The Internationalization Processes of Freight Transport Companies
- Towards a Dynamic Network Model of Internationalization

Susanne Hertz

Akademisk avhandling

som för avläggande av ekonomie doktorsexamen
vid Handelshögskolan i Stockholm framlägges till
offentlig granskning måndagen den 24 maj 1993
kl.10.15 i sal Torsten å högskolan, Sveavägen 65.

Stockholm 1993
The Internationalization Processes of Freight Transport Companies
Basic Orientation

The Economic Research Institute, at the Stockholm School of Economics (EFI) is devoted to the scientific study of problems in management science and economics. It provides research facilities for scholars belonging to these disciplines, training advanced students in scientific research. The studies to be carried out by the Institute are chosen on the basis of their expected scientific value and their relevance to the research programs outlined by the different sections of the Institute.

Research Divisions:

A  Management and Organization Theory
B  Accounting and Managerial Finance
C  Managerial Economics
CFR  Center for Risk Research
CHF  Center for Health Economics
D  Marketing, Distribution and Industry Dynamics
ES  Economic Statistics
FI  Finance
F  Public Administration
IEG  International Economics and Geography
I  Information Management
P  Economic Psychology
S  Economics

Research Programs:
Man and Organization
The Foundation for Distribution Research
Policy Sciences

Additional information about research in progress and published reports is described in our project catalogue. The catalogue can be ordered directly from The Economic Research Institute, Box 6501, S-113 83 Stockholm, Sweden.
The Internationalization Processes of Freight Transport Companies
Towards a Dynamic Network Model of Internationalization

Susanne Hertz
ISBN 91-7258-364-9

Keywords:
Transport companies – Europe
Freight transport systems
Relationships
Internationalization
Multinational companies
Dynamics
Domino effects

Gotab 97440, Stockholm 1993
To Rune and Sandra
Preface

This report, carried out at the Economic Research Institute, is submitted as a doctor’s thesis at the Stockholm School of Economics.

The author has been entirely free to conduct her research in her own ways as an expression of her own ideas.

The Institute is grateful for the financial support, which has made this research possible.

Stockholm in April 1993

Claes-Robert Julander
Director of the Institute

Lars-Gunnar Mattsson
Head of the Section for Marketing, Distribution and Industry Dynamics
Foreword

Writing a thesis is like embarking a sailing ship destined for a journey lasting many years. Planning for achievements during that period could only to a certain extent be made in advance since by necessity much has to be adapted and rearranged according to changing circumstances.

Further, there are many people taking part in the journey, helping out in different ways. Some of the people have followed me during the whole or a large part of the project while others have been of great help in periods of need.

First there are my advisors, without whom this task could not be fulfilled. Among these I will start by thanking Lars-Gunnar Mattsson for his engagement in the project and for having the guts to believe in me when I wanted to rejoin and continue my training at the Stockholm School of Economics after many years in business. During the course of writing my thesis he has spent enormous amounts of time in various advisory capacities, trying to understand my thinking as well as the work of transport companies. It has been a privilege having such an advisor and friend. Further, I would like to thank Håkan Hakansson for his stimulating critique and efforts put into the thesis in spite of varying geographical distances. Finally, Claes-Robert Jular and gave me many good advices and ideas for the completion of the thesis. Together they have fulfilled different roles, which all were necessary for making advancements in the process of completing the project. A special thank should also be directed to Lars Östman for putting me on the right track in the very start.

An unlimited curiosity of life and of learning, which are natural characteristics of my colleagues in the D-section (Marketing, Distribution and Industry Dynamics) at the Stockholm School of Economics, have encouraged me in the performance of my task over the years. Their indulging in work and in a large variety of interests from mountain climbing, playing the saxophones, writing music and poetry, performing Tai Chi, boxing and workouts en masse really have made life very enjoyable. The enthusiasm and advise of these friends have surely contributed much to my work at the section. I would like to give special thanks to Anders Lundgren for standardising my figures and making them more readable, to Ann-Charlotte for helping with lists and tables and to Patrick Sweet, being indirectly linked to the department, for his comments and corrections in the last stage in the completing of the thesis.

Another very important person putting an enormous effort into this thesis, is George Cook, who has been correcting and changing my English into an understandable form.
Further, Monica von Baumgarten has been of great help in the creation of this book’s cover and Ulla Holmsten has been of special help in listening and reading. Finally, I would like to direct a special thank to Ivan Snehota for his valuable comments and creative criticism to my thesis.

However, the writing of this thesis would not have been possible without economic support from the Swedish Transport Research Board (TFB) and from Torsten and Ragnar Söderbergs Stiftelser. I am grateful for the three years of economic contributions that I have got from TFB of Sweden. It was tremendously important in that it made it possible to get the project going, making the interviews and summarize much of the study. The support from Torsten and Ragnar Söderberg’s Foundations became much appreciated and indispensable in that it gave me possibility to complete the thesis into its final form. For that I am very thankful. During my very first stumbling steps in the academic world MTC gave me a certain freedom through their economic "seed money" support.

Furthermore, Rune Castenäs will be remembered for all his engagement and help in organizing my economic and practical situation at the Economic Research Institute (EFI).

Last but not least I would like to affectionately thank all the people from the freight transport industry in the company groups of ASG, Bilspedition and Inter Forward and to them related organizations in Sweden, Belgium, Holland, Switzerland and Germany. Many thanks for your openness, kindness and willingness to assist me in my project. You have given me a lot of support and help.

This thesis is dedicated to my husband and daughter for their love, support and patience over the years.

Stockholm in April, 1993

Susanne Hertz
Contents

Part I Background

1 Background and purpose
1.1. Introduction
1.2. The focus of the study
1.3. Purpose
1.4. Delimitations
1.5. Research method
1.6. The structure of the book

2. Transports, transport systems and transport companies
2.1. History and development
2.2. International trade and internationalization of manufacturing industry
2.2. Freight transport industry
2.3. Manufacturing industry and transport companies - two perspectives
2.4. Transport companies, definition and classification

Part II Theoretical framework

3. Three theoretical perspectives
3.1. Network approach
3.2. Distribution
3.3. Theories of internationalization

4. Model of analysis
4.1. Basic concepts
4.2. Forming a model of analysis
4.3. Effects

Part III Case studies

5. Case - ASG
5.1. ASG group - Case description
5.2. General case analysis
6. Case - Bilspedition
   6.1. Bilspedition group - Case description
   6.2. General case analysis

7. Case - Interforward
   7.1. IF Group - Case description
   7.2. General case analysis

8. Conclusions of general case analysis and comparison of the three cases

9. Event analysis - Dynamics and context (including summary including summary of empirical results)
   9.1. Event analysis
   9.2. Patterns of sequences
   9.3. Sequences of effects - contextual changes
   9.4. Patterns of internationalization
   9.5. Conclusion of empirical results

Part IV Theoretical results

10. Theoretical discussions
    10.1. The basic patterns of internationalization
    10.2. Integration changes
    10.3. Extension change
    10.4. Penetration change

11. A dynamic network model of internationalization

12. Managerial implications

13. Continued research
<table>
<thead>
<tr>
<th>References</th>
<th>318</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appendices  1-6</strong></td>
<td>330</td>
</tr>
<tr>
<td>Appendix 1. Sources of information for the case studies</td>
<td>329</td>
</tr>
<tr>
<td>Appendix 2. Glossary of transport terminology and lists of transport companies</td>
<td>341</td>
</tr>
<tr>
<td>Appendix 3. ASG</td>
<td>347</td>
</tr>
<tr>
<td>Appendix 4. Bilspedition</td>
<td>353</td>
</tr>
<tr>
<td>Appendix 5. IF</td>
<td>362</td>
</tr>
<tr>
<td>Appendix 6. Epilogue of the cases for the years of 1991 and 1992</td>
<td>366</td>
</tr>
</tbody>
</table>
Part I Background

1. Background and purpose

1.1. Introduction
This study concerns transport companies and their internationalization processes. To a large extent the choice of subject is attributable to my empirical experiences of this particular industry and of transport companies. Freight transport companies and the way in which they go about their business have fascinated me ever since I joined one over twenty years ago. Up until that time, the world of transport companies was almost unknown to me. The daily business of handling bulk volumes and large numbers of consignments as well as the administrative activities that stemming from despatching and receiving them to/ from destinations world wide are intriguing.

Further, it is quite common for international transport companies to have a large geographical network of international traffics based on the cooperation of a large number of transport companies. The bulk of volumes and consignments to be handled, the size of these geographical networks in combination with the number of companies involved lead to a very high complexity in the performance of these traffic systems.

The described situation of the transport companies poses a number of questions regarding coordination and integration and how the development of some companies affects the others. How were these international networks of traffics created and developed over a period? Specific phenomena added to my curiosity. What was it that caused certain transport companies to suddenly restructure their network of traffics causing them to sever their connections with a whole number of cooperating international transport companies at a high cost? And subsequently, why have they taken large shares in other transport companies within such a short period? Why did these changes sever cooperations, seemingly unintentionally, with transport companies not even remotely involved? What could possibly such apparently strange behaviour?

My own interest apart, there are other reasons for studying transport companies and their internationalization. Some of these are specifically related to transport companies and their role while others concern industrial service companies as the suppliers of standardized systems more generally.

Firstly, growing world trade, internationalization of industries and international competition have increased the importance of effective international distribution systems. The importance of effective distribution of products and product related services is further enhanced by the fact that production is more flexible, inventories are held at lower levels and communication is faster. In light of these increased demands on distribution systems, the role of the transport
companies would seem to be vital as part of the total distribution system, in creating and developing transport systems. Therefore it would be of specific interest to study to contribute to the understanding of how the transport companies handle the increasing demands for more effective international transports.

