p.16). In other words; it is important to do feedforward in order to get a good feedback.

In addition is it of high importance that organisations consider available information and activities involved in the surrounding environment. By doing so, they can take this into consideration when developing the message and choosing communication channel.

2.5 Environmental communication - ISO 14063

This section introduces the ISO 14063 standard and guidelines for environmental communication presented in the standard. First, a general background to the ISO standard is given, followed by essential principles in environmental communication. Thereafter, important elements in the environmental communication are described according to the standard. The described elements are environmental communication policy, environmental communication strategy and environmental communication activities.

This section has been structured similar to the ISO standard in order to make it easier for reader to find complementary recommendations. When referring to the standard, the paragraph sign (\mathfrak{f}) is used before "the ISO number".

2.5.1 Background

The International Organization for Standardization (ISO) has recently launched a standard for environmental communication, ISO 14063. The standard features different reasons for companies to communicate environment. It could for example be: 1) needs to discuss environmental matters with stakeholders, 2) within the company's environmental risk management, 3) due to requests for information by stakeholders, 4) due to regulatory requirements, or 5) due to the increasing importance of addressing global environmental issues (ISO, 2005, p.V).

ISO 14063 should not be used for certifications or registrations. Instead, it is intended to be used as a guideline and help companies to ensure successful environmental communication (ISO, 2005, p.1). It can be used for all organisations no matter their size, activities, products or services. Further, the existence of an implemented environmental management system shall not have an impact on the applicability of the standard. Appendix 1 shows how the ISO standard pictures the interrelationships and flow of environmental communication (ISO, 2005, p.VI).

According to Anne Swartling, it exist a need for a reliable communication of environmental performances (Swartling, 2005). Several guidelines for communicating environmental performance exist, though they are not uniform. Both trade and industry as well as authorities have shown an interest for getting a helping guideline in communicating environment.

The standard emphasises that environmental communication is not an end in itself; "it is the process of communicating environmental information to build acceptance, reliability and partnerships, to raise awareness, and to use in decision making. The processes used and the content of environmental communication will vary with objectives and circumstances of the organization" (ISO, 2005, p.V).

Brorson and Larson have listed six reasons for companies to communicate environmental issues (Brorson, Larsson, 1999, p.148):

- To increase motivation and participation
- To make improvements
- To meet requirements for formal reporting to the authorities
- Market communication
- Using the media to inform about the company's environmental work
- Communication effectively and accurately in an emergency.

2.5.2 Principles of environmental communication

ISO 14063 emphasises five principles on which the organisation should build its environmental communication: transparency, appropriateness, credibility, responsiveness and clarity.

Transparency - In the environmental communication process, it is important that interested parties are aware of their role in the process and the tasks belonging to its role. Further, all participants in the environmental communication process should be informed of the different processes, procedures, methods, data sources, and assumptions used in the process (§ 3.1).

Appropriateness - Information provided in the environmental communicated has to be relevant to interested parties and in order to reach them in an inclusive way must formats, language, and media be thought through (§ 3.2).

Credibility - Information provided in the environmental communication must be conducted in an honest and fair manner as well as being truthful, accurate, substantive and not misleading to interested parties (§ 3.3).

Responsiveness - When working out the environmental communication it is important to consider the different needs of interested parties. Queries and concerns of interested parties should therefore be responded to and the interested parties should be aware of how their queries and concerns have been addressed (§ 3.4).

Clarity - To make the environmental communication clear, stakeholders should understand its approach and language (§ 3.5).

2.5.3 Environmental communication policy

ISO 14063 states, when companies plan their communication they should start by performing a communication policy. The environmental communication policy should be used by the top

management of an organisation to expresses its intentions and directions with the organisation's environmental communication. The environmental communication policy could be a separate policy or, if more suitable, be part of the organisation's communication policy or environmental policy (§4).

During the development of the environmental communication policy, those responsible for the environmental management should interact and engage with those responsible for communication in order to make sure that the policy is consistent and coherent with other policies and values of the organisation (§ 4). It is also important to make sure that the environmental communication policy is consistent with the five principles discussed in Section 2.5.2.

When the environmental communication policy is finished, it should be approved by the top management of the company and thereafter communicated to appropriated internal and external stakeholders.

2.5.4 Environmental communication strategy

After finishing the environmental communication policy the organisation's management has to decide an environmental communication strategy to implement the policy. The strategy should include environmental communication objectives, identification of stakeholders, an indication of when and what the policy plans to communicate, and a management commitment to allocate adequate resources (§ 5.1).

After finishing the environmental communication strategy, the top management of the organisation should approve the strategy and thereafter it should be used for developing environmental communication activities. The strategy should describe the involvedness and co-ordination of the environmental managers, stakeholders, individual(s) responsible for environmental issues and individual(s) that are responsible for the organisation's internal and external communication. Also, local, national, and international boundaries should be decided by the strategy.

2.5.5 Environmental communication activities

This section describes five environmental communication activities which should take place in the implementation of the environmental communication policy: 1) planning the environmental communication activities, 2) selecting environmental communication approaches and tools, 3) performing an environmental communication activity, 4) evaluation environmental communication, and 5) conducting management review and planning revisions.

Planning an environmental communication activity

The implementation of the environmental communication policy should include several environmental communication activities. Both new and old communication methods and practises could be used for this purpose, though it should be done within the frames of the environmental communication strategy (§ 6.1).

Selecting environmental communication approaches and tools

When choosing appropriate approach and tools for the environmental communication the ISO standard acknowledges two things to think of. The first thing to consider is the interests stakeholders involved in the communication activity have in the issues covered by the

communication. Secondly, the organisation must think of how active it wants to be in the communication. In addition, the information used in the communication activity should be worked out specifically for the stakeholder it is intended for (§ 6.2). The ISO standard gives examples of different communication approaches and tools which could be used in the communication activities.

Performing an environmental communication activity

When performing the environmental communication activities it is important to keep in mind that they should be made out depending on the nature of the communication, the needs of stakeholders, the company's objectives for the communication, and the preferred approach of the company. It is therefore preferable with flexibility and variation in the different details (§ 6.3.2).

Material used in environmental communication activities should be documented and organised in a way which facilitates future use of the information. The data should also be evaluated to make sure it is accurate and consistent with reality (§6.3.1).

Evaluating environmental communication

By evaluating the environmental communication it is possible for the organisation to make improvements and changes for future environmental communication activities (§ 6.4). When evaluating the effectiveness of the communication the organisation should for example consider:

- whether it has achieved its environmental communication policy, strategy and objectives;
- whether it has achieved the environmental communication objectives and targets;
- the responses of different stakeholders;
- whether the stakeholders understood the purpose and content of the environmental communication; and
- whether the communication activities have reached meaningful dialogue with stakeholders.

Conducting management review and planning revisions

It is possible that views on the environmental work inside and outside the organisation will change over time. These changes could have an impact on the environmental performance of the organisation and consequently other requirements will be set on the environmental communication. It is therefore important for the organisation to review its environmental communication policy and if necessary set up new environmental communication objectives and targets.

3 Organisational structure and communication

The organisational structure of a company is of high importance for its internal as well as external communication and must consequently be understood in order to control the communication (Lesley, 2004, p.67). This chapter begins with giving examples of organisational structure. Thereafter, directions of communication within an organisation are described. The last section discusses communication in the organisation. Throughout the chapter, emphasis is put on which problems that can occur in the communication process.

3.1 Organisational structures

This section explains how the structure within an organisation changes as the organisation develops from being a small company with a few employees to being a multinational company.

Many companies start with the pioneering work of one or a few people. When the company grows, it must organise itself to delegate assignments, decision making and authority. Often, companies choose to form a so called functional oriented organisation where the organisation is structured depending on different departments' main function e.g. purchase, sale or production (Bruzelius et al., 1995, p.143). Thereafter, the organisation can be further structured depending on its geographical location, main production and/or main processes (see Figure 3-1).

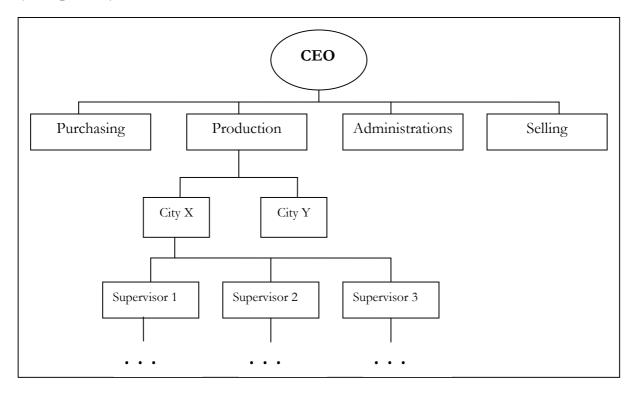


Figure 3-1, shows an example of functional oriented organisation (Bruzelius et al., 1995, p.144).

When companies continue to grow and differentiate their activities, they often change and form a division oriented organisation where the different activities are divided into more or less independent divisions. Each division works as a complete company with its own field of production or market (Bruzelius et al., 1995, p.147).

3.2 Directions of internal communication

This section describes different directions of communication within an organisation: top-down, down-up and horizontal. It also discusses different problems which might arise communicating in the different directions.

Within organisations, the direction of the communication is essential for the communication process (Jacobsen, 1995, p.276). In organisations, communication can be directed vertical within the organisation structure; *top-down* i.e. superior to subordinate, or vice versa *down-up*. It can also be directed *horizontal* between employees on the same level in the organisation which is important when creating opinions and understanding among different departments in the organisation (Jacobsen, 1995, p.282).

There are a number of reasons why problems might develop in the top-down communication. First, when information is communicated downward in the organisation and pass by different positions it might be distorted deliberately or non-deliberately, second, when information is received from superiors the message will be interpreted and prioritised depending on the subordinate's own situation, and third, personal ambitions and private goals might be another reason why information is distorted (Jacobsen, 1995, p.277-78).

In the vertical down-up communication, the communication process starts in the subordinated parts of the organisation and is directed upwards to the superior parts. Jacobsen mentions two factors influencing the form, frequency and length on the down-up communication. First, how organisational structures make it easy for subordinated people to initiate contact with superiors, and second, to what extend personal relations with superiors make such contact desirable and natural.

There are several of reasons why problems might develop in the bottom-up communication. First, superiors often shield themselves from a free flow of feedback which might lead to that important information do not reach its goal and second, feedback from subordinated might not be sufficient or trustworthy (Jacobsen, 1995, p.280).

3.3 External communication of the organisation

This section discusses problems which might occur during organisations' external communication.

Independently how the organisation is structured, different departments will have contact with the world around them. When exchanging resources and information with its surrounding environment, companies often choose to place individuals to do the interaction and communication with its external stakeholders. Miller calls these persons the boundary-spanners (Miller, 1995, p.259). For example, sales personnel, purchasing agents and marketing people often span the company's boundaries when selling and searching for products.

According to Scholes and Clutterbuck; "the biggest problem in most large organisations, is that the ownership and handling of communication activity (whether or not it is seen as such) is compartmentalised" (Scholes et al., 1998, p.232). For example communication with customers is done by the marketing department, the HR/personnel department stands for the contact with employees and others with the community and shareholders. Figure 3-2 shows

how the responsibilities for communication within an organisation often are divided between departments. This dividing up requires that a common message goes out to all parts of the company so the same message is communicated to external stakeholders. Scholes and Clutterbuck discuss that even though this might be the most logical way of structuring the communication within the company, the actual outcome might look differently. Figure 3-3 shows how stakeholders could be in direct contact with different departments within the company.

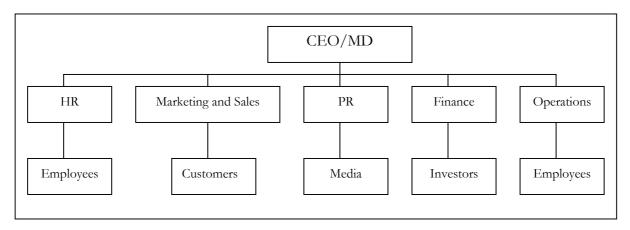


Figure 3-2, shows how organisations often picture the responsibilities for communication within its organisation (Scholes et al., 1998, p.233). Productions, which is an important stakeholder often responsible for the contact with authors, is missing in the figure (author's remark)

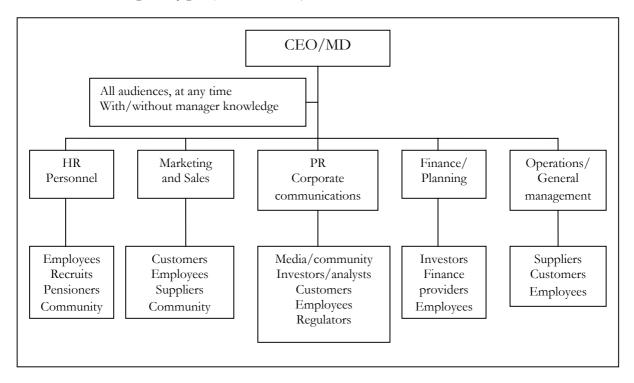


Figure 3-3, shows the chaos behind the dividing up of responsibilities for communication within an organisation. The same stakeholder might be in direct contact with different departments within the organisation. (Scholes et al., 1998, p.233).

This type of communicative structure might cause confusion among stakeholders, for example the employee audience is bombarded with information from all sides – i.e. there is an overload of information which might lead to that prioritised information is missed or information is contradicting which causes confusion among the employees (Scholes et al., 1998 p.234). In addition, external media might reach the employees before the internal media which adds to the confusion. Another problem is PR and marketing plans often go down the tubes – i.e. internal employees are not informed of external campaigns in time, leading to confusion in contact with external stakeholders (Scholes et al.,1998, p.234).

Several theorists highlight the need of informing employees about the strategy and goals of the organisation. "The representational function of boundary-spanning is largely a persuasive process of building, shaping, and maintaining an organization's reputation" (Miller, 1995, p.262). "Knowing an employee who speaks positively about their company is a bigger influence on would-be purchasers than any other factor, including advertising" (Scholes et. al., 1998, p.228).