Another reason for attention focusing lately on the transport companies and their situation has been the deregulation and harmonization of the existing rules and regulations for transport companies in the EC scheduled for 1993. How will transport companies be affected by this and how will they act to adapt to the new situation? Studying the changes in the internationalization patterns of European transport companies over a long time period would be one way to see how these companies meet new situations of similar types which can be of importance for understanding future behaviour.

Finally, the internationalization of service companies performing standardized services like transport companies, banks, insurance companies seems to have been intensified, making them the subject of growing interest. To the extent that these companies have characteristics in common, a study of transport companies might be of value for understanding also of the internationalization processes of other service industries.

1.2. The focus of the study

Choice of framework

The items of most interest are the internationalization processes and the changes in patterns of internationalization over time and more specifically how such change processes develop for transport companies (see definition p.28).

A prerequisite therefore to the choice of transport companies for the study is that they should have experienced a process of internationalization and preferably a rather extensive process so that the material for studying internationalization patterns will be rich. This implies that the result of the study will show an increasing degree of internationalization over a period. However, since our interest lies in finding different patterns and explaining them rather than discussing more generally why internationalization takes place, the choice is still reasonable.

Moreover, the context of the transport companies would seem to play a very important role in the formation of the patterns of internationalization due to their very high dependence on other companies in their geographical networks. Therefore discussing the patterns of internationalization of transport companies will have to include at least the most important companies featuring in these geographical networks of traffics. These are other transport companies in the roles of suppliers, international representatives, competitors, owners and of partnerships.
However, including a part of the context complicates the study by increasing the number of companies involved and makes it important to limit the context to the most relevant parts. Still to do this seems necessary in order to fully comprehend such phenomena as the huge international changes taking place between groups of international transport companies.

Research into transport companies

A brief overview will be provided of the type of research that exists in this field of goods transports and transport companies and their internationalization.

Research into transports of goods has basically been conducted from a macro perspective and has focused on technical, political or economic issues such as pricing of transports and their importance for society, effects of containerization, monopoly of the railways, of rules and regulations. It has been our observation that the actual development of goods transports and their flows seems to attract rather more interest than the development of the transport organizations creating and changing the systems controlling these flows. In some cases, the prediction of general market changes in different countries, formulated as trends and forecasts, have touched upon the subject of changes in the organizations handling the goods. However, very few examples have been found of any serious studies of the development process of these large multi-faceted transport and forwarding companies. The very few that seem to exist focus on the owners of the means of transportation of the goods like truckers, airlines, shipping lines etc., concentrating on structures and strategies rather than processes of internationalization over a period.

From a theoretical viewpoint, the interest in transport companies has been higher because of their role as facilitating agencies seen from the manufacturing companies’ point of view. Most logistical studies belong to this category (e.g. Ballou, 1987, Stock & Lambert, 1987). Lately, three different fields of research which would seem to have shown an increasing interest have enhanced the interest in transport companies. These are services industries in general (Grönroos, 1990; Lovelock, 1990; Normann, 1991; Zeithaml et al, 1990) deregulation of transports (Bailey & Friedlaender, 1982; Shepherd, 1984) and information technology (Brown, 1991; Englund, 1990). Most of these studies are either too general trying to include all types of service companies or focus on the changes in the industrial structure as a result of the deregulation or information systems development. Not one of these studies has examined the changes for companies in patterns of internationalization over a period.


2 In Sweden Rask (1984) is a dissertation on trucking companies and their structural poverty. The thesis is focused on the impact of company and industry structure on strategic action for small organizations.
Theoretical framework

What theoretical perspectives would be suitable to describe and analyse internationalization processes and changes in patterns of internationalization over a period?

Firstly, the transport company networks not only depict the geographical spread, they also depict relationships between separate transport companies. The development of relationships between transport companies is necessary for building their international geographical networks of traffics over a period. Therefore, it would seem natural to use the network approach which is based on development of exchange relationships between companies. The fact that the transport companies create geographical networks for which these relationships are a prerequisite will enhance the contribution of the network approach to the understanding of internationalization processes and the changes in patterns over a period.

This approach also takes the interdependence with the context into account since companies belonging to different geographical networks are basically all related in one way or another.

Further, since the study concerns internationalization of organizations the existing literature on internationalization processes and existing patterns of internationalization will necessarily be of high importance. This field of research will present the issues of importance when discussing the concept of internationalization. A description of the patterns of internationalization found in other studies which might possibly have application to transport companies will make another contribution. The rich field of studies on the subject of internationalization will not only contribute to the understanding of the process, as such, but also reveal the driving forces behind such a process and its development over time. Therefore it seems natural to include the existing theories within this field.

Finally, research on distribution seems to be of interest due to the fact that transporting is a function in distribution systems. The distribution theory is used to handle interdependencies in physical systems of similar types as transport systems and therefore research in this field would seem to contribute to explaining the international development of transport companies. Another matter that is a vital issue in distribution theory is what part of the context should be included in the systems. Even though there are important differences between transport systems and distribution systems this theoretical discussion could add to the understanding of the patterns of internationalization of transport companies.
1.3. Purpose

The purpose of the study is threefold.

First the purpose is to develop a model of internationalization, making use of network, distribution and internationalization theories, that can be applied to transport companies.

Second the purpose is to describe and then to analyse the internationalization patterns of transport companies using that model. My interest here is to show how they internationalize and not why.

The third purpose of the study, which originates from the confluence between existing research and empirical results, is to explain the behaviour patterns of internationalization found for the transport companies. These explanations will be grounded in theories of network, distribution and internationalization. Based on these a dynamic model for internationalization of transport companies will be constructed within the framework of the network approach, complemented by distribution and internationalization theories which present the patterns of behaviour internationally over a period as well as the driving forces for that behaviour.

1.4. Delimitations

In order to reduce the complexity of the study many delimitations are made. This section will focus on two delimitations of the subject which both might have important implications for interpretation of the results of the thesis.

The first is that the study excludes transport companies which have not internationalized or which started to internationalize and chose to stop the process. This way the less successful companies at internationalization will not form part of the study.

Another important limitation of the study is the decision not to include the customers in the study as part of the context in focus. There is a difference between having the customers as a direct or indirect part of the study. Since the study intends to describe and analyse the behaviour of transport organizations in search of patterns of internationalization changes over a period, an exclusion of customers from the focused context should not be serious, for the reason that the behaviour should be the same whether the customers are directly part of the study or not.

Furthermore a large transport company has normally a large variety and number of customers and especially so in the home country. Then there are the international customers through the geographical network which might be direct customers to the Swedish company depending on how the agreement is made between the industrial company and their customers or suppliers in
other countries. Finally there are large multinationals which have partly centralized their procurement of transport services to any location.

The background to the decision not to involve the customers directly in the study is in fact that it is possible to study the behaviour patterns without the direct involvement of customers. I do not deny that the internationalization of the manufacturing industry plays a very important role for the internationalization of the transport companies; it is only that I have chosen to see them rather as a very important group basically setting demands for and through their distribution systems. It is generally the case for most large transport companies and it has always been the case for forwarders that specialized systems for single customers constitute only a minor part of the total activities.

Accordingly, this study concentrates on transport companies, as such, and their interdependence in their many roles towards each other when creating and developing international networks.

1.5. Research method

This section will start by discussing the issues of a contextualist research approach. Then follows a subsection of organizational behaviour. Finally, there is a description of the research procedures in this study. The elucidation of the contextualist approach should be important for understanding the research method chosen while the discussion on organizational behaviour is rather a prerequisite for using the same method.

1.5.1. Contextualist research

There are many different perspectives and theories to the subject of organizational change. One of these perspectives is contextualism and its root metaphor is the historical event (Pettigrew, 1985). Studies describing phenomena seen in their contexts are called contextualist research.

Contextualism is described as focusing on the event in its settings and its descriptions are made "true" through qualitative confirmation, since the context will change and knowledge will also need to change. (Ibid). The important concepts are change in process, change in content and change in context. In practical process terms it implies the importance of the situational and multi-faceted character of meanings in research settings and the holistic study of emergent processes in particular and changing contexts.

Lindholm (1979) comments that contextual paradigm is typical for research on the meaning of concepts. He cites Törnebohm (1977, p 16) saying "If a researcher would like to understand the meaning of X( an action or text fragment, etc.) he needs to put X into one or several contexts". Lindholm (1979) continues by saying that a phenomenon seen from a certain
perspective in a certain context has a meaning for a specific person. This means that when studying meanings there are no real objective facts, they are all interpreted by the researcher.

This thesis continues the traditions of contextualist research in describing a phenomenon, the internationalization process, in different historical settings from a perspective chosen by the researcher.

In line with the empirically based purpose of the study to describe and analyse the phenomenon of internationalization, a qualitative method has been used. The aim of this method is not to verify hypotheses but to inductively construct some new hypothesis and perhaps revise or complement some of the existing theories. New concepts will also be developed as a result of efforts to analyse the specific phenomena in their settings.

The methods applied include empirical studies of how transport companies internationalize over a period. It starts with a description which can be seen as a first interpretation searching for the meaning of the internationalization process. This primary interpretation is then a base in this thesis for further interpretation of the process in a theoretically stricter and more formalized way called the analysis.

Even though interpretations are seen as conscious processes (Regnell, 1982) it is not to say that subconscious choices in the process have not been made. In reality a large part of the first interpretation is probably unconsciously chosen based on former experience and theoretical background.

Miller (1982 p 19) argues that in order to be able to explain an event historically, the actual and particular purpose must be linked to the non-accidental, the impersonal and objective. Cause, in general, means a ground or explaining a base, a means of explaining, a condition of, the mode of understanding (ibid p 23). Finally he states that "cause is the reason that places an event in some order." (Ibid p 27) As to teleological explanations involving the purpose of the act he claims that "the essence of a purposive act is not only that it proceeds from a general program but also that it requires the revision of the program in the interests of which it is undertaken." Specific elements in motive or action are both necessary in principle and accidental in their peculiarity" (Miller 1982, p 33).

In this thesis the contextualist approach has been used, which implies that interpretation of complex behaviour of a few organizations is more important than a survey involving a large number of organizations. The explanations of historical events are made from the peculiar, actual purposes of the event to non-accidental more objective and impersonal purposes via theoretical discussions.
1.5.2. Studies on organizational behaviour

Since this study focuses on behaviour of the transport companies in the process of internationalization it seems important to discuss to what extent it is possible to generalize about the behaviour of organizations.

Organizational behaviour is difficult to study since it is difficult to separate the organization, seen as a social collectivity, from the individual (Weick 1979). It is the individuals who act in the organization. Therefore studies on organizational behaviour contain both sociological as well as psychological aspects.

A way to cope with the term organizational behaviour, according to Weick, would be to build theories on particular ways that enduring individual dispositions are expressed in an organizational setting and about effects of this setting rather than to search for unique behaviour. First noting that behaviour can be viewed as responses in search of pretext for expression, he then re-formulates the question into "How are the processes of and contents of attention influenced by the conditions of task-based interdependency found in those settings we conventionally designate as organizations?"

Silverman & Jones (1976) discuss the individual interpretation of the organizational routines which are included in the social structure of the organization. In order to be selected as acceptable for their organization the individuals seem to interpret their discussions with other individuals internally or externally in the light of the rules and routines in the organization. This would indicate that it would be possible to talk about the consistent behaviour of an organization without specifying the individual.

An important point according to Weick (1979) is that organizational activities are social rather than solitary and that if these activities can be specified sufficiently a pattern will be allowed to exist. An organization interacts rather than acts. The pattern of interaction determines the outcome and not the personal qualities of the single individuals.

Weick uses three bases for describing the bulk of organizing activities. These are enactment, selection and retention, basically forming a sequence. These processes help an individual to form social cycles into sensible arrangements.

There may be many cycles within each process and there may even be a reversed direction of the arrows saying "how can I know what I think or feel until I see or hear what I am doing?". The question that Weick poses is "under what condition adaption precludes adaptability" (ibid p 135). Even though the enactment, selection and retention is made in a linear fashion it may be misleading. Since there are many parallel processes going on of various inputs and there is a
plurality of cycles, cause maps and enacted environment the complexity will intercept the flows of events. (Ibid p 143) This might be applicable to the interpretation of the organizational behaviour of the transport companies as well.

The contextualist approach recognizes, according to Pettigrew (1985), that the process is contained by structure as well as shaping the structure, whether it leads to preserving or changing it.

1.5.3. Case studies and choice of cases

In light of the fact that we are using a contextualist approach and that the process studied seems to involve large complexities, the case study would be the natural choice. Further, since the purpose is to describe a process over time a longitudinal study should be necessary.

A case study is a research strategy which focuses on understanding the dynamics present within single settings (Eisenhardt, 1989). A case study also involves numerous levels of analysis which makes it possible to understand the different interdependencies creating part of the complexities. Through this it might also be possible to generalize.

Multiple methods for data collection are also a necessity when a process spans as much as 30 - 50 years after which very few people are left who remember the changes.

The decision to make multiple case studies has also been influenced by the interest to describe the process as richly as possible in order to depict in the process repeated sets of actions over a period. The likelihood of finding such sets is higher when studying several cases. The possibility to generalize from the cases will also increase with multiple cases.

What sort of transport companies should be selected then as being most suitable for pursuing our enquiry?

The transport companies chosen for the study are large Groups concentrating mainly on goods transports. They also undertake many different transport company tasks, both domestically and internationally. Their basic international task has been focused on forwarding rather than operating and owning the means of transportation, even if this has changed very much over time. One of the main reasons for choosing transport companies in the freight forwarding business is that they seem to develop large geographical networks and they often utilize several different means of transportation. The role of the forwarder has also lately become increasingly important as combined transports and logistical services have expanded and the size and weight of many products have been decreasing, favouring consolidation. Lately, large multinational
transport companies have combined the roles of operators, owners and forwarders, which have a relevance for the way they internationalize.

I have selected three of the largest international freight transport companies of Sweden. These companies made up more than half of the Swedish market for international freight transports in 1990 partly as a result of their international growth over a period, partly due to large numbers of acquisitions in Sweden as well as abroad. The point in time when they started their internationalization process differs considerably between the three companies which helps to illustrate the impact of the differences in the environment for the three cases.

Since the process of internationalization will involve companies in other countries, the study will have to include some of these as well. These companies are brought into the picture not only as being part of the process of the focal company but also for the specific purpose of showing typical events or very important events in the process of internationalizing.

When trying to depict sets of action in the internationalization process it would also be of interest to look at the sets of action in the internationalization process of the foreign transport companies. Therefore seven of the events are also describing the international development of eight foreign transport companies in another environment. These companies are subsidiaries except for one which is an agent. However, five of the subsidiaries were acquired as international transport and forwarding companies and therefore have a history involving their own international development before the acquisition.

The analysis will then include a deeper and more formalized process of interpretation when the design and definitions are stricter in focusing on important changes in the process of internationalization and put into a model, taking different inter-dependencies into account. In this analysis model, new concepts will have to be developed from the theoretical background which then will focus on certain dimensions of the process seen as important in my interpretation. The analysis contains first a within-case analysis and then a cross-case analysis. It tries to recognize more impersonal and general patterns of actions out of the particular events in the description. The description as well as the analysis focus on organizational behaviour.

1.5.4. Data collection and sources of information
Data is collected through interviews as well as from secondary materials. Even though the case study per se is basically a qualitative study it often contains some quantitative descriptions.

The data in this case is based on a combination of interviews and secondary material. Lists of interviews are presented in the enclosure as well as the most important secondary material. The
interviews were semi-structured and were of a duration between 2-5 hours. Often there were several contacts with the persons interviewed.

The number of full interviews was thirty two in all, thirteen for ASG, eight for Bilspedition and eleven for Inter Forward. Then there were some ten more persons from the organizations who have played an important role in the collection of information on the companies (Appendix 1).

The interviews were with key informants who had experience and knowledge of the historical background as well as the present. The secondary material consists mostly of annual reports, written historical reviews of the company in question or parts of the company, internal pamphlets and magazines, protocols, etc. The external sources are basically of two kinds. The first kind is articles in newspapers and magazines, press-releases, advertisements, etc. The second kind is from the interviews containing questions about other companies in the business and from other persons involved in other ways like customers, members of the press, etc. Some of the material plays a more important role for the general longitudinal description while other material contributes more to the specific events.

The case descriptions of each company were sent out to a number of key persons in the companies concerned for revision and formal consent.

1.5.5. Validity and reliability

Multiple sources, multiple events and multiple cases have been used in order to increase validity and reliability of the study. As to the construct validity, seen as the ability of the study to describe what it is intended to, the multiple sources, the multiple events looking closer at certain changes and the revision of the key persons would increase this type of validity (Yin, 1989). In the case of the external validity, the extent to which the result of the study can be used for theoretical development, multiple cases but also the multiple events would increase this validity. Finally the reliability, the ability to get the same results of the study when repeated, will be enhanced by the multiple sources as well as the description of the process for data collection.

However what is equally important is that the cases are interpreted, formulated and presented by the researcher in a way that it gives the reader a possibility to understand and follow the reasoning in the study. This would lead to an increase in credibility, plausability and trustworthiness of the study (Glaser & Strauss, 1967). The perspective chosen is one of many that can be used on the same material.
1.6. The structure of the book

The book will be divided into four parts. The first is the background (chapter 1 and 2), which will set the frame of the study and introduce the reader to the world of transport companies i.e. information about important concepts, freight transport industry, etc. The second part involves a presentation of the theoretical base (chapter 3 and 4) that will be utilized both for creation of the operational tools to the analysis and as a framework for possible explanations to the process in the last part. This part ends by presenting an analytical model for the study. The third part contains the case studies description and analyses (chapter 5-9) and the third presents the theoretical results (chapter 10-13). The theoretical implications make up the main part which involves theoretical discussions and construction of a dynamic model of internationalization. Finally there is a small part discussing managerial implications and theoretical results.
2. Transports, transport systems and transport companies

Before we go into theoretical framework and the empirical studies we will give an overview of change in the context which is not directly part of the study but has a general impact on the development of international freight transports, transport systems and transport companies. A special interest is paid to the international trade and development of the manufacturing industry and the freight industry. Further we will take a closer look at how the distribution and transport systems are connected from a perspective of the manufacturer as well as the transport company. Finally we discuss different types of transport companies and their transport systems, which will help us in clarifying the subject of the study.

2.1. History and development

Historically, transport systems of one kind or another have existed for as long as there has been trading. The developments in freight transport systems have always played a significant role in economic activities in that they have been bridged gaps in time and physical space and as such influenced areal specialization, optimization of production units and extension of the market (White 1983). The existence of effective transport systems have made large scale manufacturing and mass marketing possible for many industries (Chandler 1990).

Changes in transport technology and location and patterns of transport systems have had an impact not only on the possibilities to trade but also the importance of the trade with different areas. Old gateways to countries and whole areas of industrial activity have declined in importance with the development of new transport systems. The impact of the new technology has varied depending on where the industries are located. The development of rail and long distance road haulage has reduced the importance of some harbours whilst upgrading others, growth of road haulage has caused changes to the railway network, etc. In other cases, the prerequisites for trading in new types of goods like perishables, fashion wear, etc., were met by the development of more advanced and faster ships and airplanes. However, some areas depend more on land transportation due to their geographical location while the development of sea and air transports are vital for others.