In the opinion of Jacobsen; the major challenge for organisations is to organise the communication to efficiently master the need of communication with the surrounding environment and at the same time consider the need of communication for internal activities (Jacobsen, 1995, p.289).

4 Environmental issues connected to transports

This chapter starts with a brief introduction of goods transport in the European Community. It also presents environmental problems caused by goods transport. The next section explains how the so called Euro-class on heavy vehicles regulates emissions. Finally, the logistics industry and related environmental problems are introduced and discussed.

4.1 The White Paper - transport in the European Community

The White Paper on "European transport policy for 2010: time to decide" launched by the European Community in 2001, emphasis that the European Community must change their Transport Policy. The White Paper sets out an action programme including approximately 60 measures between 2001 and 2010.

Transport is a key factor in modern economies. Transport is increasing in the European Community. However, there are also negative sides of accelerated transport. The increase of transport leads to more congestions, accidents and environmental nuisance which have a negative impact on humans, the environment and the society (EC, 2001, p.2). The White Paper accentuates that this situation to some extent depends on insufficient coverage of costs caused by transport users. For example, external costs from infrastructure, congestion, environmental damage and accidents are generally not reflected in the price structure (EC, 2001, p.12).

Transport of goods is increasing in the European Community. According to the White Paper, reasons for this trend are to large extend changes in the European economy as well as its system of production (EC, 2001, p.12). It is noticed that during the last 20 years, the European economy has moved from a so called "stock" economy to a so called "flow" economy. Companies, especially those which are active in high labour input industries, try to reduce their production costs by moving their production to other countries. However, the result might be that the final assembly plan and/or users are hundreds or even thousands of kilometres away from the production site. The abolition of frontiers within the European Community has also lead to the establishment of a so called "just-in-time" production system i.e. to keep inventory costs at a minimum and not have large warehouses loaded with stocked products. Instead, products are produced and transported in order to be delivered to customers – just-in-time for their needs.

The White Paper further mentions that transport with heavy goods will increase by nearly 50% over its 1998 level in 2010, unless measures are taken (EC, 2001, p.13). The share of road's transport of goods has constantly increased from 41% in 1990 to 44% in 1998. It is expected to reach 47% in 2010, unless some action is taken. Figure 4-1 shows a growing imbalance between modes of transport in the European Union. The White Paper emphasises that the increasing success of road transport results in increasing congestions. At the same time, rail and short-sea shipping is not exploit to its full potential which impedes the development of alternatives to road haulage (EC, 2001, p.22).

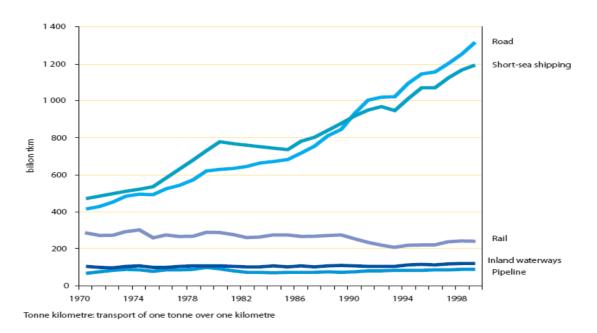


Figure 4-1 shows the growth of goods transport by mode of transport in EU-15: 1970-99 (EC, 2001, p.23).

4.2 Emissions from heavy vehicles

Emissions from heavy vehicles have been regulated in Europe since 1982 when limits were determined for emissions of nitric oxides, carbon monoxides and hydrocarbons. A few years later, this was complemented with limits for emissions of particles (Schenker AB, 2005a).

Table 4-1 shows t	ha different	Euro classos	for boarn	nahiclas	(Cchambon	$AR = 2005a \cdot 2$
1 avie 4-1 snows i	ne anneremi	Euro-ciasses	ior neavv	venicies	(Sinenker.	AD, 2003a)."

	Demands from	NO _x	PM	НС	СО
Euro 0	1990	14.4	-	2.4	11.2
Euro 1	1993	8.0	0.36	1.1	4.5
Euro 2	1996	7.0	0.15	1.1	4.0
Euro 3	2000	5.0	0.10	0.66	2.1
Euro 4	2005	3.5	0.02	0.46	1.5
Euro 5	2008	2.0	0.02	0.46	1.5

² In 2003, 26% of Schenker AB's total vehicle fleet belonged to Euro-class 0, 8% to Euro-class 1, 37% to Euro-class 2 and 29% to Euro-class 3 (Schenker AB, 2005a). Schenker AB has set up a plan of action to phase out the old vehicles. By 2008, all vehicles of Euro-class 0 should be gone and by 2009 all vehicles of Euro-class 1 (Lundqvist, 2005, June 9).

Requirements on emissions from heavy vehicles have thereafter gradually been sharpened through the introduction of the so called Euro-class of vehicle, which regulates emission levels from newly produced vehicles. Table 4-1 shows the different Euro-classes and their requirements on emissions. It indicates that vehicles belonging to a higher Euro-class have a less impact on the environment compared to vehicles of a low Euro-class.

4.3 Logistics Industry

This section introduces the logistics industry and defines logistics companies' role in the flow of products. Barriers for companies to include transport in their environmental initiatives are also explained.

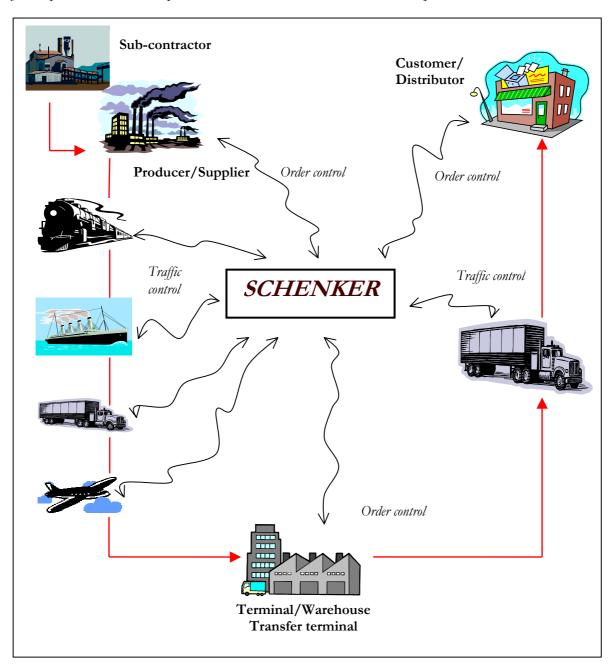


Figure 4-2 shows the flow of products and the logistical control of transport. The straight lines picture the direction of products transported by Schenker AB. The wavy lines picture where in the transport process Schenker AB is controlling the traffic respectively the order (BTL,1997, p.42).

The Council of Supply Chain Management Professionals (CSCMP) defines logistics as the part of the supply chain that "plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements" (CSCMP, 2005). Llogistics solutions often are specially designed for the customer and vary from one customer to another. The role of the logistics partner (e.g. Schenker AB) is to involve in the planning, monitoring and follow up where in the manufacturing process the suppliers are. In other words, logistics deals with the flow and storage of goods and related information between the suppliers and customers and provides an added value to customers. Figure 4-2 shows an overall picture of the products' flow.

4.3.1 Customers' view on transports

Customers consider transport of their products in varying extent when calculating their environmental performance. Those companies who include transports often feel pressure from stakeholders e.g. customers to do so (Kåberger, 2005, September 5).

The Danish report 'Is transport beginning to form part of companies' environmental initiatives? – a status on the visibility of goods transport in companies' environmental communication" produced by the Dansish EPA, outlines barriers to and opportunities for including companies goods transport in environmental initiatives (Danish EPA, 2005). The overall conclusion of the report is that stronger signals must be sent out to companies in order to encourage them to include goods transport in their preventative environmental initiatives (Holgaard, Remmen, 2001, p.10).

The report distinguishes a number of barriers for companies to include transports in their environmental initiatives. "First, companies find it difficult to make demands on transport operators if the companies themselves have not introduced systematic environmental initiatives. In addition to this fundamental barrier, other barriers playing a role are:

- companies' stance on where to draw the line in terms of their environmental responsibility;
- a lack of resources for mapping the environmental impact of goods transport;
- the fact that the inclusion of goods transport is given a lower priority compared with urgent environmental problems or fields offering greater potential for environmental improvement;
- the fact that complex and different transport systems make it difficult to obtain operational data that can be used to calculate the environmental impact depending on, say, the mode of transport, utilisation of transport means and differences in transport routes; and
- demands by customers for quick delivery at short notice." (Danish EPA, 2005)

Stora Enso is a Swedish company in the forest industry, which has been profiled as actively working with sustainability issues (Josephsson, 2005, p.37). The transport manager at the land department of Stora Enso Transport and Distribution says that there is a myth that buyers of transports only look at the prise (Josephsson, 2005, p.35). He explains that the price is just another component among others. Instead, they calculate transport costs and not transport prices and consequently they search for added values. He further emphasises the importance of having an open dialogue with suppliers in order to reach win-win situations.

5 Schenker AB

In order to comprehend the environmental communication process performed by Schenker AB, it is important to first understand the company and how it is organised. This chapter gives a general introduction of Schenker AB. It includes a description of the company's history, organisational structure, environmental work and important competitors and stakeholders.

The international group of companies is referred to as Schenker AG or the group, the Swedish company is referred to as Schenker AB or the company.

5.1 Background information

This section gives an overall description of Schenker AB and a historical overview of the company.

Established more than 130 years ago, Schenker AG is today one of the leading international providers of transport and logistics solutions in Europe. Schenker AG belongs to the Stinnes Group which in turn is owned by Deutsche Bahn (Schenker AB, 2005a). The head office in lacated in Essen, Germany.

In Sweden, Schenker AB is a wholly owned subsidiary of Schenker AG and originates from BTL Sweden³ (Bilspedition Transport & Logistics). In 1997, Schenker AG became shareholders of BTL Sweden and created Schenker-BTL AB. In 1998, Schenker AG took over the company and created the now existing Schenker AB (Schenker AB, 2004). The uniting of the two companies made it possible to develop a closely connected network in more than thirty European countries. Today, Schenker AB is one of the leading transport and logistics companies in Sweden (Jadsén Holm, 2005, August 12).

Schenker AB has in total around 4 200 employees who are represented through the head office in Gothenburg and through branch offices and terminals at 27 different locations around Sweden. Schenker AB has around 18 million consignments each year and approximately 42 000 contracted customers from a wide variety of industries and company sizes (Schenker AB, 2004).

Schenker AB has an own haulage company, Schenker Åkeri, which owns about 550 vehicles and which stands for approximately 20% of Schenker AB's domestic consignments (Andersson, 2005, September 6). The other 80% is performed by approximately 250 contracted haulage companies. These companies vary in sizes from 4 to 50 drivers. In total, around 7 000 personnel are employed by the contracted haulage companies (Schenker AB, 2004). Schenker AB's contracted haulage companies are organised in a haulage company organisation called BTF (Bilspedition Transportör Förening). BTF represents its members in discussions with Schenker AB.

-

³ BTL consisted of the former companies Bilspedition Domestic and Scansped (Schenker AB, 2004).

5.2 Organisational structure

This section describes the organisational structure of Schenker AB. The description only includes divisions, business areas and departments covered by the limitations of the thesis.

Schenker AB's operations are structured in three divisions: Division Land, Division Logistics and Division Air and Sea. Figure 5-1 shows how the three different divisions are structured within the organisation. The Land Division is responsible for transport services on road and rail as well as logistics solutions on both domestic and international level. The Air and Sea Division is specialised on transport solutions for air and sea and belonging services. Among the services offered by the Logistics Division are stocking possibilities and supply chain management. Only the Land Division is included in the thesis. All three divisions are supported by four common departments: Marketing and Processes, Finance, IT and Human Resources. Only Marketing and Processes is included in this thesis.

The Land Division has been divided into different units: Region North, Region South, Coldsped AB⁴ and Schenker Åkeri⁵ (see Figure 5-2). The branch offices are geographically divided between the northern and the southern region and the offices are responsible for organising transport and logistics activities within their respective district. Only *Region South* is included in the thesis.

The different units consist of three common business areas: Domestic, International and Parcel and four other departments: product development, purchasing, controller division land and personell division land (see Figure 5-2). Only *Domestic* is included in the thesis. Domestic is responsible for all goods transport on road and rail in Sweden.

Figure 5-3 describes the structure of Marketing and Processes. It includes the following departments: QRE (Quality, Risk and Environment), Corporate Communication, KAM (Key Account Management), Marketing and Sales, Purchasing, Strategic Development, TM (Tender Management) and Automotive. Only *QRE*, *Corporate Communication* and *KAM* are included in the thesis.

The structure of the environmental organisation within QRE can be seen in Figure 5-4. Each branch office has its own environmental coordinator, who often has primary assignments other than environmental responsibilities.

Schenker AB also includes a number of independent companies and divisions such as Schenker Consulting, Schenker Logistics and Railog AB. These are not covered by the limitations of the thesis and are therefore not discussed.

-

⁴ Coldsped AB offers transport and storage of frozen food.

⁵ Schenker Åkeri is Schenker's own haulage company.

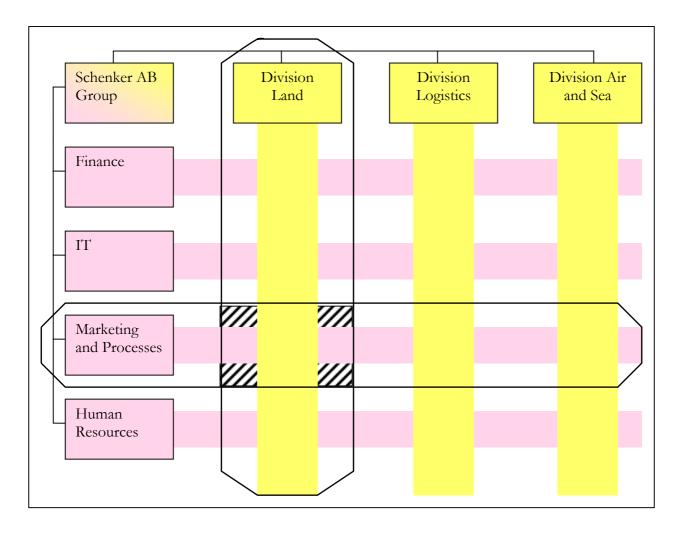


Figure 5-1shows the organisation structure of Schenker AB Group. The marked areas are those covered by the limitation of the thesis. Consequently, only the internal and external environmental communication of those parts of the company is discussed in the thesis (Schenker AB, 2005b).