Rail and road transports throughout Europe have played a very important role for industrial development in landlocked countries such as Austria, Switzerland and Czechoslovakia, while for countries like U.K and Ireland, the development of faster, larger and more effective ships has made a larger impact on their industries.
In the early part of this century transports by sea, inland waterways and railways were clearly the main forms of carriage. As trains became technically more advanced, a gradual shift in emphasis to rail took place. Very little long-distance road transportation existed. Road transportation has since been taking over the railways' role and has increased its share of the freight transports in Europe. In 1988, road transportation carried over 70% of the volumes (tons) of total transports in Western European countries\(^1\), while sea and rail had decreased to 15% and 7% respectively (see Table 2.1).

On the other hand, sea transports still held the lead, in terms of tonnage, for Western European countries' international transports, with a share of 50% in 1988 while road transports only had 20%. The main reason, of course, is that many countries in the world can only be reached either by sea or by air. The share of road transports for freight is estimated to continue to grow unless there is government intervention on trucking in many European countries.

| Mill.-tons | Total International transports | Total transports (incl.domestic) ||
|----------------|--------------------------------|-----------------|--|----------------|
| 1970 | 1988 | % | 1988 | % |
| Rail | 230 | 11 | 211 | 7 | 765 | 7 |
| Road | 177 | 9 | 606 | 20 | 8491 | 73 |
| Sea | 1165 | 58 | 1523 | 50 | 1699 | 15 |
| Others\(^3\) | 450 | 22 | 678 | 23 | 627 | 5 |
| Total | 2022 | 100 | 3018 | 100 | 11,582 | 100 |

Table 2.1, Transports of Western-European countries - modes of transport


Road transportation has changed from having a share of 9% to 20% (tons) between 1970-1988. Behind this shift in volumes from rail to road transportation would lies a combination of factors, such as investments in roads, new technologies for trucks and trucking systems as well as the inflexibility and lack of capacity by the national railways. It would seem that these problems continue to exist even in 1992 despite the EC countries' declared intent to invest in and increase the flexibility of the railways\(^4\) and to reduce the expansion of road traffics on

---

\(^1\)Excluding Italy

\(^2\) Total transports of the same countries as for international transports but Norway, Sweden and Finland are excluded. Transit traffics excluded as in the case of the international figures

\(^3\) Out of which inland waterways was 431 mill tons and air 4,2 mill. tons of total international transports in 1988 but of total transports all of it is inland waterways

\(^4\) New strategies for European Freight Transport - 91, Conference arranged by TFK-VTI in Hamburg
account of its environmental effects. However, investments planned by the European railways\(^1\) in combined transports rail-road, in new railroad communication systems, etc., estimated at SEK 14 billion, will help freight transports.

The problem is how to finance these. Privatisation and becoming registered on the stock exchange are common solutions put forward.

The shift to road transportation has not resulted in any drastic decreases in volumes for other means of transport due to the growth in the total volumes of international transports (around 50% during the period). Only rail has experienced a slight reduction (-8%) in international tonnage between 1970-1988. Sea actually increased its volumes by over 30% during the period.

Even though we know that airfreight has increased very much during the period, airfreight’s total share (in tons) was still too small (under a promille) at this time to be registered separately. For Sweden the increase in exports by air (in tons) between 1976 and 1986 was more than 100% and air freight’s share of Swedish export in value was 2.8% in 1976, increasing to 6% in 1986 (Comén 1988).

There are advantages and disadvantages in a particular situation attaching to each mode of transport and since they partly overlap in suitability they can be both competing and complementary. Though all modes have been subject to technical development the pace has been faster for airfreight and slower for freight on railway.

However, some of the more important technical changes since the second world war have necessitated an application to more than one mode of transport in order to be effective. Examples of such technical changes are containerization, standardization of unit loads, new infrastructure for communication through computers and telefax. Combinations of rail - road, sea - road, rail - sea, road - air have grown in importance as a result of this and have facilitated integration of the different transport systems.

2.2. International trade and internationalization of manufacturing industry

The growth in international trade and internationalization of the manufacturing industry are perhaps the two most important factors for the development of international transports. The functions of the transport in its service to manufacturing industry are threefold: a) the assembly of raw materials b) the transfer of semifinished products between plants c) the distribution of finished products (White 1983). In a wider sense they are all to be regarded as parts of distribution systems for industrial production units.

\(^1\)Svensk Export Aktuellt nr 4 1992
A very important indicator of the development of international distributions systems is the growing volumes in international trade since the second world war. During the last decades the increase in world exports has been very high. Between 1970-89 it increased 2.5 times\(^1\). In Western Europe the growth has been even higher. This not only reflects the increasing trade between different countries of the world but also the on-going internationalization of the manufacturing industries.

An example of internationalization is the increase from 52% to 70% in the proportion of international sales recorded by large Swedish Groups from 1965 to 1978\(^2\). Towards the end of the 1980's this share has continued to increase.

The discrepancy between 2.5 times increase in the volume of trade of Western European countries and the much lower (50%) increase in tonnage in international transports during the almost corresponding period illustrates the reductions in weight and size of the units produced during the last decades e.g. computers, refrigerators, etc. The changes in the unit values of world trade during the same period of 3.5 - 4 times\(^3\) partly illustrates the same phenomena.

The growth in volumes, international competition in combination with the increased unit values, higher international interest rates, increased fuel costs, etc., brought the logistical costs into focus for the manufacturing companies in industrialized countries.

The logistical costs include warehousing, inventorying, handling, information systems, transports, etc (Ballou, 1987). In three large empirical studies\(^4\) during 1960-70's the logistical costs in percentage of sales were on average around 21% in the States but differed as between industries. In Sweden they were said to be even higher on average during the 1970's. The logistical costs in percentage of GNP during 1970-80 were estimated at somewhere between 17-18% for Sweden (Tarkowsky & Ihreståhl 1987). A similar figure in the United States was estimated at 15% during roughly the same period (Ballou, 1987).

In industrialized countries, as a result of the increasing logistical costs, industry is rationalizing by lowering inventory levels, reducing volumes in warehouses, creating greater efficiency in handling, developing new, faster and more effective information systems and better control, etc. When discussing transports the expression "just-in-time" (JIT) is often used, meaning the presentation of an item to a customer at the right time, in the right place and in the right

---

\(^1\) World Trade Statistics volumes - Total transports quantum index 1980 =100 from 1965 41-149 in 1989 and from 62-149 between 1970 - 1989 in volumes (derived from value data and unit value data base period weighted). For Western Europe (EEC and EFTA) the changes were in exports 57/56- 150 between 1970-89 and for imports from 60-149 during the same period.

\(^2\) Swedenborg, 1982. (From " De Svenska Storföretagen, 1985, IUI)

\(^3\) World Trade Statistics 1970-89

condition, using the right type of carrier and giving right information, etc., price and speed will be less in focus. An introduction of JIT will often result in an increase in the number of and a greater frequency of external transports. Since it is linked with extremely low inventory levels, the work-flow in the total distribution system requires to be carefully and comprehensively planned.

The creation of JIT (just-in-time) during the last decades seems to have been just what industry in Europe wanted. So much so, in fact, that a body of opposition is beginning to awaken in many European countries, since the increased frequency in road transports creates environmental problems. However, the increased international competition to be expected from the single European Market will probably fuse the interest of industry in reducing logistical costs. Some of the large international manufacturers, especially in high-tech (Philips, Rank Xerox, etc.) but also other multinational companies (Unilever, DSM, etc.) have continued to pursue this direction and have largely rid themselves of their transport departments and warehouses.

Accordingly, these industrial companies have come to rely heavily on the services of the transport companies which would seem to have created the need to work more closely with fewer transport companies.

This increase in international trade has been reliant on other very important trade-facilitating prerequisites, such as the changes in trade rules and regulations and decreased or eliminated customs duties, etc. Also in Europe, much of the customs clearance work can now be handled on-line directly with the Customs which has meant a sharp reduction in the time taken to clear a consignment. An important issue for EC has been to harmonize and deregulate the procedures and rules of trade within the Internal Market specifically but also towards other parts of the world.

The growth in trade and internationalization of industry have brought about internationalization of distribution systems and the transport companies have participated through the creation of these international transport systems. Further higher logistical costs and increasing interest for JIT have changed the demands on effective transport systems.

2.3. Freight transport industry
(see glossary of transport terminology appendix 2)

The growth in total transports, in combination with the demands for effective international transport systems, have increased the size and international activities of the transport companies over time. Many transport companies in Europe have become multinational or global as a result.
Shipping and road transport are dominating the volumes of international freight transports according to the trade statistics (see table 2.1.). As international road transports are controlled by freight forwarders one would expect to see forwarding companies along with shipping lines as dominating international freight transport companies. In the normal course, freight forwarders also play an important role for international air and rail freight since they utilize several means of transportation. However, since the UN international statistics on the largest transport companies in Europe does not separate passenger from freight the largest companies are, in fact, railways and airlines. (Among the first twenty transport companies, thirteen are from these two groups). When studying the types of activities one find that airlines¹ and railways perform a large variety of passenger activities while the shipping lines and forwarders have their variety in freight activities.

This is not to say that both railways and airlines might not be large as international freight transport companies but, statistically, their size should be heavily reduced. The railways do have large volumes of freight transports but, on the other hand, are restricted internationally.

Therefore in table 2.2, the largest international freight transport companies are listed excluding railways and airlines. (For the full list see appendix 2)

Large international forwarders being owned by the railways, like ASG owned by the Swedish Railway (SJ), Schenker owned by German Railways (DB), van Gend &Loos owned by Railways of Netherlands (NS), etc are registered separately in the 1988 list with the exception of Schenker which is added to the list. These mentioned companies have all been sold or registered on the stock exchange during the intervening 3-4 years due to economic problems of the national railways.