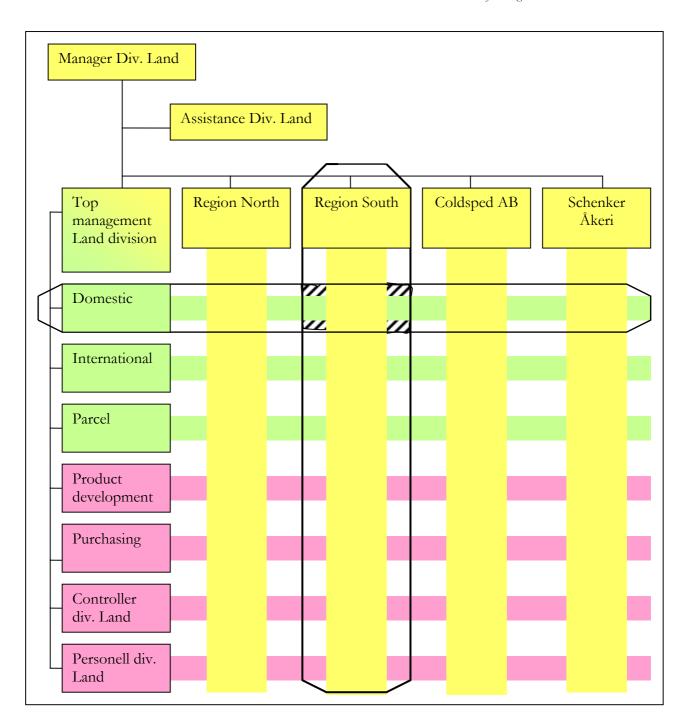


Figure 5-2 shows the organisation structure of Division Land. The marked areas are those covered by the limitation of the thesis. Consequently, only the internal and external environmental communication of those parts of the company is discussed in the thesis (Schenker AB, 2005b).

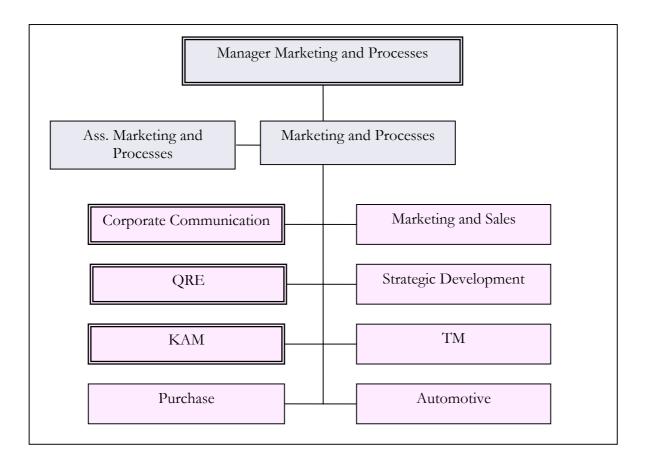


Figure 5-3 shows the organisational structure of the department of Marketing and Processes. The highlighted areas are those covered by the limitation of the thesis and consequently, the internal and external environmental communication of those parts of the organisation will be discussed (Schenker AB, 2005b).

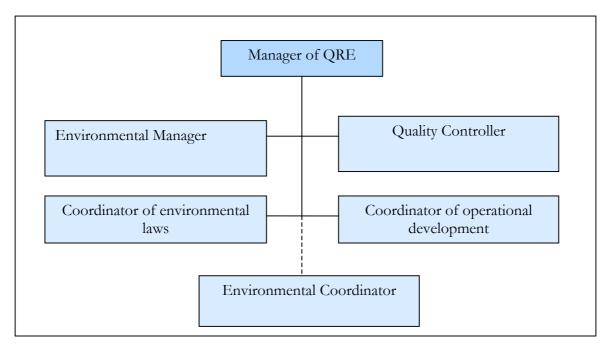


Figure 5-4 shows the organisational structure of the environmental department. The whole department is of interest for the internal and external environmental communication (Schenker AB, 2005b). The environmental coordinators are organised under respective branch office.

5.3 Environmental Work at Schenker AB

In order to comprehend the environmental communication process performed by Schenker AB, it is important to first understand how the company works with environmental issues. This section begins with a historical view of Schenker AB's environmental work followed by a short description of the company's organisational structure and work with environmental issues. Thereafter, the ISO certification process is described. Finally, customers' views and demands on Schenker AB's environmental work are discussed.

The environmental policy of Schenker AB is: "We contribute to a sustainable development by offering efficient logistics and transport services with the least possible effect on the environment." (Schenker AB, 2005a).

5.3.1 Historical work and changes

The transformation from BTL Sweden to Schenker AB meant organisational changes for the environmental department as well as changes in attitudes towards the environmental work.

Before the purchase, the majority of the environmental work was organised and performed by an environmental department which was organised direct under the top management of BTL (Trouvé, 2005, August 25). Today, countries have an environmental department of their own which work towards respectively country's company. In addition, Schenker AG has an environmental department called cooperate environmental affairs which serves the whole group. Cooperate environmental affairs is not structured under the top management of Schenker AG today. The thesis only covers the environmental work within the Swedish company. The environmental work and environmental communication performed by Schenker AG is, however, discussed when it is found to have an impact on Schenker AB's environmental communication.

Schenker AB, or Bilspedition, as it was called before, started its environmental work in the beginning of the 1990s. The work was initiated by certain important customers who required engagement and improvements in transport of their products. One of Schenker AB's first concrete environmental goals was to make sure that the whole vehicle fleet changed fuel to eco-diesel. Another evident change was to appoint environmental coordinators at branch offices (Åhrlin, 2005, May 24).

According to Johan Trouvé, the manager of the cooperate environmental affairs at that time, Schenker AG did not work as active with environmental matters compared to BTL Sweden (Trouvé, 2005, August 25). The purchase therefore had consequences with regard to the focus of the environmental department of that time. For example, before the purchase clear mandate to work with environmental issues which made it possible to initiate different projects and to communicate them to different stakeholders. After the purchase, much focus and resources have been invested in changing and developing the environmental work within the group. This might have influenced the communication of environmental issues (Åhrlin, 2005, August 17).

The environmental work within the group is to a large extent based on demands from customers. Demands from important customers, during the last couple of years, have resulted in the top management of the group setting up environmental goals and activities for the whole group (Åhrlin, 2005, May 24). It also meant changes in work load and work tasks for the manager of cooperate environmental affairs. Today, one of the main work tasks is to implement ISO 14001 in all European companies.

5.3.2 Environmental work within the organisation

Schenker AB's most essential environmental problems are caused during the transport process e.g. emissions of CO₂ and NO_X (Jadsén Holm, 2005, June 7). Other environmental problems which are caused by the company's activities are consumption of raw materials and resources e.g. electricity and generation of waste such as used wrapping, pallets and fluorescent lamps (Schenker AB, 2005b).

Interviews made it clear that Schenker AB can improve its environmental performance in three ways: 1) increase the efficiency of goods transport, 2) improve the environmental performance of the vehicle fleet, and 3) improve the environmental performance at the branch officies/terminals. Transports are the main production of Schenker AB, and consequently are emissions from transport causing Schenker AB's major impact on the environment. Other environmental issues, such as resource consumption and waste production, should in comparison only be seen as marginal (Svensson, 2005, June 9).

Two related problems have been acknowledged by employees when discussing problems connected to the increase of goods transport. First, since Schenker AB lets contracted haulage companies perform the majority of its consignments the company is dependent on influencing the contracted haulage companies in order to improve the environmental performance of its vehicle fleet. Second, a minority of companies include transports of their products when they calculate their total environmental impact (see Section 4.3.1 for more explanation). Consequently, many companies do not have environmental requirements when they negotiate transports with Schenker AB (Jadsén Holm, 2005, June 7).

For companies to include transports in their environmental performance interviewees have raised two possible ways: 1) politicians put pressure on companies by issuing stricter laws, and 2) different stakeholders put pressure on companies to take over their whole responsibility (for example Wolf, 2005, August 17). Several interviewees have also mentioned that Schenker AB should influence customers and other actors to take over more responsibility. Two possibilities have been described: 1) be more proactive towards customers, and 2) be more active within networks and lobby towards politicians and branch organisations.

The top management of Schenker AB decides on the environmental strategy and environmental engagement within the company. According to the manager of Marketing and Processes, the company will restart and clarify their environmental work this year (2005). They will, for example, decide on an environmental strategy for the whole Swedish company (Nordin, 2005, August 17). The three divisions (Land, Logistics and Air and Sea) are responsible for implementing this environmental strategy. This work is done independently and might differ among the divisions due to different work tasks and business activities. The top management of the Land Division sets up overall goals for its activities. Thereafter, the different business areas must set up more concrete and specific environmental goals. For example, Domestic decides on environmental goals concerning the environmental performance of the contracted haulage companies e.g. when vehicles of certain Euro-classes should be phased out (Lundqvist, 2005, June 9).

The branch offices set up local environmental strategies and targets where they decide how they want to work with environmental issues e.g. sorting of waste and reduction of energy consumption (Malmberg, 2005, July 21). This work is to a high extent covered by the environmental management system. The two regional offices are together with QRE responsible for following-up the environmental work performed by the branch offices (Samuelsson, 2005, August 19).

QRE does not have any mandate of its own. Instead they work as advisors and bring pressure on the divisions, business areas as well as the top management of Schenker AB to work with environmental matters. Other work tasks which QRE is held responsible for is the management of the environmental management system and to make sure that environmental laws, decrees and policies are implemented and obeyed (Jadsén Holm, 2005, June 7).

5.3.3 Environmental education

During the ISO 14001 certification⁶, all employees went through a general education in environmental issues. The education was performed either by the environmental coordinator or a responsible person from the head office. Today, environmental coordinators are responsible for educating new employees at the branch offices in environmental matters. An computer based environmental education, available on intranet, have been developed in order to facilitate the education of new employees (Nilsson, 2005, August 16).

It has been noticed that the intranet education mainly focuses on general environmental issues such as global warming, waste and environmental legislation. There is a chapter concerning the transport industry, but this chapter only focuses on technical perspectives, such as information about the Euro-class and PAH emissions caused by the tires. There is no direct information about the relation between environmental performance and logistics.

5.4 Customers' views and requirements

Schenker AB has in total approximately 42 000 contracted customers (Schenker AB, 2004). The KAM (Key Account Management) is responsible for the contact with 35 of the biggest customers. (Wedel, 2005, August 19). The remaining customers are contacted by sales personnel at the branch offices.⁷

As described in Section 5.3, certain customers' requirements on Schenker AB's environmental work have had a major impact. In general, customers are today more familiar and competent in environmental matters compared to ten years ago. Schenker AB has experienced this change by receiving more questions and demands from its customers (Jadsén Holm, 2005, June 7). However, it is experienced by sales personnel that customers seldom have specific environmental requirements (Clerkefors, 2005, June 9). Often they ask whether Schenker AB is certified; another common question concerns the vehicle fleet's mix of Euro-classes.

Customers usually present their requirements on Schenker AB's environmental work during quotations and agreements with KAMs and sales personnel. Today, Schenker AB has a close collaboration with some KAM customers. However, it has been underlined by both sales personnel and the manager of KAM that customers in general have little requirements on Schenker AB's work with the environment. (Wedel, 2005, August 19).

_

⁶ The certification has only been compulsory for the Land Division, though other divisions of the company can voluntarily choose to certificate their activities. The Land Division finished the certification process of the local offices and the head office in 2002. (Svensson, 2005, June 9).

⁷ Schenker Consulting also have contact with the top management of companies as well as municipalities. According to the manager of Schenker Consulting, they discuss goods transport from a strategic perspective including an environmental approach (Kettelhoit, 2005, June 10). Schenker Consulting is not included in the limitations of this thesis, consequently, the environmental communication performed by Schenker Consulting is not described in this thesis.

Schenker AB uses a so called "satisfied customer index" (NKI)⁸ to monitor customers' preferences regarding transport related issues. The index indicates that "small" customers, belonging to the Land Division, do not think that environmentally friendly transport solutions are an important aspect. However, KAM customers show other preferences. Here, environmentally friendly transport solutions are considered to be of high priority, especially in the future. Further is it stressed that also "small" customers at the Land Division probably will find environmentally friendly transport solution important in the future (Englund, 2005, June 8).

5.5 Competitors' work with environmental communication

This section shortly describes competitors' work with their environmental communication.

Interviews make it clear that in its line of business, Bilspedition was a pioneer in terms of environmental work (for example Jadsén Holm, 2005, June 7). In the beginning, possible environmental improvements were easy to identify and to implement. Today, competitors have caught up with their environmental work and Schenker AB does no longer have the same clear lead.

Schenker AB's main competitor in Sweden is DHL (Jadsén Holm, 2005, June 7). Interviews gave the impression that competitors are much better in their external environmental communication compared to Schenker AB. On the contrary to Schenker AB, competitors had for example advertising campaigns on their work with environmental issues in both the daily press and TV. The manager of QRE thinks that this could partly be explained by larger budgets for advertisements as well as a different communication strategy (Nordström, 2005, June 9). However, many within the company have emphasised that even though competitors are better in communicating their environmental activities, this does not mean that they are better in their environmental performance.

It was mentioned by some interviewees that competitors are better in performing "flashy" projects which to some extend are easy to communicate even though the total improvements on the environment might not be as big (Lanfeldt, 2005, June 13).

5.6 Stakeholders

This section describes important internal and external stakeholders identified by Schenker AB.

Figure 5-5 shows a stakeholder view performed by Corporate Communication. The old version of the stakeholder view is used and not the new one launched by GRI (Global Reporting Initiative). This stakeholder view is also used within the environmental communication (Jadsén Holm, 2005, June 7).

-

⁸ NKI - Nöjd Kund Index

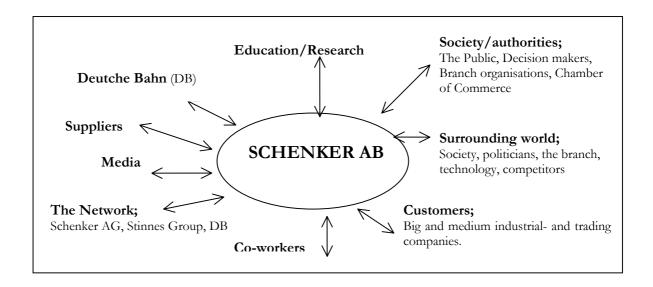


Figure 5-5 hows a stakeholder view for Schenker AB's "general" communication, performed by Corporate Communication.

6 Environmental Communication of Schenker AB

This chapter describes the internal and external environmental communication performed by Schenker AB. The chapter is divided according to five different perspectives of Schenker AB's environmental communication: the sender, the message, the receiver, communication channels and feedback, i.e. the essential elements of the communication process discussed in section 2.2. The first four sections describe four important senders of Schenker AB's environmental communication: QRE, the Land Division, the branch offices and Corporate Communication. Thereafter, the environmental message(s) of Schenker AB is discussed, followed by receivers of Schenker AB's environmental communication and different communications channels of Schenker AB. The final section addresses feedback.

Each sender is described from three different perspectives: 1) stakeholders i.e. who the sender communicates to, 2) message i.e. what message the sender communicates, and 3) communication channels i.e. communication channels used in the sender's environmental communication.

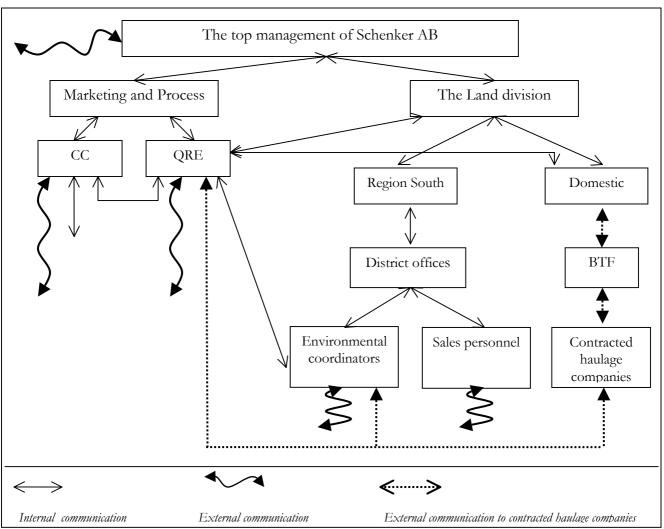


Figure 6-1 shows an overall picture of Schenker AB's internal and external environmental communication. Stakeholders are restricted by the limitations of the thesis. Corporate Communication (CC) communicates to all internal stakeholders (not marked in the figure). The figure should only be used for understanding the environmental communication process more clearly.

6.1 QRE

This section describes the internal and external environmental communication performed by QRE (Quality, Risk and Environment) which is organised under Marketing and Processes (see Figure 5-3). It includes for example the communication process between QRE and relevant stakeholders such as the contracted haulage companies, environmental coordinators and Marketing and Processes.

6.1.1 Internal Communication

Stakeholders

As described in Section 5.3.2, QRE is responsible for running the environmental management system and to make sure that Schenker AB follows environmental laws, decrees and policies. QRE shall also bring pressure and give advice to the divisions, business areas and the top management in their environmental work. Within QRE, there are mainly four persons who communicate environmental matters with other parts of the company: the manager of QRE, the environmental manager and the coordinators of environmental law and operational developments.

The coordinators of environmental law and operational developments together with the environmental manager stand for most of the communication downwards in the company. The operational manager is responsible for communicating changes in the environmental management system to the environmental coordinators. Through feedback, he makes sure that the certificate is maintained. The environmental manager has the main responsibility for advising and contacting the divisions and business areas. The environmental manager also keeps regular contact with environmental coordinators and acts as the link between the main office and the branch offices.

In addition, the environmental manager stands for most of the vertical communication with other departments in the company such as KAM and Corporate Communication as well as the different business areas.

The manager of QRE is responsible for the communication upwards in the company. He communicates environmental matters to the manager of Marketing and Processes who is represented in the top management of Schenker AB.

Message

According to the manager of QRE, environmental matters are presented differently depending on the direction of the communication. In the top-down communication, towards environmental coordinators, mainly technical and practical advices, rules and legal provisions are communicated. In the bottom-up as well as vertical communication, towards the top management, divisions and business areas, focus lies on issues such as environmental goals and strategies as well as requirements from customers (Nordström, 2005, June 9).

Interviews make it clear that it is experienced to be easier to communicate environmental issues downwards in the organisation compared to upwards.

Communication Channels

Information and changes in Schenker AB's environmental work is to a large extent communicated to employees through the intranet, NOVA. Other commonly used communication channels are: the internal magasine "Insidan", the official website and the

sustainability report. This is complemented by direct contact with the environmental coordinators through telephone conversations, email and during auditing and network meetings (Jadsén Holm, 2005, June 7).

Information and changes in the environmental management system are mainly communicated through their internal platform, ISOPEQ, which is a web based information system. ISOPEQ helps the environmental coordinators to organise, register and store environmental information. The system also provides a convenient way for QRE to control and verify information (Vidén, 2005, June 10).

Decisions taken in the top management of the company are partly communicated by minutes from meetings partly at formal and informal meetings (Nordström, 2005, June 9).

6.1.2 External Communication

Stakeholders

QRE communicates environmental issues externally to customers, suppliers i.e. haulage companies, competitors, authorities, politicians, the general public, research/education and branch organisations such as the Swedish Road Administration⁹, the Swedish Association of Environmental Managers¹⁰ and the Network for Transport and the Environment¹¹ (Jadsén Holm, 2005, June 7).

Message

In their external environmental communication, the environmental manager finds it important to make sure that different stakeholders understand Schenker AB as a company which works seriously with environmental issues. The environmental manager also finds it important to reach contracted haulage companies in order to get information about the vehicle fleet and to make sure that the haulage companies understand the importance of working with environmental matters (Jadsén Holm, 2005, June 7).

Communication Channels

QRE communicates environmental issues to customers and suppliers to a large extent through info letters and their external paper "Inside-Outside". Corporate Communication is principally responsible for producing the written material, though the environmental manager takes part in deciding on relevant topics. They strive to have at least one article related to environmental issues in each addition (Jadsén Holm, 2005, June 7).

In addition, the environmental manager sometimes visits customers to talk about Schenker AB's environmental performances. Occasionally, QRE also has advertisements in branch- and environmental magazines. Other commonly used channels are the webpage and the sustainability report (Jadsén Holm, 2005, June 7).

Many interviewees clearly expressed a lack of external environmental communication initiated by QRE. This statement is further confirmed by QRE. Both the manager of QRE and the environmental manager explain that they deliberately have not had any active campaigns

⁹ Svenska Transportförbundet (STIF)

¹⁰ Näringslivets miljöchefer (NMC)

¹¹ Nätverk för transporter och miljön (NTM)

during the last years since they have been waiting for the new environmental strategy to be approved. They also say that QRE has chosen not to advertise in the daily press. Instead they choose to advertise in "Inside-Outside", because they think it gives more value for the money (Nordström, 2005, June 9).

In their contact with haulage companies, questionnaires are used to a large extent. The haulage companies must on a yearly basis answer different questions concerning their environmental performances which results in specific "environmental numbers". Thereby the companies can see their own improvements as well as compare their environmental performance with other companies (Jadsén Holm, 2005, June 7).

QRE communicates with competitors and branch organisations during different meetings and gatherings for the transport industry.

6.2 Land Division

This section describes the internal and external environmental communication performed by the Land Division (see Figure 5-1 and 5-2). The internal communication focuses on the communication between the Land Division and the manager of Region South. The external communication focuses on the contact between Domestic and BTF as well as BTF's contact with the contracted haulage companies. The environmental communication performed at the branch offices is described in the next section.

6.2.1 Internal Communication

Stakeholders

As described in Section 5.3.2, different divisions are responsible for implementing the environmental strategy decided by the top management. The Land Division has decided overall environmental goals for its activities and the business areas must then set up more concrete goals.

The specific environmental goals, which are set up for Domestics' activities, are mostly covering the contracted haulage companies. Domestic also decides routines concerning the work of the branch offices. These are communicated downwards in the company. The environmental communication upwards in the company is performed by the manager of Domestic who is represented in the top management of the Land Division (Lundqvist, 2005, June 9).

The manager of Region South is the link between the Land Division and the branch offices. He communicates environmental issues downwards in the company to the managers of the branch offices. Managers of the branch offices are responsible for the environmental work performed at the branch offices. This work is to a large extent delegated to the environmental coordinators and this work is described in more detail in Section 6.3 (Samuelsson, 2005, August 19)

The manager of Region South communicates environmental issues upwards in the organisation to the manager of the Land Division who is represented in the top management of the company.

Message

In the top-down communication, towards the managers of the branch offices, the manager of Region South communicates the environmental goals which are decided by the top management of the Land Division. In the bottom-up communication, the managers of the branch offices report their environmental work to the manager of Region south, who reports to the top management of the Land Division (Samuelsson, 2005, August 19).

Communication Channels

Environmental decisions taken by the top management of the Land Division are communicated downwards in the hierarchy through minutes of meetings, NOVA and personal contacts.

6.2.2 External Communication

Stakeholders

Domestic sets up specific environmental goals which must be followed by the contracted haulage companies. These goals and decisions are to some extend communicated to the contracted haulage companies through BTF. A dialogue with BTF is therefore necessary in order to secure the environmental goals.

All haulage companies have their own environmental coordinator. However, the engagement varies among companies and the environmental work is performed differently depending on whether the company has 50 or 4 trucks. Many interviewees have expressed the difficulties for small haulage companies to keep the same level of environmental standard compared to larger companies due to fewer resources (for example Andersson, 2005, September 6).

The Region offices and branch offices communicate environmental issues externally to customers. Sales personnel are responsible for most communication with customers at the branch offices, and this work is described in more detail in Section 6.3.

Message

In their top-down communication, Domestic communicates the environmental goals and strategies which are set up for the contracted haulage companies. This includes improvements of the vehicle fleet (e.g. action plans when different Euro-classes should be phased out), and decreased environmental impact from transports (see Section 4.2). Other issues are related to fuel consumption and how the haulage companies can reduce their cost per driven kilometre.

Communication Channels

Domestic's traffic manager communicates environmental issues to haulage companies through different channels such as email, personal contact at meetings, questionnaires, contracts with haulage companies and via BTF (Andersson, 2005, September 6).

Domestic also uses written material, for example, a newsletter "Släpet" produced by Corporate Communication. "Släpet" consist of varying information about Schenker AB, including environmental matters (Ralph, 2005, June 8).

BTF often communicates environmental decisions and information to the contracted haulage companies through email and their own intranet. BTF also has a newsletter of their own in which they sometimes use articles from "Släpet" (Lanfeldt, 2005, June 13).

6.3 Branch Offices

This section describes the internal and external environmental communication performed by the branch offices. The internal communication focuses on the communication performed by environmental coordinators. The external communication focuses on the communication performed by sales personnel.

6.3.1 Internal Communication

Stakeholders

Within the frames of the environmental management system, branch offices must work with environmental matters by for example setting up environmental targets for its activities and educate its employees in environmental matters. Another important task is to make sure that the branch office follows local laws and regulations which might have an impact on its activities (Nilsson, 2005, August 16).

The environmental work is initiated by the manager of the branch offices together with the environmental coordinator. The work is structured differently at the different branch offices depending on size and other organisational structures. The environmental coordinator is responsible for engaging and educating employees at the branch offices to work with environmental matters (Jadsén Holm, 2005, June 7).

Environmental coordinators often have other work tasks besides working with environmental issues. The engagement in the environmental work varies among environmental coordinators as well as the amount of time spent on working with environmental matters.

Message

In the top-down communication, towards employees, the environmental coordinator communicates environmental targets and a plan of action for each branch office. He or she also tries to engage employees to work with the environment. In the bottom-up communication, towards the environmental manager at the main office, the environmental coordinators communicate their work with environmental matters as well as addresse environmentally related questions (Nilsson, 2005, August 16).

Communication Channels

The environmental coordinator uses different communication channels depending on the size and organisational structure of the branch office. Some coordinators communicate environmental matters though meetings and/or information letters. Some coordinators delegate the communication (within the hierarchy) to different department managers. (Nilsson, 2005, August 16).

The network meetings for the environmental coordinators, which is held every second year, is an appreciated communication channel and helps to increase the understanding among the different environmental coordinators. However, the contact between the environmental coordinators is only sporadic between the network meetings (Malmberg, 2005, July 21).

Section 6.1 describes communication channels used in the environmental communication between the environmental manager and environmental coordinators.

6.3.2 External Communication

Stakeholders

The branch offices communicate environmental issues externally to customers and sometimes to local mass media and contracted haulage companies. The environmental coordinator stands for the contact with the haulage companies and mass media while sales personnel are responsible for the contact with customers. However, sometimes sales personnel need help from the environmental coordinators when discussing environmental matters (Larsson, 2005, August 16).

Sales personnel are the group of employees which have been identified in interviews to be a key group for Schenker AB's external communication. This is due to the fact that sales personnel often are Schenker AB's face towards customers.

Message

It has been found that sales personnel mostly use environmental matters as a selling argument. The most important message to get across to customers is that Schenker AB works actively with environmental issues. Sales personnel mostly communicate technical matters such as the ISO standard, the emission report tool¹² and standard of the vehicle fleet. They seldom approach environmental matters from a strategic view i.e. how customers can make strategic changes in their logistics in order to reduce the environmental impact of their goods transport (Clerkefors, 2005, June 9).