<table>
<thead>
<tr>
<th>(1988)</th>
<th>No²</th>
<th>(Country)</th>
<th>Type of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>P&amp;O Co</td>
<td>(5)</td>
<td>GB</td>
<td>Sea/ road etc</td>
</tr>
<tr>
<td>Danzas AG</td>
<td>(8)</td>
<td>CH</td>
<td>All types</td>
</tr>
<tr>
<td>Schenker³</td>
<td>W-G</td>
<td>All types</td>
<td></td>
</tr>
<tr>
<td>Billspedition</td>
<td>(12)</td>
<td>S</td>
<td>All types</td>
</tr>
<tr>
<td>Kühne &amp; Nagel⁴</td>
<td>(16)</td>
<td>CH</td>
<td>All types</td>
</tr>
<tr>
<td>NFC Plc</td>
<td>(18)</td>
<td>GB</td>
<td>All types</td>
</tr>
<tr>
<td>Nedlloyd</td>
<td>(20)</td>
<td>NL</td>
<td>Sea/ road etc</td>
</tr>
<tr>
<td>van Gend &amp; Loos</td>
<td>(22)</td>
<td>NL</td>
<td>All types</td>
</tr>
<tr>
<td>Panalpina AG</td>
<td>(24)</td>
<td>CH</td>
<td>All types</td>
</tr>
<tr>
<td>Lep Group Plc</td>
<td>(25)</td>
<td>GB</td>
<td>All types</td>
</tr>
</tbody>
</table>

¹ The share of freight in the total revenues was for all the large European airlines under 20% in 1986. (Comén, 1988)
² Ranking on the total list including railways and airlines ranked by sales
³ Figures for ranking of Schenker and ASG are from their Annual Reports
⁴ International
Hapag LLoyd (26) D Sea/ air etc
Swedcarrier (35) S All types
Kühne & Nagel AG (44) D All types
TDG Plc (46) GB All types
ASG S All types
SCAC (50) F All types

Table 2.2 Largest international freight transport companies in Europe (excl airlines and railways) - ranked by sales 1988

Source: U.N (United Nations) International Classification standard by ISIC (International Standard Industrial Classification) Industrial codes 71 - Transport and Storage

In the modified list (table 2.2) consisting of freight transport companies shipping lines and freight forwarders dominate. P&O, a shipping line, is the largest company with 6 bill. dollars in sales. The second, Danzas, and third, Schenker, are two large international freight forwarders. The registered profitability of all companies on the modified list is on average around 4-5% of sales.

When comparing this list to a similar list for 1977 presented by the Commerzbank in Germany (Transportnytt 5, 1979) and focusing on freight transport companies seven, of the 10 largest from 1988 were the same companies on both lists\(^1\). An important change though was that Bilspedition had moved from being the last to no 4 in size\(^2\). Both Scansped and ASG were larger than Bilspedition in 1977. Further, between 1977-1988 the 7 largest freight transport companies grew roughly 2.5 times which seems to have been faster than for the average passenger company. The total number of freight transport companies has increased (from 7 to 10) among the first 25 transport companies of the full list.

It is interesting to note that the number of employees in 1988 varied from 4000-56 000 and did not strictly follow the ranking of sales. This phenomenon reflects the degree to which extent the companies are owners of their facilities and means of transportation. Shipping lines like P&O (56 000) and Nedlloyd (22 000) are among the largest while a traditional forwarder like Danzas has much fewer (13 000) employees.

Moreover the variety of services offered by the freight transport companies is large. Their services include warehousing and storing, support services of different kinds, airfreight services, services incidental to transports etc. Reasons for this might be found in higher

\(^1\) These were in order Danzas, P&O, Schenker, K&N, Hapag LLoyd, Nedlloyd and Panalpina.

\(^2\) In a list of road-based freight companies in Europe ranked by sales from 1990 (Cooper, Browne & Peters, 1992, pp 198) Bilspedition was ranked as no 3, ASG no 11 and Inter Forward no 16
logistical costs and transport companies taking over some of the logistical activities from industry. The transport companies have added and developed new services in order to meet the demands of their customers. Most of the large freight transport groups have these services.

Many new types of rapidly growing companies have entered the market during the same period, the express and parcel companies, specialist companies, logistical service companies, etc. though only some of the newcomers are European-based. Especially the development of the new express companies or parcel companies such as TNT, UPS, Federal Express, DHL seems to have stressed the importance of integrated transports systems and time-guaranteed transports and pointed to the importance of effective information and communication systems. Some researchers (Browne, 1991) even say that this is the critical issue in the future development for all freight transport companies. Those lacking know-how in this area will not survive. The information systems and communication might be internal or external. Internal systems exist to a large extent for planning systems, operational systems, follow-up systems, etc., while external systems embracing customers, suppliers, agents, etc., demand more adaptions. If direct EDI (Electronic Data Interchange) would not be suitable, for efficiency’s sake or due to incompatibility of computer systems between companies, there are other possible ways like using electronic mail box systems and/or a switch board transferring messages electronically, etc. Many of the large transport companies develop their own electronic switch boards for EDI. Cross-border EDI would facilitate their international ambitions but is still in its infancy (Browne, 1991 pp 2).

Further the harmonisation and liberalisation of the rules and regulations for transports within Europe, expected to be fulfilled in 1993 or shortly thereafter, will probably underline the importance of information and communication systems and so change the possibilities for more effective transports as well as increase international competition between transport companies.

2.4. The manufacturing industry and the transport companies—two perspectives
In order to describe how changes of manufacturing companies have influences on and are influenced by transport companies, it seems necessary to understand how they are interconnected, starting from the dominating perspective of the manufacturers and then continuing to the perspective of the transport companies.

2.4.1. The manufacturing companies’ view-point.
The dominating picture in business administration and organizational literature is that transport companies are plainly regarded as facilitating agents in the distribution channel for the manufacturing industry.
As facilitating agents, the development of transport companies seem to be totally dependent on the manufacturing companies. The interdependence between the two industries is not taken into consideration when discussing the development of the manufacturing industry.

The distribution channel is seen as an inter-organizational system, consisting of sets of interdependent organizations, that is involved by an exchange of outputs in the process of making products or services available for consumption. (Stern & El Ansary 1977)

The organizations in the distribution channel normally include intermediaries like wholesalers, retailers, etc., which are part of the flows of activities mentioned above and help to fulfill the four basic utilities of form, time, place and possession. In the manufacturing perspective, the transport companies are connected through the transport systems contributing to time and place utilities.

The dyad relations between the companies in the distribution channel to the final consumer can be seen as a separate system, referred to here as the transfer system.

The number of transfer systems varies with the structure of the channel. Normally a distribution channel includes several different transfer systems (figure 2.3.)

Figure 2.3. Distribution channel, transfer systems and transport systems

A single transfer system is a part of the distribution system having a specified sender and receiver. A transfer system does not have to coincide with the transport system. Sometimes a transfer system includes more than one transport system, at other times it coincides or the transport systems include more than one transfer system (see figure 2.3.). This will vary depending on the single firms involved being senders and receivers in the transfer systems as well as the extent to which suitable transport systems exist.

No matter how the transfer and the transport systems are inter-connected when used, from the perspective of the manufacturer the systems are seen as a one-way system.
Basically the transport system, as far as the manufacturer is concerned, is a geographically extended system taking the products from one part to another in the distribution channel.

The nodes wherein the transport systems meet the industrial systems may differ depending on the conditions of the connecting systems. An example of this is the extent complementary services have been added, such as warehousing, packing, sorting, etc. These services have extended the role of transport companies into performing part of the "form utility" as well. In some cases they may even take over part of the role of the wholesaler, with the transport companies storing, sorting, packing, etc., and via their information systems having direct contact with the manufacturer.

Up to this point, the transport systems as well as the transport companies have been presented from the manufacturers' viewpoint, which means being a part of the distribution channel and its transfer systems.

2.4.2. The transport companies' viewpoint
Turning to the transport companies' viewpoint, the discussion will show a quite different situation.

The linkage between the manufacturing and the transport company is represented by the transport system and the difference in perspective is subsequently based on their different views of the transport system.

First, a transport system from the transport companies' point of view is normally a two-way or maybe a triangular system but not a one-way system and it covers not only one but several transfer systems in both directions. (See figure 2.4.). The number of transfer systems using one transport system might be just a few or run into hundreds, depending on the type of system.

Secondly, the transport systems are normally standardized and thereby utilized for goods from different manufacturing companies. The fact that it is possible to utilize the system for many different customers makes it possible for higher capacity utilization compared to a normal single customer system. The customized system, set up for a specific purpose and/or time limited, is still not so common. However over time, some large manufacturing groups have achieved the volumes to be transported to create a high level of efficiency. Creating special systems for these customers will often be made on a project basis by the transport company as a seller of know-how. On the other hand, it is in the best interests of the customers to increase effectiveness through combining the usage of transport resources in the means of transportation, terminals, etc, with the use of the existing transport systems and net of contacts.
From the perspective of the transport company, the transport system is not basically seen as a connection between two parties in the distribution channel. The transport system is rather a specific combination of resources being available at a certain place during a certain period of time that should be organized in an efficient way.

In most cases, the whole system is controlled by one or a few transport companies which, in their turn, have subcontractors who control limited parts of the system. Normally, the transport companies controlling the system are also marketing the transport system. Each transport system can be marketed as a separate service even though this is not always how it happens.

The resources can be made available either because of direct ownership or through leasing, renting or one of many different forms of agreement with subcontractors. Such agreements can be either long-term or short-term and can be close or at arms-length depending on what is standard and the total capacity within that specific branch. It is not uncommon for the most critical resources of the systems to be owned or in some other way guaranteed for a longer period of time by the controlling companies.