When customers make inquires about environmental issues they mostly ask general questions about the Euro-class of the vehicle fleet and whether the company is ISO certified or not. Further, it has been featured that in the communication with customers sales personnel often discuss historical projects and activities instead of present ones (Clerkefors, 2005, June 9).

Communication Channels

Sales personnel communicate environmental matters with customers during the work with quotations and agreements. Sales personnel often have direct contact with customers and communicate environmental issues by showing the so called customer presentation. Sales personnel also use the emission report, mostly the one available on the intranet (Nilsson, 2005, August 16). Customers often use questionnaires when they ask questions about Schenker AB's environmental work and performance (Clerkefors, 2005, June 9).

6.4 Corporate Communication

This section describes the environmental communication performed by Corporate Communication which is organised under Marketing and Processes (see Figure 5-3). The department is responsible for producing a majority of Schenker AB's information material. Most information material is used for both internal and external communication and therefore is this section not divided into internal and external communication.

_

¹² The emission report tool is a calculation software developed by BTL in the late 1980s and inherited by Schenker AG (Wolf, 2005, August 17). The emission report helps customers to calculate emission of e.g. CO₂, HC, NO_X, PM and SO₂ during transport of goods (Schenker AB, 2005a). A simplified version of the calculation tool is available on Schenker AG's/AB's homepage.

Stakeholders

Information material produced by Corporate Communication is communicated, to a varying extent, to all internal and external stakeholders identified in Figure 5-5: suppliers, customers, mass media, the network, owner, co-workers, society/authorities and the surrounding world.

Message

Corporate Communication tries to communicate the same message in different external media i.e. Schenker AB's engagement in environmental matters. This is for example done by describing and showing current projects and activities.

Corporate Communication serves all business areas and departments within Schenker AB and therefore, the same message is perceived to be communicated to all stakeholders within the company. The message is however to some extent adjusted depending on who the receiver is and it is further adjusted depending on whether the message is communicated to internal or external stakeholders. For example, when communicating to haulage companies economical advantages are stressed, while logistical advantages are stressed when communicating with sales managers (Ralph, 2005, June 8).

Communication Channels

Corporate Communication is responsible for producing the sustainability report, the internal paper "Insidan", the external paper "Inside-Outside", different sheets of information and press releases. The department also organises Schenker AB's participation in different exhibitions. By participating in exhibitions, Schenker AB wants, for example, to show their interest and support in environmental issues. Schenker AB also acts as supporter of the environmental price issued by the city of Gothenburg¹³ (Ralph, 2005, June 8).

6.5 Environmental message(s) of Schenker AB

This section starts by summing up the environmental message(s) which is communicated to internal and external stakeholders. It also includes comments and experiences from different stakeholders on communicating Schenker AB's environmental message(s).

6.5.1 Internal communication

Some of the internal environmental communication is done within the frames of the environmental management system. This includes the communication of environmental goals, strategies and policy as well as reporting of how those are followed up. Overall, environmental goals and strategies are decided by the management of the company and are thereafter translated into more specific numbers and units relevant for different parts further down in the company.

According to the environmental manager, the most important message to communicate within the company is the importance of working with environmental issues. The engagement in environmental matters probably affects future business developments of Schenker AB and therefore, it is considered to be important for the company (Jadsén Holm, 2005, August 12).

¹³ Göteborgs miljöpris

It has been acknowledged by many that the intranet based environmental education focuses on technical aspects e.g. the ISO certification, Euro-class of the vehicle fleet and the emission report tool. In that respect, it has been expressed that there is a need for a strategic approach as well.

Interviews have shown that problems of getting the environmental message(s) across to employees are strongly associated with the level of enthusiasm and interest among employees. In this respect, anxiety has been expressed that persons in higher positions do not prioritise environmental issues when making decisions.

Interviewees have found it difficult to get the environmental message(s) across because the benefits of environmental work are intangible i.e. it is considered difficult to put an economic value on the environmental work. Consequently, employees find the environmental message(s) indistinct and do not find reasons for working with environmental matters.

In addition, it has been expressed to be difficult to set up "relevant" environmental targets at the branch offices. Today, the environmental work at the branch offices does not cover Schenker AB's primary environmental problem i.e. transports. Many interviewees have mentioned that consequently, some employees do not think that they have the power to make a difference. Therefore, they do not have enough enthusiasm and engagement to work with the environment.

6.5.2 External communication

Most people interviewed have emphasised that Schenker AB's work with environmental matters is the most important message to communicate to external stakeholders. This is done by presenting different projects and initiatives. In addition, it is found to be essential to have a close contact with the contracted haulage companies in order to register, improve, and encourage their environmental performance.

Interviews have made it clear that many employees find Schenker AB's external communication deficient and there is consequently a pronounced anxiety. There is, for example, a risk that insufficient external communication might be interpreted by some stakeholders as if Schenker AB does not perform any environmental work at all.

As mentioned in Section 6.3, environmental issues are today mostly discussed from a technical perspective during the work with quotations and agreements. However, there has been a clear wish by many to have a more strategic approach on the communication with customers. It was also expressed that Schenker AB should take a more proactive role in the public debates on problems with transport of goods. For example, in influencing politicians' and customers' view on environmental problems caused by transports (as discussed in Section 5.3.3).

Different parts of the company express different difficulties in getting the external environmental message across to their receivers. Just like in the internal communication process, the level of enthusiasm and interests among the receivers is an important factor. Another problem might be the engagement of the sender. For example, it has been acknowledged that since some sales personnel do not think that they can make an impact on the environment they choose not to discuss environmental matters with customers.

Difficulties of making the environmental message(s) clear and tangible also affect Schenker AB's external communication because employees choose to not communicate environmental matters to external stakeholders.

6.6 Receivers of Schenker AB's environmental communication

This section analyses receivers of Schenker AB's environmental communication. Focus is on stakeholders, which are identified in the stakeholder view of Schenker AB's "general" communication (see Figure 5-5). Receivers' perception of Schenker AB's environmental communication is not discussed in depth. Instead, common boundary-spanners and communication channels for each stakeholder are identified. General information about different stakeholders is added from ISO 14063 with the purpose to give a more general picture.

Table 6-1 lists contacts between Schenker AB's internal and external stakeholders. Information is gained from interviews with employees at Schenker AB. (CC stands for Corporate Communication and Env C stands for environmental coordinator).

	QRE	CC	Sales personnel	Env C	Domestic	CEO
Employees	Х	Х		Χ		
Customers	X	Χ	X	Χ		Χ
Suppliers (BTF)	X	X		(X)	X	
Mass media		Х		Χ		Χ
Authorities	Χ			X		
Politicians	X					Χ
Branch org.	X					Χ
Owners (DB)						Χ
Competitors	X					Χ
General Public	Χ	Х		(X)		
Research/Educat	X	Х				

6.6.1 Employees

Employees are important ambassadors for Schenker AB and should therefore be seen as the most important internal stakeholder for all environmental communication. Information from an individual employee could sometimes be considered as more credible compared to the company's official information (Brorson et al., 1999, p.148).

Table 6.1 shows that environmental issues are communicated to employees by: QRE, Corporate Communication and the environmental coordinators. Most frequently used communication channels are NOVA and written material such as the sustainability report, "Insidan" and "Inside-Outside".

6.6.2 Customers

Schenker AB's environmental work can have an impact on customers' work with the environment. Environmental information about products and services should therefore be communicated to customers (Brorson et al., 1999, p.150).

Table 6.1 shows that environmental issues are communicated to customers by: QRE, Corporate Communication, sales personnel (KAMs), environmental coordinators and the CEO. Most frequently used communication channels are "Inside-Outside", internet and personal contacts.

6.6.3 Suppliers (BTF)

Contracted haulage companies perform a majority of Schenker AB's consignments and consequently, Schenker AB must influence these companies in order to improve the environmental performance of their vehicle fleet.

Table 6.1 shows that environmental issues are communicated to suppliers by: QRE, Corporate Communication, environmental coordinators and Domestic. Most frequently used communication channels are "Släpet", personal contacts and questionnaires.

6.6.4 Mass Media

Media influences the opinion of other stakeholders. Media can for example help Schenker AB to communicate their environmental work and activities or damage their image by identifying poor performance and/or wrong doings (Brorson et al., 1999, p.151).

Table 6.1 shows that environmental issues are communicated to mass media by: Corporate Communication, environmental coordinators (local media) and the CEO. Most frequently used communication channels are press releases and personal contacts.

6.6.5 Authorities

When Schenker AB applies for different licences and fulfills other requirements, contact with authorities such as municipalities, councils, emergency services and inspectors is necessary (Brorson et al., 1999, p.150).

Table 6.1 shows that environmental issues are communicated to authorities by: QRE and environmental coordinators. Most frequently used communication channels are email and personal contacts.

6.6.6 Politicians

Political decisions on infrastructure and market instruments can affect the transport in Sweden and consequently the business activities of Schenker AB (see Chapter 4).

Table 6.1 shows that environmental issues are communicated to politicians by: QRE and the CEO. Most frequently used communication channels are personal contacts.

6.6.7 Branch organisations

Branch organisations within the transport industry cooperate in different networks, gatherings and projects (Schenker AB, 2005a). Here, Schenker AB can promote itself as a company working actively with environment. Cooperation in different projects often has spin-off effects and might, for example, lead to involvement in other projects and activities (Trouvé, 2005, August 25).

Table 6.1 shows that environmental issues are communicated to branch organisations by: QRE and the CEO. Most frequently used communication channels are personal contacts.

6.6.8 Owner (DB)

Deutsche Bahn (DB) is the owner of Schenker AG and consequently should be interested in the environmental performance of Schenker AB. As the owner of a company, Deutsche Bahn should also set up requirements and demands on Schenker AG's environmental work.

Table 6.1 shows that environmental issues are communicated to the owner by: the CEO. Most frequently used communication channels are email and personal contacts.

6.6.9 Competitors

By having a dialogue with competitors, Schenker AB can keep them up to date with environmental performances and activities.

Table 6.1 shows that environmental issues are communicated to competitors by: QRE and the CEO. Corporate Communication also follows the environmental communication produced by competitors. Most frequently used communication channels are personal contacts.

6.6.10 General Public

The general public and local community find interest in Schenker AB's environmental performance, especially transport of goods to and from terminals at the branch offices.

Table 6.1 shows that environmental issues are communicated to the general public by: QRE, Corporate Communication and environmental coordinators. Most frequently used communication channels are articles in newspapers and local happenings. Schenker AB is also represented in the local community by their vehicles.

6.6.11 Research/Education

Cooperation with Universities and other educational programmes makes it possible for Schenker AB to take part in interesting projects. It also creates opportunities to communicate issues related to the transport of goods to younger people and work with future employees.

Table 6.1 shows that environmental issues are communicated to the general public by: QRE and Corporate Communication. Most frequently used communication channels are meetings and different gatherings.

6.7 Communication channels of Schenker AB

This section analyses communication channels used in Schenker AB's internal and external environmental communication. Focus is on Schenker AB's most important communication channels: internet, intranet, sustainability report, printed material and personal contact. General information about communication channels is added from ISO 14063 and interviews with the purpose to give more substance to discussions.

Many communication channels are used by Schenker AB for both their internal and external stakeholders.

Table 6-2 shows a list of communication channels, which are used in the environmental communication activities with different stakeholders.

Stakeholder	Channels of communication		
Customers	Meetings, questionnaires, external papers,		
	sustainability report, internet, information		
	sheets.		
Mass Media	Internet, external papers, press releases,		
	sustainability report.		
Society/authorities	Meetings, websites, sustainability report.		
Financiers	Personal contacts, sustainability report		
Employees	Intranet, internet, email, sustainability report,		
	internal and external papers, minutes from		
	meetings, information and training activities,		
	information material, personal contacts.		
Company Management	Intranet, internet, meetings, sustainability		
	report, minutes of meetings, "Inside-		
	Outside".		
Competitors	Internet, meetings, sustainability report.		
General Public	Internet, sustainability report, exhibitions,		
	meetings with employees.		
Suppliers (contracted haulage companies)	BTF, meetings, "Släpet", internet,		
,	questionnaires.		

6.7.1 Internet

According to the ISO standard, the strength of websites is that they offer a great opportunity to reach out to a lot of people on different issues. They are also easy to update and has the possibility to create an effective two-way communication. Further, the websites also give the opportunity to answer frequently asked questions. Another positive aspect is that the communication can be done to a relatively low cost. The weakness is that companies sometimes put brochure ware on their websites, which might not lead to interactivity (ISO, 2005, p.11).

Schenker AB's website has a special section for environment and quality and is found to be well organised and informative. The website gives basic information about the environmental work performed by Schenker AB. Contact information of the environmental manager is available so users can provide questions and feedback to the company. However, in the opinion of the environmental manager, she does see that the website gives much feedback.

Many of the different sections have not been updated during the last six months. This might be a reason why all links did not work when clicking on them. Another negative aspect with the website is that all sections have not been translated into English yet.

6.7.2 Intranet

Intranet is used for both communication and to provide employees with policy documents. In general, the intranet has the same strength and weakness as the website.

The intranet, NOVA, is frequently used for communicating environmental matters. Countries have links to respectively companies' own domestic intranets. Schenker AB has a special section for environment and quality where information about projects, activities, education, guides and plans of action can be found. QRE has the outermost responsibility to communicate environmental issues on the intranet, even though other internal stakeholders can announce their environmental related news.

It has been mentioned by interviewees that the intranet does not give a good holistic view of Schenker AB's organisation and consequently other employees' work tasks are found difficult to understand. However, the environmental manager emphasises that ISOPEQ is a tools, available on intranet, which does makes this clearer. When it comes to environmental news, people made it clear that they know where to find information i.e. under the environmental section. However, a majority says that they seldom visit the environmental section. It is also found that insufficient amount of news about environmental matters is visible on Schenker AB's main page.

Environmental coordinators find that information on the intranet gives them good support in their work with the environment. However, since intranet includes a lot of information it sometimes seemed difficult to know when new information or news is launched. It has been stressed in interviews that it would be desirable if the environmental manager, and others, could send an email telling the environmental coordinators when new information has been launched (Malmberg, 2005, July 21). Further, the information on the main page could be streamlined so important information will not be omitted.

6.7.3 The environmental and sustainability report(s)

The ISO standard stresses that one of the main strengths of a sustainability report is that it creates an opportunity to address multiple issues in depth. It also gives the possibility to create internal transparency in all relevant issues of an organisation. Further, it is a good approach to build acceptance and reliability for the organisation among both internal and external stakeholders. Another positive aspect, connected to the production of the report, is that it creates an internal process within the company. The process forces the company to think through its present environmental performances (Jakobsson, 2005, September 9). The negative sides of producing sustainability reports are that it often demands hard work and can be difficult to update regularly. In addition, it might provide information in a form which does not permit comparison with similar organisations (ISO, 2005, p.11).

The sustainability report is considered to be of high importance for Schenker AB's external environmental communication. The report is performed with the goal to address a broad target group such as customers, employees, suppliers, haulage companies, students and future employees.

BTL produced its first environmental report in 1996, parallel to its financial report. This work was continued until 1998 i.e. it stopped after the take over of Schenker AG. Schenker AG has never produced any environmental report for the whole group. However, the Swedish company decided to establish an environmental report only including Schenker AB's activities. The company started to produce its environmental report according to the Global Reporting

Initiative (GRI) in 2000. Between 2000 and 2003, the environmental report was produced externally and the environmental manager was responsible for the production

Schenker AB produced its first sustainability report in 2003. The report was produced internally by Corporate Communication. Information about the company's activities are collected by HR (Human Resources), Finance and QRE independently. The environmental manager is responsible for collecting the data about the company's environmental performances through questionnaires directed to the contracted haulage companies.

Today, Schenker AB uses all core indicators and plan to use the technical protocols specific for transports in the future. The GRI is found to be a good support when producing the sustainability report. Even though the company has realised that sustainability issues are indirectly connected, they do not work with the different issues integrated within the company. The company does not have any integrated sustainability key ratios today (Jadsén Holm, 2005, June 7).

Schenker AB has decided to not produce a sustainability report for 2004 due to problems with answers from haulage companies in time. Instead, a "light-version" of the sustainability report will be made. The report will only be launched on the internet (Jadsén Holm, 2005, August 26).

The absence of a sustainability report for 2004 has been noticed by, for example, the environmental coordinators. They often use the sustainability (and earlier the environmental) report in the communication with customers to give statistics and information about Schenker AB's environmental performance e.g. Euro-classes within the vehicle fleet. This resulted in that environmental coordinators instead must ask the environmental manager for information (Malmberg, 2005, July 21)

6.7.4 Printed material

The strength of printed material is, according to the ISO standard, that it can inform a large number of people at the same time both inside and outside the organisation. Weaknesses of printed material are that it might be difficult to distribute to remote areas and it might only include basic information (ISO, 2005, p.11).

Schenker AB's newspaper "Inside-Outside" has approximately 35 000 readers especially employees and customers. In each issue (four issues per year), there is at least one article about environmental matters. The articles contain information about specific projects of interest for different stakeholders. The environmental manager explains that the actual topic could either be chosen because it is important for Schenker AB to communicate to its stakeholders or because stakeholders might have asked for the information (Jadsén Holm, 2005, August 12). The manager of Corporate Communication mentions that she prefers that environmental information is integrated in other articles in order to not treat environmental issues differently (Ralph, 2005, August 19).

6.8 Feedback

In the opinion of the environmental manager, there is deficient feedback on the environmental communication. She thinks that this either depends on that the message is "crystal clear" or that there is insufficient interest among the receivers. Further, she says that if receivers want to give feedback on the environmental communication, they know whom to

turn to. Contact information to the environmental manager is for example available in "Inside-Outside" and on the website (Jadsén Holm, 2005, August 12).

According to the manager of Corporate Communication, they get a certain degree of feedback on written environmental communication e.g. from articles in "Inside-Outside" and the sustainability report. However, they do not actively search for feedback by for example contacting different stakeholders. This is not done today due to lack of resources – time and money (Ralph, 2005, August 19).

When it comes to the sustainability report, the environmental manager has no clear view of how the report is interpreted by different stakeholders, due to insufficient feedback. Further, Corporate Communication did not communicate environmental matters systematically with important stakeholders before they produced the report

7 Discussions and Recommendations

This chapter brings general reflections on environmental communication and presents three important factors influencing environmental communication. Furthermore, Schenker AB's internal and external environmental communication as well as the link between them is discussed. Finally, a communication plan for Schenker AB's environmental communication is presented.

7.1 General reflections on environmental communication

Findings from interviews indicate that it has become more difficult to communicate environmental issues. Today, the environmental message does not attract people to the same extent compared to ten years ago. This could be explained by the fact that companies are working more active with environmental issues today. The amount of environmental communication in the society has increased and therefore, it is more difficult to distinguish the message. Another reason is that more demands have been put on environmental communication concerning seriousness, transparency, language and content of message (Jakobsson, 2005, September 9). Some interviewees also mentioned that environmental issues are difficult to communicate due to long-term perspectives (for example Trouvé, 2005, August 25). To make the environmental message more attractive, interviewees concluded the need for new perspectives and approaches. To help companies succeed in their environmental communication different tools, guidelines and standards have been developed.

Many interviewees emphasised the importance for companies to be transparent in their environmental communication (for example Jakobsson, 2005, September 7). Negative information concerning companies' environmental performance should always be presented. An interviewee stressed two reasons: 1) the negative information will always be brought forward anyway, and 2) it shows an understanding for problems facing the company (Brorson, 2005, September 7). However, sometimes internal conflicts occur within companies when there are different opinions concerning how much information should be revealed.

With regard to environmental (and sustainability) reports, ten years ago the production of an environmental report was generally considered as active environmental communication. An interviewee commented that companies today still assume that the production of an environmental (or sustainability) report is enough to fulfil stakeholders' needs (Jakobsson, 2005, September 7). However, from other interviews it can be concluded that few stakeholders actually read the report.

When referring to difficulties in communicating environmental issues, some interviewees have mentioned problems of connecting the environmental message to business activities. At the same time, this connection is of high importance to create reliability for the environmental message (Jakobsson, 2005, September 9). Companies today are not considered trustworthy if they only communicate environmental issues. The environmental responsibility should also show its positive influence on the company's business activities. In this respect it should also be highlighted that today, it is no longer "taboo" for companies to claim that good environmental communication means profit (Jakobsson, 2005, September 9).

The link between internal and external environmental communication

Interviewees emphasised the relation between internal and external environmental communication (for example Brorson, 2005, September 7). In order for the external environmental communication to succeed, the internal environmental communication must first work. As explained in Section 3.3, successful external communication requires that the same external stakeholder receives the same message from different boundary-spanners i.e. internal stakeholders. This makes it essential for internal stakeholders to receive and understand the internal environmental message. In addition, boundary-spanners must be aware of their role in the company's external environmental communication.

7.2 Factors influencing environmental communication

7.2.1 Consideration of stakeholders' needs, interests, and values

It can be concluded that senders' consideration of stakeholders' needs, interests, and values are to a high extent influencing the success of environmental communication. In this respect, senders can facilitate the consideration of stakeholders' needs, interests, and values in four ways: 1) evaluate their relationship with different stakeholders, 2) adjust their message according to stakeholders' preferences, 3) choose suitable communication channels, and 4) secure feedback.

Relationship to stakeholders

Section 2.3.1 reflects on the importance for companies to identify stakeholders who directly or indirectly put pressure on the company to take responsibility. To neglect some stakeholders' needs and demands might result in damaged reputation. Identification of stakeholders is often done in a so called stakeholder view (see Figure 2-3 and 2-4).

The findings from Windahl et al. in Section 2.2 imply that the sender-receiver relationship is crucial for the outcome of the communication process. Several interviewees referred to the increased need of two-way communication i.e. dialogue in environmental communication. As accentuated in ISO 14063, the dialogue with important stakeholders makes it easier for companies to consider stakeholders' needs, interests, and values in their environmental communication. The standard also underlines the possibility of a dialogue to build acceptance, reliability and partnership.

Adjustment of message

Findings from interviews emphasise the necessity to adjust the message in order to consider receivers' needs, interests and values. In the light of companies' environmental message, it is, however, important to keep in mind what is perceived to be clear from a sender's perspective might not be understood by receivers. One reason is that stakeholders sometimes choose to shield themselves from the environmental message.

Concerning the environmental (and sustainability) report, companies are commonly not adjusting the message for different stakeholders' needs and demands. Instead they distribute the same information to all stakeholders (Jakobsson, 2005, September 7).

Choice of communication channels

As discussed in Section 2.2.2, the capability to convey information is highly dependent on the choice of communication channel. Although new efficient communication techniques are considered to be valuable, communication shall not only become a technical issue i.e. by communicating everything on internet and intranet. Research implies that the choice of communication channel should depend on the content of the environmental message and receivers' needs and demands.

Feedback

While acknowledging the need of feedback in environmental communication, several interviewees expressed their frustration of insufficient responses (for example Brorson, 2005, September 7). As reflected by some interviewees, this could be caused by too much information in the society (for example Jakobsson, 2005, September 7). Figure 2-2 indicates that feedback is one of the pronounced differences between the linear and contextual communication models i.e. one-way and two-way communication. Absence of feedback makes the contextual model incomplete and makes two-way communication, i.e. dialogue, impossible.

Findings show that companies must actively search for feedback, for example, by investigating how the company is comprehended by important stakeholders and investigating the attitude of employees (Jakobsson, 2005, September 9). Companies should also encourage stakeholders to give environmentally related feedback by, for example, distributing some kind of "present".

7.2.2 The receptiveness among stakeholders

As reflected by many interviewees, receivers' attitudes towards environmental issues influence the success of environmental communication. The top management of a company plays an important role in convincing employees and managers to work with environmental matters. As some interviewees reflected, the top management's attitude towards different matters will affect the whole company. It will also have an impact on the company's external communication.

7.2.3 Individuals influence on companies' image

With regard to companies' environmental image, several interviewees associated companies with individuals (for example Trouvé, 2005, August 25). These persons often work as CEO or environmental manager at companies; meanwhile they are active within different networks and projects. The manager of the information department and/or corporate communication has also been acknowledged to be of importance for companies' environmental communication (Jakaobsson, 2005, September 9). Interviews revealed the importance for key persons to be involved in different environmental activities. Thereby, the company's environmental message can be communicated to important stakeholders and the company is understood as actively working with environmental matters.

According to several interviewees, the personality of the key person is of high importance to succeed in, especially, the external environmental communication (for example Trouvé, 2005, August 25). Examples of personal characteristics are: outgoing, inspiring, enthusiastic and well-informed. These persons should also be able to create confidence among stakeholders concerning the company's environmental work (Brorson, 2005, September 7).

In this respect, it should also be mentioned that being dependent on certain individuals also includes some risks. For example, if the persons choose to resign from his or her position this could have a significant impact on the company's environmental communication (for example Brorson, 2005, September 7). One explanation could be that personal contacts with employees in other companies and organisations are not easy to replace.

7.3 Evaluation of Schenker AB's internal and external environmental communication

7.3.1 Pressure from stakeholders

Interviews concludes that pressure from certain customers have had an important influence on Schenker AB's environmental work. During the last ten years, customers have shown an increasing interest in Schenker AB's environmental performance. Though, it has been acknowledged by interviewees that the majority of customers are not willing to pay for the costs related to more environmentally friendly transport solutions. The exception is a few KAM customers. The satisfied customer index (see Section 5.3) and interviews indicate however, that in the future both KAM customers and other customers will probably require more environmentally friendly transport solutions and that they will pay for it.

The market economy relies on transport of goods, and as shown in Chapter four, the amount of goods transported in the European Community is increasing. Transports also have negative impacts on humans, the environment and the society. The White Paper implies that future decisions for the transport sector must take all costs into consideration. This will affect the transport industry and consequently, stakeholders both inside and outside the transport industry will probably put more pressure on Schenker AB.

At Schenker AB, employees are perceived to be aware of problems facing the transport industry as well as future pressure from stakeholders. The company has knowledge and tools to help companies and municipalities with the logistics of their goods. Though, the impression is that knowledge and tools are not used to their full potential. Interviews revealed that the main reason is due to deficient support from the top management of Schenker AB (and Schenker AG) to work with environmental matters. Even though interviewees have indicated a change in attitudes towards work with environmental issues in the top managements, the company (and the group) must be more proactive. Even though support is available all business opportunities are not defined and consequently are long-term decisions sometimes overlooked and useful tools are not developed.

7.3.2 Needs for environmental communication

Section 5.3.2 describes environmental problems caused by Schenker AB's activities and how the company's environmental performance can be improved: 1) increase the efficiency of goods transport, 2) improve the environmental performance of the vehicle fleet, and 3) improve the environmental performance of branch offices/terminals. The alternatives involve and require work from different departments and groups of people within the company. They also need varying skills and approaches to environmental communication.

Increase the efficiency of goods transport

As explained in Section 5.3.3, interviewees have mentioned two possible ways for Schenker AB to influence companies to take more responsibility. Schenker AB should: 1) be more proactive towards customers, and 2) be more proactive and lobby towards politicians.

Interviews make it clear that KAMs and sales personnel play an important role in influencing customers. Today, KAMs and sales personnel discuss environmental matters with customers during the work with quotations and agreements. Though, interviewees mention that only technical perspectives of Schenker AB's environmental work are discussed with customers; not strategic perspectives¹⁴. The conclusion is that special environmental education for KAMs and sales personnel is needed and should be worked out. Such education would coach and teach KAMs and sales personnel to discuss environmental aspects in transports and logistics from a strategic approach.

Many interviewees fear that companies will not include transports of goods in their environmental performance until there are political decision and/or market instruments forcing them to do so. It has been mentioned that Schenker AB can make a difference by lobbying towards politicians and branch organisations and express the companies opinion about, for example, the harmonisation of taxes.