A similar situation would seem to apply from the customers' side, in that they are normally interested in making a long term agreement with the transport companies when a specific transport system is vital for their intake or output of goods. In other cases, the industrial companies buy the services of a specific transport system virtually off-the-shelf from the transport company, varying their choice from time to time. The increasingly important role played by the transport companies seems to have resulted in a greater number of agreements made between them and their customers.
The basic flows of activities in a transport system are the physical flow consisting of a technical flow and a flow of goods, the flow of communication/information, the flow of responsibility and the flow of payments. The flow of goods and information is directly related to the transfer system of the customers while the others are mostly related to the design of the specific transport system. The last two flows concern the division between the companies performing the different functions of the transport system. For the transport companies involved in the transport systems, the flows also have longer term and day to day aspects. While the longer term flows might concern the design of the systems in general, the day to day flows might concern the immediate information and quantities of goods moving in the transport system. To the extent that the resources in the flow of goods and information concern the design of the system they are transport system specific (system specific) rather than transfer specific.

Typical functions of transport companies of a long distance transport (A-B) in the flows of goods and information flows are shown in figure 2.5.

Figure 2.5. Typical flow of goods and of information for a long distance transport

The information flow is typically performed through documents, computers, phone, telefax etc and is to a large extent concerning the other flows. The flow of payment concerns the sharing of incomes and costs and the flow of responsibility concerns sharing the risks. Finally informations of the goods (size, consignments, type of goods etc) are needed not only for the technical system used for planning the continued transport but for the feeding information to next stage of the system.

In summary, the transport companies and the manufacturing companies are basically connected via transport systems which are organized and controlled by the transport companies. In that
function, the transport companies are facilitating agents in performing the time and place utilities through undertaking part of the physical flow in the channel of distribution. From the manufacturing companies’ side, the transport systems are a one-direction system between the market and the manufacturing company, for which the demands are set depending on the market situation. The subject of available transport capacity is rarely mentioned when discussing marketing strategies as it is generally assumed to be available. The transport companies, on the other hand, are looking at a two-way or triadic transport system serving a large number of industrial companies. The systems are often standardized and questions as to marketing and efficient use of resources (quantity of resources, alternative combinations and availability in time and place) are very important for their competitiveness.

2.5. Transport companies -definition and classification

The transport company is an organization which organizes and controls a transport system, systems or part of transport system/s without owning the goods transported. A transport system normally consists of several inter-dependent transport companies fulfilling different functions in the system. The companies are often specialized in specific functions.

A classical categorization of transport companies in international transport systems is into a) forwarders/ brokers, that prepare documentation for export and import (like forwarders and brokers), b) owners of the means of transportation/equipment/facilities, and c) operators of the transports/ freight carriers.(see figure 2.6.)

![Figure 2.6. Three basic categories of a transport company](image)

Basically these three categories cover the existing types of transport companies but they also include companies that would not be called transport companies according to the definition above. These companies might indirectly be part of the transport system but they do not organize or control any part of that system. Examples of such non-transport companies are ship
owners whose interest is purely financial, sub-contractors like companies leasing transport equipment, warehousing specialists, etc. Formerly, it was often taken for granted that the operator was also the owner of the means of transportation, the terminals, etc. This is not necessarily the case any longer. Similarly, in the past the traditional forwarder or broker did not necessarily own facilities, equipment, etc. These traditional stereotypes have been changing. New mixes of these categories have evolved. Reasons for this can be found in changes in laws and regulations, technological development, changes in customer demands, etc. In many instances, the companies have developed partly along all three lines, combining being a forwarder, an operator and an owner of at least certain means of transportation. This has resulted in the development of some very large transport companies.

The services performed by the transport companies can be separated in many different ways. A traditional way has been to divide the services of the transport companies by dimensions of consignment and means of transportation used. The combination of the size of consignment and the basic technologies create specific types of transport systems which are shown in figure 2.7. The figure also shows the typical way that these transport systems were related to certain transport companies.

![Figure 2.7. The traditional way of specifying transport systems and classifying transport companies](image)

Depending on the means of transportation utilized some transport companies are more suitable for certain types of goods and specialized in transport systems handling these volumes like railway, shipping lines, airlines, etc. Forwarders which often use different means of transportation have traditionally specialized in consolidation. As the unit value has increased and the size decreased, consolidation and packages have become more important to the
advantage of the forwarder. The development of unit loads has further increased their field of business. Basically the local transports are performed by truck while the long distance transports can be performed by any mode and type of transportation (sea, air, truck, rail) and any equipment can be utilized (trailers, containers, flats, etc).

In normal circumstances, the smaller the size of the individual consignments the greater the number of customers per transport system.

However, the decrease in size of consignments and the stronger demands on speed, timing and frequency in order to create a more effective distribution of goods, have led to the development of new types of transport services. These are time-based transports, special transports and customized logistical transports. Time-based transports are standardized transports with a time guarantee which are adapted to the new demands of JIT (just-in-time) and more customer integrated. Special transports stem from the development of new technologies utilized for transports of certain types of goods such as hanging garments, bulk, furniture transports, etc. These added services have been at the expense of general transports. The customized logistical transport services are those designed exclusively for a specific customer which include specialized combinations of transport services and logistical services.

The four basic types of transports services (general, special, time-based and customized logistical transports) have caused a development of new transport companies which are less focused on specific means of transportation. Combined transports have been much more common for long distance transports based on standardized equipment like truck-rail, truck-ship or truck-air. Classifying the transport companies in a more modern manner, taking the new service companies into consideration would be possible to do according to their different problem-solving abilities. Figure 2.8 is adapted from Håkansson & Johanson (1982). The general ability reflects the degree to which the transport companies producing standardized services have a low or high standard in their services. The adaption ability on the other hand reflects the ability to adapt to the needs of specific customers.
The abilities of problem solving - a classification of transport companies

<table>
<thead>
<tr>
<th>General ability</th>
<th>Highly integrated companies (time-based transp)</th>
<th>Specialized logistical service companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>low</td>
<td>General transport companies</td>
<td>Special transport companies (furniture, hanging garment etc)</td>
</tr>
<tr>
<td>low</td>
<td>high</td>
<td>Adaption ability</td>
</tr>
</tbody>
</table>

Figure 2.8. Modern classification of transport companies based on abilities of problem solving (adapted from Häkansson & Johanson, 1982)

The general transport companies can be exemplified by many of the traditional forwarders, railway, shipping lines, etc and highly integrated companies by the express companies such as TNT, UPS. Special transport companies are of many categories, specialized in taking care of a certain type of goods and customers, which lead to a much higher integration with these customers. The last category is perhaps the least common type, which is specialized in performing complex logistical services for specific customers.

In line with these new services and demands, the transport companies’ operational systems have also been changed in order to be more efficient. Different types, like central terminal systems, several terminal systems with direct traffics (network system), hub and spoke systems, central route systems or a mixture of these, have been used (Ljungström, 1986 p. 58). Some have become more frequently used for certain types of goods or sizes of consignments. Central terminal systems are more suitable for many small sized consignments since they concentrate a large number of local traffics (see glossary) to a few large more distant transports. Therefore they are used by IPEC, TNT, Federal Express, etc., specialized in packages, express goods, etc. Network systems, which are the most common in Europe, e.g. used by Kühne & Nagel, Calberson, Billspedition Domestic, etc, are built on local distribution and collection and then long distance traffics between terminals. The number of traffics will be very high in this case which will lead to low capacity utilization. In the “hub and spoke system” (satellite system) the volumes get much larger, leading to higher capacity utilization.
The development of services has resulted in the development of new types of transport companies as well as a reorganization of the existing traditional ones into these areas. Therefore the spread of types of transport companies has increased since they have developed into many different areas and/or acquired transport companies representing other areas. Forwarding companies, shipping lines, etc., often cover the whole spectrum of services shown in figure 2.8.

The interest in this thesis is centred on companies going through the process of growing into large international transport companies developing into all basic categories of services. They are all operators and forwarders in combination with being owners of some of the terminals and equipment and part of the means of transportation.
Part II Theoretical framework

3. Three theoretical perspectives

With the characteristics and roles of the transport companies before us, we proceed now to the existing research and theories. On a more general level the intention of the chapter is to gain a better understanding of the behaviour of firms in a growth process such as internationalizing and how this behaviour is assumed to vary in different contextual settings. However, two specific purposes govern the choice of existing research and theories. Firstly based on this review, we want to create a model of analysis that can be applied to the internationalization of transport companies. Secondly, we want to understand what could be possible driving forces to different patterns of internationalizing. While the model of analysis will used for structuring the actual behaviour, the driving forces will facilitate the understanding the observed behaviour and as such will not be discussed until chapter 11.

Since the network as well as the distribution research spring to a larger extent from empirical studies rather than originating from microeconomic models, these research fields will include more of empirical research. The empirical parts will be especially helpful in understanding the problems in connection with the creation of a useful model for the structuring of organizational behaviour. The focus of the research review, both theoretically and empirically, will be on changes in systems and on firms and their interdependence with other firms. We start, therefore, with the network approach where interdependence between firms is a basic assumption and changes are constantly going on within and between companies. As such, the network approach plays a predominant role in the creation of a model of analysis. Distribution research, being next, contributes specifically to the understanding of distribution systems and changes in firms being a part of these systems, which is important for creating the model of analysis. Furthermore, both network and distribution theories contribute to driving forces for changes which will be applied to the empirical findings. Finally, internationalization theories will have high importance when looking for possible driving forces of explaining how the internationalization process changes as well as for some of the basic concepts of the model of analysis.

3.1. Network approach

Apart from the reason, mentioned earlier, of contributing to the understanding of changes in the behaviour of the transport companies, the network approach simplifies the combining of micro and macro perspectives through seeing the same organization in a limited and then a larger setting. In these settings the organization is assumed to be interacting with other organizations in the network and therefore the context will naturally be included in the study.
Even though the term “network” has been used in many research disciplines like sociology, ecology, communication, etc., the application of the network approach to industrial systems is more recent. Being a young research approach, partly originating from other research fields, it has produced a variety of concepts and definitions. Therefore we shall start by defining what we mean by the concepts used. This will be followed by discussions concerning interdependence and embeddedness and then concerning dynamics in networks. The part on dynamics will be of particular importance in understanding the processes that the transport companies have gone through in the creation of their international networks. The section will end with a short discussion on strategic action in networks and limitations of the network approach.