Improve the environmental performance of the vehicle fleet

In order to improve the environmental performance of the vehicle fleet, the Land Division, Domestic, BTF, haulage companies and QRE play important roles. Since haulage companies are responsible for a majority of costs related to investments and changes in the vehicle fleet, the communication between Domestic and BTF is essential. According to Domestic's technical manager, the engagement of contracted haulage companies' in environmental matters varies. Big companies are considered to have better possibilities to work with environmental matters compared to small companies. This should be kept in mind when deciding and working out the environmental communication.

Improve the environmental performance of branch offices/terminals

Improvements of the environmental performance at the branch offices/terminals are to a large extent covered by the 14001 certification. The impression is that this work is well organised among the different parts of the company. For example, the responsibility and the authority connected to certain key positions are understood by employees. The internal environmental communication within the environmental management system also seems to work e.g. between QRE and the environmental coordinators and Region South and branch offices.

Environmental coordinators often have other work tasks besides working with environmental issues. Interviews with environmental coordinators give the impression that the environmental work sometimes might be neglected. To facilitate environmental coordinators' work with environmental issues, easy accessible communication possibilities should be provided and encouraged to make use of where environmental coordinators can share experiences.

¹⁴ Though, it should be mentioned that Schenker Consulting does this to a certain degree.

7.3.3 Organisational structure and environmental communication

Schenker AB's organisational structure, which is explained in Chapter 4, is experienced by some employees as complex. This could affect the transparency of the company and consequently might influence both the internal and external environmental communication.

Interviews with QRE indicate that it is easier to communicate environmental issues top-down in the company compared to bottom-up. As discussed in Section 3.2, the bottom-up communication fails because superiors shield themselves from a free flow of feedback. This might lead to that important information does not reach its goal. Another reason might be that feedback from subordinated persons is not sufficient or trustworthy. When it comes to Schenker AB, an additional reason should be distinguished. Environmental matters communicated downwards in the company have a technical approach compared to a more operational approach used upwards in the company. Technical matters could be more understandable and practical as well as more easy to understand compared to operational matters.

It has been mentioned that environmental issues would probably get more priority if QRE was represented in the top management of Schenker AB. For example, it would be easier to put environmental issues on the agenda as well as reduce the risk of presenting environmental matters incorrectly. Environmental decisions today are sometimes discussed on many different levels of the company before it reaches its final destination.

Receptiveness among employees

Interviews conclude that in the internal environmental communication, the interest of the receiver is considered to be of high importance in order to get the message across. The interest for environmental matters is revealed to be low among some employees. It has been acknowledged by interviewees that younger people have more interest in environmental issues compared to older ones. In addition, difficulties to set up "relevant" environmental targets at the branch offices and terminals (see Section 6.5.1) have also been mentioned to influence employees' interest and engagement in environmental issues. It should also be emphasised that the level of external environmental communication towards customers highly depends on the interest among KAMs and sales personnel.

In order to engage and inspire employees to work with the environment, both ISO 14001 and ISO 14063 accentuate the necessity to involve of the top management of the company. Schenker AB's top management plays an important role in motivating and supporting employees to work with environmental matters. The top management should for example make sure that employees see the relation between Schenker AB's engagement in environmental matters and the company's financial performance.

Environmental education has been shown to raise employees' awareness and interest in environmental issues. Schenker AB should therefore implement a system which gives incitement to employees to accomplish the education. For example, give a diploma after finishing the education and/or have a competition among employees. The environmental education should partly include general environmental information, partly be adapted to specific groups e.g. sales personnel, purchasers needs of information.

Some interviewees mention that support from the top management probably would affect important boundary-spanners i.e. internal stakeholders to communicate environmental matters to external stakeholders. Table 6.1 indicates that Schenker AB has many groups of boundary-spanners. Though, interviews give the impression that important boundary-spanners, such as

sales personnel, are not aware of their role in Schenker AB's external environmental communication. Consequently, Schenker AB's environmental message might not be communicated to important external stakeholders. Schenker AB must therefore inform internal stakeholders of their role and make sure that the receptiveness among them is raised.

7.3.4 Schenker AB's environmental communication process

Relationship sender-receiver

To succeed in their environmental communication, Schenker AB must consider needs, interests and values of its receivers i.e. stakeholders. One way of taking these things into consideration is for Schenker AB to carry out dialogues with stakeholders. This would also facilitate Schenker AB's possibilities to built acceptance, reliability and partnership with important stakeholders.

Schenker AB has not performed a stakeholder identification of its present environmental communication. Findings from interviews show that different parts of Schenker AB communicate environmental issues to several external stakeholders (see Table 6-1). Important stakeholders, who are identified in theoretical models (see Figure 2-4), but not experienced to have an impact on Schenker AB's general communication (see Figure 5-5), are: NGO's, future employees, insurance companies and financial analysts. These stakeholders could put pressure on and/or influence Schenker AB's environmental work in the future and consequently they should be considered in Schenker AB's (environmental) communication. The stakeholder identification should also include independent companies which are related to Schenker AB, e.g. Schenker Consulting.

Message

Even though the environmental message is perceived to be frequently communicated to internal stakeholders, some employees experience it as non existent. As reflected by some interviewees, this could depend on that the environmental message is not clear enough. Another reason could be that employees choose to not receive the message by for example shielding themselves from it i.e. not look for it on intranet and info letters. In this respect it should also be mentioned that Schenker AB does not seam to have a clear understanding in what extent the message is understood among employees. This could imply that employees understand the environmental message differently and consequently communicate different message(s) to external stakeholders.

Communication channels

Section 6.7 discusses common communication channels used by Schenker AB. Table 6-2 indicates that the same communication channels are used to reach many different stakeholders. This could imply that the message has not been adjusted to receivers' specific needs and demands and consequently, the environmental message does not reach the intended receiver.

Many interviewees express the importance for Schenker AB to have a sustainability report. Section 6.7.3 discusses Schenker AB's work with its environmental and sustainability reports and explains the reason why no sustainability report is produced for 2004. Since the sustainability report is found to be of high importance for the company's environmental communication, the top management of Schenker AB must make sure that a procedure for producing the report is worked out.

Findings from interviews show that daily press is not a frequently used communication channel. While acknowledging that advertising in daily press is costly, it should be kept in mind that daily press is an important communication channel to reach the general public. In this respect, articles in daily press about Schenker AB's environmental work could be an opportunity to reach important stakeholders.

The majority of interviewees have expressed that Schenker AB could be more represented in different networks and projects. This highly influences the company's external environmental communication. Earlier Schenker AB's external environmental communication was to a large extent performed by the environmental manager at Schenker AG. When he resigned from his position, Schenker AB's external environmental communication was affected. Stakeholders comprehend Schenker AB's external environmental communication differently today, especially people within branch organisations.

Feedback

Insufficient feedback complicates Schenker AB's understanding of how stakeholders comprehend the company's environmental communication. It has been emphasised that the inadequacy feedback could depend on deficient identification and consideration of different stakeholders during the development of environmental communication. Another reason might be if the receiver does not know the intensions of the sender (ISO, 2005, p.18). Thereby, it might be more difficult for the receiver to give relevant feedback and the communication will be more ineffective.

The conclusion is that Schenker AB should search for feedback more proactively, for example, by investigating how the company is comprehended by important external stakeholders and investigating the attitude among employees. Schenker AB should also encourage stakeholders to give feedback by giving them some kind of present e.g. lottery ticket.

7.4 Environmental Communication Plan

This section gives recommendation to Schenker AB to be kept in mind when they create their environmental communication plan. Recommendations have been gained by using the ISO 14063 as a guideline. The emphasis is on issues discussed earlier in this chapter. This section has been structured similar to the ISO standard in order to make it easier for readers to find complementary recommendations. When referring to the standard, the paragraph sign (\S) is used before "the ISO number".

7.4.1 Environmental communication policy

QRE together with Corporate Communication should establish a communication policy which is based on the five principles explained in Section 2.5.1: transparency, appropriateness, credibility, responsiveness and clarity. It is important that the top management of Schenker AB expresses its intentions and directions with the company's environmental communication in the policy.

Recommendations

The ISO standard emphasises five important matters which clearly must be stated in the environmental communication policy (§ 4).

First, the policy should clearly state the organisation's commitment to engage in dialogue with stakeholders. Schenker AB must therefore decide its main reasons for communicating environmental issues to internal and external stakeholders.

Second, the organisation should decide its commitment to disclose information about its environmental performance. Schenker AB must therefore decide if there is anything within the company's environmental performance which should not be revealed for different stakeholders.

Third, the significance of internal and external environmental communication within the organization should be decided. Schenker AB must therefore decide the importance of its internal respectively external environmental communication. This is done with the purpose to achieve the overall aim with the company's environmental communication. In addition, the internal and external environmental communication integration and dependence on each other must be identified in order for the other one to succeed.

Fourth, the commitment to implement the policy and provide the necessary resources for the implementation must be expressed. Schenker AB must therefore decide how much resource (money and personnel) they want to spend in order to implement the environmental communication policy.

Finally, the commitment to address local/global key issues of environment should be stated within the policy. Schenker AB must for example decide how the company shall be involved in public debates concerning environmental problems related to the transport industry.

The ISO standard also mentions other important factors which should be considered when developing the environmental communication policy, such as: the company's size, expectation of different stakeholders, environmental management system and the company's business sector and its product or service portfolio.

7.4.2 Environmental communication strategy

After finishing the environmental communication policy, an environmental communication strategy must be performed. The environmental communication strategy should be approved by the top management of Schenker AB.

Recommendations

When developing the environmental communication strategy it is important to first have a well thought through environmental communication policy. This will make the following work much easier.

Second, environmental communication objectives should be established in order to provide a basis for evaluating the effectiveness of the environmental communication. However, to be able set relevant objectives it is important to first decide the purpose and desired result with the environmental communication. Thereafter, the different objectives can be prioritised based on its different considerations. (§ 5.2).

The ISO standard gives the following examples of priority considerations for setting objectives:

- complying with legal and other requirements;
- influencing public policy on environmental issues;

- minimising internal and/or external conflicts; or
- improving the organisation's credibility and reputation.

Further, it is important for Schenker AB to identify and list internal and external stakeholders which have expressed an interest in the company. In order to achieve the overall objectives of its environmental communication strategy, Schenker AB should also identify other stakeholders with whom the company wishes to communicate (§ 5.3).

To make the environmental communication activities work at Schenker AB, it is dependent upon available resources being allocated to it. For example, human, technical and financial resources should be included in the strategy and designated responsibilities and authority should be well defined.

7.4.3 Environmental communication activities

Schenker AB should establishseveral environmental communication activities in their implementation of its environmental communication policy.

Planning an environmental communication activity - recommendations

When Schenker AB plans their environmental communication activities they have to start with a situational analysis i.e. understanding of the context for their communication. This includes the consideration of potential costs and consequences of not communicating. The ISO standard gives examples of tools and questions, which can be used for the situation analysis (§ 6.1.1).

Schenker should for example consider:

- the existing environmental communication activities and commitments;
- the identification and understanding of issues of concern to interested parties;
- the expectations and perceptions of the organisation held by interested parties;
- the public image of the organisation on a specific issue;
- the latest developments and trends on environmental issues related to the organisation's specific activities, products and services; and
- the communication media and activities that have proven to be the most effective in communicating with interested parties in similar situation.

The second step is to set environmental communication targets i.e. decide what the company wants to achieve with its environmental communication activities. Targets make it possible for Schenker AB to evaluate its environmental communication activities and to decide if the objectives have been achieved or not (§ 6.1.2).

Thereafter, Schenker AB should select the target group among its stakeholders. The ISO standard underlines that different stakeholders might have conflicting interests. Therefore, environmental communication activities must often address and respond to different and sometimes conflicting demands from the stakeholders. When getting feedback from stakeholders it is important for Schenker AB to explain why they want feedback and what the company plans to do with the obtained information (§ 6.1.3).

The next step is to define the geographic scope of the environmental communication activities i.e. area or locations on which Schenker AB wants to focus its environmental communication activities. This is essential since different places with different languages, cultures and habits might have different perceptions about the company and consequently might require different communication (§6.1.4).

Finally, the significance or relevance of different environmental issues must be identified and interpreted by Schenker AB. This can be done by collecting information on the environmental impacts and performances related to the company's strategies, plans and different business activities. Thereafter, appropriate qualitative and quantitative data and information should be selected. This should be done by taking the targets for the environmental communication activities into consideration (§ 6.1.5).

Selecting environmental communication approaches and tools - recommendations

When working out the environmental communication activities it is important for Schenker AB to define responsibilities and involvement for both internal and external stakeholders. Thereafter, responsible employees should be trained in aspects related to communication in order to reach out to the different stakeholders. If necessary, an outgoing dialogue should also be kept between the company and important stakeholders (§6.2.1).

In order to track input from different stakeholders, Schenker AB could use some kind of register which records contact between the company and stakeholders e.g. the date and the nature of the information. Thereby it is possible for Schenker AB to recall historical communication with specific stakeholders. Consequently, it is easier to understand stakeholders changes of inquires and engagement in environmental matters (§6.2.2).

It is also important for Schenker AB to foresee environmental crises and emergencies and to plan appropriate environmental communication activities in case they would occur (§6.2.3).

Performing an environmental communication activity - recommendations

Feedback from stakeholders is a very important part of the communication process since it makes it possible for the organisation to evaluate stakeholders' reactions and understanding of the environmental communication (§ 6.3.3). Therefore, it is important for Schenker AB to make sure that they receive appropriate feedback from their different stakeholders.

The feedback makes it possible for Schenker AB to adjust failures in the environmental communication activities and provide clearer information through more direct access and discussions. In addition, negative feedback should be investigated to get a full understanding of complains and if possible make corrections.

To make the feedback process easier, different information material should include forms and/or contact persons for feedback. Schenker AB can also provide a definition in the material about the information the company is hoping to gain in feedback.

Evaluating environmental communication - recommendations

In the evaluation process, Schenker AB should make use of so called environmental communication indicators which monitor if environmental communication objectives and targets have been achieved. Examples of indicators listed in the ISO standard are (§6.4):

- number of articles published by media;
- number of visitors to the company's environmental communication pages on its website; and
- rate of response to an environmental questionnaire.

The top management of Schenker AB should review the environmental communication policy on a regular basis (§6.5).

8 Conclusions

This chapter concludes the thesis. Findings from both the theoretical part of the thesis and the study of Schenker AB are commented.

Environmental communication is more complex and challenging today compared to ten years ago. If companies want to succeed in their environmental communication, they must have a clear understanding of their environmental communication process. The impact from individuals and organisational conditions on the environmental communication must be comprehended.

Factors influencing Schenker AB's environmental communication

Consideration of stakeholders' needs, interests, and values

Schenker AB's consideration of stakeholders' needs, interests, and values highly influence the success of its environmental communication. This consideration can be facilitated in four ways:

- <u>Evaluate Schenker AB's relationship to different stakeholders:</u> It is apprehended that stakeholders will put more pressure on Schenker AB to take environmental responsibility. If stakeholders' requirements are neglected, Schenker AB's reputation can get damaged. Tools and knowledge to meet future pressure are perceived to exist at Schenker AB, though they are not used to their full potential. Two-way communication i.e. dialogue with important stakeholders increase Schenker AB's possibilities to consider stakeholders' demands. Dialogues also create opportunities to build acceptance, reliability and partnership.
 - Schenker AB should identify stakeholders who directly or indirectly put pressure on the company to take environmental responsibility; and
 - initiate dialogue with important stakeholders on a regular basis.
- <u>Adjustment of message:</u> Schenker AB must adjust its environmental message according to
 different stakeholders' needs, interests, and values. Even if the environmental message
 does correspond to stakeholders' preferences, it is experienced by some employees as
 non existent. One reason could be that the environmental message is not clear enough;
 another reason could be that employees choose to shield themselves from the message.
 - Schenker AB should adjust its environmental message according to stakeholders' needs, interests, and values.
- Choice of suitable communication channels: The capability to convey information is highly dependent on the communication channel. The choice of channel should be done with consideration to stakeholders' needs, interests, and values. Schenker AB uses a variety of communication channels and one and the only channel is used to reach many different stakeholders. This could imply that the choice of communication channel might be done without consideration of stakeholders' preferences. It could also indicate that the environmental message is not adjusted for specific stakeholders.

- Schenker AB should choose communication channels according to stakeholders' needs, interests, and values.
- <u>Secure feedback</u>: Feedback from stakeholders permits evaluation of how the environmental communication is received and comprehended. Feedback is one of the pronounced differences between one-way and two-way communication. Schenker AB experiences feedback on its environmental communication as insufficient. This could depend on deficient identification and consideration of different stakeholders during the development of environmental communication.
 - Schenker AB should encourage stakeholders to give feedback on its environmental communication; and
 - active search for feedback by investigating how the company is comprehended by important internal and external stakeholders.

The receptiveness among employees

Stakeholders' attitudes towards environmental issues highly influence the success of getting the environmental message across. The top management of Schenker AB and other key persons play an important role to influence employees' attitude towards working with environmental matters. Interest for environmental issues is experienced to be low among some employees. Young people are noticed to show more engagement. Difficulties to set up "relevant" environmental targets at the branch offices and terminals also influence employees' interest and engagement in environmental issues.

Individuals' impact on Schenker AB's image

Companies' environmental image is sometimes associated with certain individuals. Though, companies' dependence on certain individuals also includes risks. If key persons choose to resign from his or her position, companies' environmental communication could significantly be affected. Earlier, Schenker AB's external environmental communication was highly dependent on the environmental manager of Schenker AG. When he resigned from his position, Schenker AB's external environmental communication was affected. Stakeholders comprehend Schenker AB's external environmental communication differently today, especially people within branch organisations.

The link between Schenker AB's internal and external environmental communication

In order for the external environmental communication to succeed, the internal environmental communication must first work. Successful external communication requires that the same external stakeholder receives the same message from different internal stakeholders. This makes it essential for internal stakeholders to receive and understand the internal environmental message. In addition, internal stakeholders must be aware of their role in the company's external environmental communication. Schenker AB does not seam to have a clear understanding of internal stakeholders who communicate environmental matters to external stakeholders. Further, they do not know how employees comprehend the internal environmental message.

- Schenker AB should obtain an idea of employees' understanding of the company's environmental message;
- identify internal stakeholders who communicate environmental issues to external stakeholders; and
- plan environmental education for specific internal stakeholders.

Bibliography

Books, articles, reports, seminars (including electronic sources)

Almgren, Richard, & Brorson, Torbjörn. (2003). Miljörevision – Handbok för miljörevisioner och andra som är intresserade av miljöledning och miljörevision. [Environmental audit – Handbook for environmental auditors and others who are interested in environmental management and environmental audit]. Täby: Green Business AB.

Brorson, Torbjörn, & Larsson, Gösta. (1999). Environmental management: How to implement an environmental management system within a company or other organisation. Stockholm: EMS AB.

Bruzelius, H. Lars, & Skärvad, Per-Hugo. (1995). Integrerad organisationslära. [Integrated knowledge about organisations]. Lund: Studentlitteratur.

BTL (1997). Annual report 1997.

Collin, Pamela. (2004). Berätta om ditt miljöarbete så att omvärlden förstår! [Tell about your environmental work so the surrounding world understands!] SIS standard magazine. No 4: p.12. Available: http://www.sis.se/upload/632387028289768750.pdf [2005, August 24]

Conrad, Charles, & Poole, S. Marshall. (2002). *Strategic organizational communication – In a global economy*. Fort Worth: Harcourt College Publishers.

Danish Environmental Protection Agency. (2005). Is transport beginning to form part of companies' environmental initiatives? [Online]. Available: http://www.mst.dk/news/08020000.htm [2005, August 24]

Dimbleby, Richard, & Burton, Graeme. (1995). *Kommunikation är mer än ord. [More than Words. An introduction to communication]*. Lund: Studentlitteratur.

Global Reporting Initiatieve (GRI). (2002). *Introducing: The 2002 sustainability reporting guidelines*. Amsterdam: Global Reporting Initiative.

Holgaard, E. Jette, & Remmen, Arne. (2001). Transport på vej ind I virksomhedernes miljøarbejde? Status over godstransportens synlighed i virksomhedernes miljøkommunikation. [Is transport beginning to form part of companies' environmental initiatives? – a status on the visibility of goods transport in companies' environmental communication]. Aalborg Universitet Institut for Samfundsudvikling og Planlægning. Danish Environmental Protection Agency. Nr. 641.

Jacobsen, I. Dag, & Thorsvik, Jan. (1995). Hur moderna organisationer fungerar. [How modern organisations work]. Lund: Sudentlitteratur.

Josephsson, Anders. (2005). *Ge oss vad vi vill ha [Give us what we want]*. Svensk åkeritidning. (The Swedish paper for haulage companies). Nr. 7. 35-37.

Kreps, L. Gary. (1990). Organizational communication – theory and practice. New York: Longman.

Larsson, Larsåke. (2001). Tillämpad kommunikationsvetenskap. [Applied science of communication]. Lund: Studentliteratur.

Lesley, Ulf. (2004). Integrerad kommunikation – I praktiken. [Integrated communication – in practise.] Malmö: Liber.

Miller, Katherine. (1995). *Organizational communication – approaches and processes*. Arizona State University: Wadsworth Publishing Company.

Rågvik, Harry. (2003). Bra ledarskap - avgörs av förmågan att kommunicera. [Good leadership – decides on the ability to communicate]. Ingenjören – Tidningen för Ingenjörsförbundet [Newspaper for the engineer association. No 3, 2003, 8-11. [Online]. Available:

http://www.ing.se/Resource.phx/plaza/content/public/ingenjoren03.htx.i924.pdf [2005, May 10]

Schenker AB. (2004). Information sheet: Schenkers nätverk – tillgängligt over hela världen [Schenker's network – available all over the world] Art. nr 0805/POD.

Schenker AB. (2005a). Homepage [Online]. Available: http://www.schenker.se [2005, August 24]

Schenker AB. (2005b).Intranet Available: [2005, June 9]

Scholes, Eileen, & David, Clutterbuck. (1998). Communication with stakeholders: An integrated approach. Long Range Planning. Vol. 31, 227-238.

Swartling, Anne. (2005). New ISO-standard for environmental communication. Seminar about environmental communication performed by the Swedish EPA, NUTEC, SIS and Confederation of Swedish enterprises. Stockholm. (2005, February 25)

The Council of Supply Chain Management Professionals (CSCMP). (2005). Supply chain and logistics terms and glossary. [Online]. Available: http://www.cscmp.org/Website/Resources/Terms.asp [September 6]

The European Commission (EC). (2001). White Paper - European transport policy for 2010: time to decide. Luxembourg: Office for Official Publications of the European Communities.

The International Organization for Standardization (ISO). (2004). ISO 14001: Environmental management systems – Requirements with guidance for use. Geneva: ISO copyright office.

The International Organization for Standardization (ISO). (2005). ISO 14063: Environmental management – Environmental Communication – Guidelines and examples. Geneva: ISO copyright office.

Waddock, A. Sandra, Bodwell, Charles, & Graves, B. Samuel. (2002). Responsibility: the new business imperative. Academy of management executive. No.2, Vol. 16, 132-148.

Windahl, Sven, Signitzer, H. Benno, & Olson, T. Jean. (1992). Using communication theory – An introduction to planned communication. SAGE Publication Ltd.

Personal Communication

External experts

Brorson, Torbjörn. Adj. Professor IIIEE. President of MIS. (2005, September 7) Personal interview

Enell, Magnus. Adj. Professor IIIEE. Enell Sustainable Business AB. (2005, February 18) Lecture (2005, May 4) Email questionnaire.

Jakobsson, Jonna. Sustain. (2005, September 9) Telephone interview

Jakobsson, Åsa. Rektorsakademin. (2005, September 7) Telephone interview

Kåberger, Tomas. Associate Professor IIIEE. (2005, September 5) Personal interview

Employees at Schenker AB

Ahldén, Gunnar. Operational manager business area Domestic. (2005, June 8) Personal interview

Andersson, Stefan. Domestic technical manager. (2005, September 6) Telephone interview

Andreen, Lars. Coordinator of environmental laws. (2005, June 7) Personal interview

Clerkefors, Dennis. Sales personnel – branch office Hultsfred. (2005, June 9) Telephone interview

Englund, Magnus. Responsible for NKI. (2005, June 8) Personal interview

Jadsén Holm, Monica. Environmental manager. (2005, June 7) Personal interview (2005, August 12) Telephone interview (2005, August 26) Email questionnaire

Kettelhoit, Mattias. Manager Schenker Consulting. (2005, June 10) Personal interview

Larsson, Patrik.. Sales personnel – branch office Helsingborg. (2005, August 16) Telephone interview

Lundqvist, Annika. Administration business area Domestic. (2005, June 9; 2005, August 18) Personal interview

Malmberg, Renée. Environmental Coordinator – branch office Malmö. (2005, July 21) Personal interview

Nilsson, Ann-Christin. Environmental Coordinator – branch office Halmstad. (2005, August 16) Telephone interview

Nordin, Mats. Manager Marketing and Processes. (2005, August 17) Personal interview

Nordström, Mats. Manager QRE. (2005, June 9) Personal interview

Ralph, Eva. Manager Corporate Communication. (2005, June 8; 2005, August 19) Personal interview

Samuelsson, Erling. Manager Region South. (2005, August 19) Telephone interview

Svensson, Ann-Christine. Quality Controller. (2005, June 9) Personal interview

Trouvé, Johan. Manager – branch office Gothenburg (International environmental manager of Schenker AG 1999-2001; Schenker BTL 1998-99) (2005, August 25) Telephone interview

Vidén, Karsten. Coordinator of operational development. (2005, June 10) Personal Interview

Wedel, John. Manager KAM. (2005, August 19) Personal interview

Others

Lanfeldt, Jonas. BTL (Bilspedition Transportör Förening). (2005, June 13) Telephone interview Wolf, Christina. Project Manager – Schenker AG Environmental Services. (2005, August 17) Personal interview Åhrlin, Ulla. Environmental coordinator Schenker AG. (2005, May 24; 2005, August 17) Personal interview

Abbreviations

BTF Bilspedition Transportör Förening

BTL Bilspedition Transport & Logistics

CC Corporate Communication
CEO Corporate Executive Officer

CSCMP The Council of Supply Chain Management Professionals

DB Deutsche Bahn

EC The European Community

EMS Environmental Management System
EPA Environmental Protection Agency

GRI Global Reporting Initiative

ISO The International Organization for Standardization

KAM Key Account Management

NGO Non-Governmental Organization

NKI Nöjd Kund Index (satisfied customer index).

SIS Swedish Standards Institute

QRE Quality, Risk and Environment

Glossary

ISO 14001 ISO 14001 is a standard for an environmental managements system. The standard contains

different elements which must interact in order for a company to organise its environmental

work in an efficient way.

ISO 14063 ISO 14063 is an environmental communication document, residing in the 14000 family of

standards. It offers guidance on what should be considered in developing an environmental communication program. It also provides sources of information on how each consideration

has been addressed by others.

White Paper "European transport policy for 2010: time to decide "is performed by the European

Commission. The White Paper includes objectives and strategies for Europe's transport

policy.

Appendix 1: Interrelationships and flow of environmental communication in ISO 14063 (ISO, 2005, p. VI) Organization Other policies and Environmental policy strategies ISO 14063 **Environmental communication policy (4) Environmental communication strategy (5)** Establishing Identifying Allocating Interested interested objectives resources parties parties Environmental communication principles (3) **Environmental communication activities (6)** Planning Conducting Performing Evaluating - meeting objectives - targets - collect and review and - boundaries and targets process data planning Target - conduct the interested parties - target groups revisions - information communication response groups - resources - capture, evaluate - critical evaluation - means - data collection - responsibilities and response to - communication - feedback system feedback process and - planning for crises products and emergencies