**Definitions and concepts**

In general terms, a network is a set of connected exchange relationships between actors. A definition by Cook (1982, p 180), derived from sociology is "exchange relations are defined as connected if exchange in one relation is contingent upon exchange in the other relation". This definition points to the interdependence or interconnectedness between relations. Since the focus here is on industrial networks, the exchange is assumed to include an economic element and it takes place in the relationships of connected organizations (Easton, 1992; Mattsson, 1987).

Easton (1992) comments that the "Industrial network approach differs from other network approaches in terms of its scope. It is concerned to understand the totality of relationships among firms engaged in production, distribution and the use of goods and services in what might best be described as an industrial system." (ibid pp 3)

However, viewing an industrial network of relationships as an industrial system means restricting the relations of the organizations in the network to those concerning industrial systems. In many cases, the discussion will even be limited to a specific production system.

To overcome this limitation, Johanson & Mattsson (1992) have constructed a model that separates the industrial production systems from those of the industrial networks of organizations. It is the separation of the organization/actor, and their respective positions, from the resources and activities which will facilitate the understanding of organizations in the network and their ability to form part of different production systems and still be connected. The actors, at network level, control and coordinate the resources at the production system level via the governance structure. Causal relations are assumed to exist between the two levels (ibid). Since the two levels interact, changes at one level will induce changes at the other.
Further, an industrial network of organizations might be analyzed from three different perspectives, i.e. that of the single organization, the relationship and the total network.

When focusing on a single organization/actor the position is important. The concept of position shows how an organization "fits" into an industrial system (Henders, 1992). It is often used in order to describe the role an organization plays vis-a-vis other organizations to which it is related directly or indirectly in the network (Mattsson, 1984). A distinction is made between limited position and extended position (Johanson & Mattsson, 1992), where the limited position purely relates to the network level and the extended position also refers to the role of the single organization/actor in the production system. The position in relation to other firms is relevant for the constraints and opportunities of the single organization/actor in the network and therefore also for their strategies.

In the (industrial) network approach the organizations are assumed to be heterogeneous in their resources and activities. Therefore in the exchange relationships the resources are mostly complementary. Furthermore the type and character of the relationships play a significant role for the organizations. Each relationship is assumed to have different strength and content. (Mattsson, 1985). Strength can be described in different ways depending on purpose. A common way when applying more quantitative analysis is in terms of frequency, intensity and duration (Mitchell, 1969; Lincoln, 1982). Another way, which seems to measure the sum of these, is in terms of the capacity to withstand a disruptive force (Easton & Arujo, 1992). Content is often described in terms of social, legal, knowledge based, technical- and time-based bonds between firms (Hammarkvist et al, 1982).

Through these interdependent relationships the organization obtains access to resources controlled by other organizations in the network. However the coordination of these relationships is often in reality so complex that the parties have to develop close relationships. Empirical studies using the interaction approach have shown that these relationships are typically of a long lasting nature. Due to the efforts put into these relationships in terms of creation, maintenance and development they are not easily broken (Håkansson, 1982).

Even though an industrial network is based to a large extent on complementarity and long term relationships, there are conflicts within the relationships. Both competition and cooperation between actors are both important parts of a network (Mattsson, 1984). Further, stability and change will play a significant role in the development in relations and in the network.

Finally the perspective of the total network consists of organizations and relations. Fombrun (1982) defines the total network as an aggregate of overlapping sets of networks with different transactional content. Further it can be defined in terms of the interdependencies between
positions taken by the organizations in the network (Mattsson, 1987) and then described as loosely or tightly structured depending on the degree of inter-dependencies that exist.

There are often clusters of organizations in the total network, however, which show a higher interdependency. These can be called clusters, nets (Mattsson, 1985) or sub-networks (Hägg & Johanson, 1982).

Such nets or sub-networks show similarities to earlier developed, more limited concepts in inter-organizational research of organizational set, action set (Aldrich and Whetten, 1981) or trans-organizational systems (Cummings, 1984). The organizational set, based on classical role set, is limited to direct relations of a focal company. An action set is based on a number of directly related organizations that have joined together for a specific purpose. The development of the organization set and action set are important in organization theory because they point out the arbitrariness of organizational boundaries.

However, arbitrary boundary setting is in reality applicable not only to an organization but to an even greater extent to networks consisting of inter-organizational relations. On a general theoretical level, the total network might continue almost endlessly into new relations. A vast network would also be under constant change which would make the boundaries fluent. A specific industrial system might have a certain industrial or technical logic though, which could be a base for delimiting the network. There is in reality, however, no single real objective way of delimiting a network (Mattsson 1987). Therefore the boundary setting will be dependent on the subject of research and the perspective of the researcher.

Summarizing, we have described some basic concepts for the network approach and present the three different levels of aggregation of organizations i.e. networks, relationships and clusters/nets and their characteristics. As we shall see, both the concepts and the separation into different levels of analysis will be extremely useful for the construction of our model of analysis. Finally, the problems of boundary setting when making an empirical study will be discussed.

**Interdependence - trust and connectedness**

Resource dependence theory has received a great deal of attention in inter-organizational theory as a base for explanation of why companies interact and for the increasing interdependence between organizations. This theory claims that in order to understand an organization you must understand the context of that organization.

Pfeffer & Salancik (1978) argue that a key to survival, in a situation of scarcity of resources and interconnectedness of organizations, is the ability to acquire and maintain resources.
Coordination through inter-firm linkages (cooptation, trade association, cartels, joint ventures, social norms, etc.) help to stabilize the organization’s exchanges with its environment and to reduce uncertainty of the context. However these linkages not only create certain advantages of reduced uncertainty but also further increase the level of interdependence to the environment.

Coordination is equally important for firms in networks since it is based on interaction and interdependence between organizations. Cummings (1984) indicates that there is an inherent change towards higher interdependence in networks through the process of coordination, in that coordination is made for increased effectiveness. As the level of effort increases it affects the level of coordination. The argument is that the level of effort (degree of intensity) and coordination of efforts are among the most important factors influencing effectiveness of a limited net, such as an action set, but also that the level of effort is positively connected to coordination of efforts. More specifically, Cummings states that the degree of intensity in interaction (the level of effort) is positively related to coordination of efforts such as formal agreements, centralized decision making and structural agreements like standardization and formalization. The strength of a relationship is positively related to the degree of coordination.

However, interconnectedness in networks or between networks seems to both have a positive and a negative side. It creates interdependence between organizations which might create a higher achievement but at the cost of a higher level of uncertainty and a more unstable environment for the organizations.

Interconnectedness between organizations might lead to uncertainty but does not necessarily lead to disorder involving conflicts, as many economists claim (Granovetter, 1985). Further the degree to which stability and trust, as well as generalized standards for behaviour, are developed in a network will be more important for the level of uncertainty and any pressure for change than disorder due to opportunism and conflict (Ibid).

In the relationships of an industrial network both stability and trust play an important role in coping with the uncertainly of interconnectedness. Trust is the base for the social exchange in the relationships. Trust in a relationship is seen as "one party’s belief that its need will be fulfilled in the future by actions undertaken by the other party" (Anderson & Weitz, 1986). Johanson & Mattsson (1992) have formulated that "Through the exchange relationships the actors learn about each other and develop trust." Furthermore, this is the base for long term relationships.

There are benefits in building up long term social relationships in that it gives cheaper, better, richer and more accurate information about other organizations forming part of the network than merely relying on institutional arrangements or on the fact that firms would not willingly risk damage to their reputation (Granovetter, 1985).
However, the degree to which trust and stability are present in a relationship is often dependent not only on the single relationship but also on its connectedness to other relations in the network. The expression of positive and negative connectedness in relations reflects complementarity and competition between relations. Relations are positively connected, to the extent that exchange in one relation increases the likelihood of exchange in another relation, and negatively connected when the likelihood is a decrease of exchange in another relation (Emerson, 1972; Cook, 1982). Positively connected systems are exemplified by distribution systems or vertically integrated markets (Stern & El Ansary, 1972) and negatively connected networks by competitive economic market structures (Emerson & Cook, 1978).

The distinction between a negative and positive connection is seen as important for unifying theories on competitive processes with exchange processes based on complementarities. For example in the framework of Cook (1982), negatively connected exchange relations represent competition over valued resources within an exchange network.

By adherence to this, in an industrial network there would be a number of desirable alternatives for coordination with a high value of exchange and another number of possible alternatives due to the resource situation for each organization. These would also be in constant change due to actions of other organizations, in order to change the balance of power in the network, which in turn shows how the embeddedness of organizations in the network context changes interconnectedness over time (Cook, 1982).

In summary, we have discussed interconnectedness and interdependence between organizations, which is reflected in the embeddedness in networks of organizations. Seeing organizations as embedded in the networks of organizations seems to be vital for the understanding of how transport companies will develop their international networks. A necessity when coping with uncertainty of interconnectedness is coordination between organizations which in turn seems to increase the interdependence further. Important driving forces for coordinating within and between relationships are trust and stability and the degree to which companies are positively or negatively connected in the network. These concepts will play a vital role in the theoretical discussions later on.

**Dynamics in network**

Due to the inter-dependencies in a network, changes of positions, relations and nets will have effects on the total network. Changes in positions of single firms will be discussed in the section dealing with strategies in networks.
On a relational level, much of the changing takes place in ongoing relations between organizations (Håkansson 1987). In this case it would be a question of maintaining, developing and strengthening a relation over time. Other relational changes taking place are the establishment of new relations and leaving relationships. The relation, as such, may even go through its own life-cycle over time. Dwyer, Schurr & Oh (1987) and Liljegren (1988) have presented two similar models on a relationship life cycle. The model of Dwyer et al shows five phases. The first two phases concern the formation of the relation (awareness and exploration), the next two phases the development of an established relation (expansion and commitment) and finally dissolution of the relation. In the formation process the awareness phase is just a recognition that a party is a feasible exchange partner and the exploration phase refers to the search and trial process. The relation can still be very fragile in this stage.

The first establishment phase, expansion, refers to a continual increase in benefits and increasing interdependence for the partners. The next phase, commitment, is based on a pledge for continuity of and parties are engaged in maintaining the relationship. The fifth phase, dissolution, is one of withdrawal or disengagement involving emotional and physical stress. It seems mostly to be initiated unilaterally.

Liljegren (1988) constructed a four phased model based on an empirical study of the evolution of a relationship over a period of 10-15 years which to a large extent supported the model of Dwyer, Schurr & Oh. He called the phases "building up", "development" and "maintenance" and the phase of "uncertainty". Liljegren found that the stage of uncertainty did not necessarily develop into dissolution but could equally well be developed into a stage of uncertainty leading to a renewal from the building up stage again.

Underlying this life-cycle, however, might not only be changes in the focal relationship but also effects of changes in other relations in the network. Gadde & Mattsson (1987) argued that not only the direct but also the indirect relations would have to be taken into account in order to understand changes going on within the relationship. In Liljegren (1988) such effects were shown.

On a general level, applied basically to populations and communities, Fombrun (1986) argues there are two basic types of evolutionary changes in networks, convergence and contradiction/divergence.

Convergence and divergence is also used by Lundgren (1991) in his thesis on “Technological Innovation and Industrial Evolution”. He found three network stages as the technology developed over time. These were genesis- identification, coalescence-legitimation and dissemination- adaption. Genesis was characterized by ascendency of interrelated clusters of innovations in which the actors were separated but gradually developing relations and creating a network. In coalescence the development converged towards a core technology leading to a tightly-knit network. Dissemination is the establishment of user-producer interaction leading to
breaking the existing tightly-knit network structure which would be more of diverging from existing technology and converging into pre-existing technologies.

The phases of coalescence and dissemination are seen as the two dominating ways of network evolution by Håkansson & Lundgren (1992). They also discuss different patterns of changes which might lead to network evolution. These are the three dichotomies of generalization-specialization, structuring-heterogenization and hierarchization-extrication.

Mattsson (1987b) discusses network changes in terms of expansion or contraction of the network size, taking the degree of homogeneity, hierarchization, structuredness, and exclusiveness into consideration.

According to Astley & Fombrun (1983) there are three different forms of economic interdependencies taking place over time, leading to structural evolution of industries, which can be seen as patterns of change in networks. These are horizontal, vertical and diagonal interdependence. The first two take place within a single functional chain, a set of loosely coupled firms performing a specific social function and being symbiotically related, while diagonal interdependence takes place between functional chains. The horizontal interdependence is exemplified by relationships between competitors within cartels, trade associations, etc., while vertical interdependence is exemplified by complementary relations from suppliers and buyers in value added chains. The diagonal interdependence is seen as an indirect interrelationship between different industrial sectors or functional chains. This interdependence can take both the form of diagonal competition as well as a diagonal symbiosis. "Diagonal interdependence reflects convergence of two functional chains, which come to act either as substitutes or as complements for each other." (Ibid).

Diagonal relationships are seen as the most important for organizations when coping with a turbulent situation leading to more interconnectedness in the environment (Emery & Trist, 1965). Astley & Fombrun (1983) state that the same bilateral structures ranging from agreement and contracts to joint ventures and mergers are also used by organizations of functional chains to cope with interdependence as they converge. These diagonal linkages between functional systems or chains will fuse into a business cluster which together help to serve a major social function. Diagonal interdependence spreads through multiple intermediaries and elaborate networks of relationships are needed to coordinate activity. Business clusters are seen as basic sub-systems of such networks joined together by linking pin organizations (Aldrich & Whetten, 1981) whose function is to integrate network activities by providing channels for communication and general services for facilitating interaction.

Astley & Fombrun (1983) are using the works of Chandler (1962, 1977) to exemplify how companies grow first by horizontal penetration, then by vertical integration and then finally by
diagonal diversification. In a historical analysis made by Scherer (1980), a similar development was found for small family businesses and for waves of mergers. This development is combined with changes in the internal firm structures, from unifunctional to integrated multi-unit and then diversified multi-divisional conglomerates, as well as with inter-organizational structures like cartels, joint ventures, clusters/ nets etc.

The dynamics of organizations in nets or network seem to have certain similarities with those of populations and communities in ecology in that there are many unities consisting of homogeneous/heterogeneous resources performing similar/different functions consisting of interdependent organizations of cooperating and conflicting interests as expressed by Astley (1985), Fombrun (1986), Astley & Fombrun (1983).

Astley (1985) in his article comparing population and community ecology points out that population ecology limits the investigation to evolutionary change while community ecology focuses on the rise and fall of populations. Population ecology emphasizes the stability and the homogenizing of organizations where community ecology simultaneously tries to explain homogeneity and heterogeneity between organizations.

On population levels, Astley refers to "phyletic gradualism", the natural selection that progressively transforms the population through a gradual one-by-one selection and "the bandwagon effect", exemplified by what DiMaggio & Powell (1983) have called the mimetic processes, which encourages organizations to copy each other. In this way homogeneity increases and variety in the population decreases.

Technologies of different populations are then linked into larger complexes. These interdependencies between technologies fuse those organizations into functionally integrated systems or organizational communities.

"Organizational communities are functionally integrated systems of interacting populations: they are emergent entities that, over time, gain a certain degree of autonomy from their environments." (Astley, 1985, pp 234).

Such autonomy occurs as the populations, being part of the community, begin to function by exchanging resources with each other, rather than directly with their environment. In this way, they shut themselves off from their environment. By locking their members into a given set of relationships, communities approximate closed systems as the environmental space is filled. As the community reaches closure stage it is assumed that no new population can be added without disturbing the functional integration of the system. The complexity developed when the system has reached the closure stage leads to stability but also provides an inherent possibility of collapse. Such a community experiences disturbances over a certain threshold level, some may
disintegrate because of the domino effect while others go into periodic waves of instability and then extended states of equilibrium. Severe disturbances upset the equilibrium and destroys the community and recovery of such a state of equilibrium occurs through succession i.e. change in both competition and symbiosis. As a community is destroyed new environmental space is created. (Astley, 1985)

These changes in population level as well as community level take place in networks as well. The patterns of changes presented by Astley seem to sequentially combine the patterns of networks such as exclusiveness, heterogeneity, homogeneity, structuredness.

In the reasoning in this section, changes have been described on a more general level without really taking into account the driving forces behind them. There are some ideas of more general driving forces for change on network level, like changes in technology or quantitative or qualitative imbalances (Mattsson 1987a). Quantitative imbalances are between capacities of different types while qualitative imbalances are referred to as missing complementary activities in technological change processes.

In summary, this section about dynamics showing different ways of change of relationships and networks is of vital importance for development of the model of analysis. As far as networks are concerned, not only were changes mentioned such as expansion, contraction, changes in inter-dependencies, converging, diverging, etc., but also patterns of developments over time that have taken place through these changes, such as a movement towards a closure stage, combinations of inter-dependencies, etc. These ways are all of importance for understanding of changes and patterns of changes going on in networks. Finally, quantitative and qualitative imbalances were mentioned as possible driving forces for changes on relational and network levels.

*Strategies in networks*

Strategies in the network can be formulated for a single organization and sometimes for a dyad or a cluster/net but never for a total network. Instead it is assumed that there is no master plan for the total network since the organizations are too interdependent, the activities too numerous and resources too diverse (Hägg & Johanson, 1982).

In research on industrial networks, the strategies of single organizations would be connected to strategic actions taken from a specific position which is defined in terms of network properties (see p.24). Strategic actions are seen as efforts made by actors to influence their position in network/s the intention being to increase effectiveness and to create a base for future development (Johanson & Mattsson, 1992). The effectiveness of an organization is defined as the ability of an organization to attract and gain control over the necessary resources. It is seen
as an external standard applied to the output or to the activities of an organization while efficiency is an internal standard of organizational performance. These two are interdependent standards (Pfeffer & Salancik, 1978).

Strategic action according to Johanson & Mattsson (1992) is based on the firm's position, its resources and the actor's "network theory". The "network theory" means the subjective intention and interpretation of the network by the actor. When influencing other actors through breaking, establishing, preserving or changing the character of existing relationships, etc., one important way might be to change other actors’ perceptions of the connections between relationships i.e influencing their "network theories". This reasoning applies not only to single firm strategies but also to relational strategies.

Granovetter (1973) analysed the importance of weak ties for the diffusion of influence and information, etc. for an individual actor in an effort to link the micro and macro levels in a network. He came to the conclusion that the weak ties being bridges to other parts of the network are seen as indispensable for individual opportunity and integration into communities. Strong ties, on the other hand, defined as a function of time, intimacy (mutual confidence), intensity and reciprocal services, lead to fragmentation into small groups (Granovetter, 1973). The possibilities for information and change would increase depending on to what extent the number of weak ties form bridges to other parts of the network. In an industrial network indirect relations are often assumed to be weak ties as a result of their distance and thereby lower impact. Strategies based on this reasoning have been used by many researchers of networks (Knoke & Kuklinski, 1983; Mattsson 1987b).

Drawing from the Morecambe Gasfield studies (Easton & Smith 1984), Laage-Hellman & Smith (1992) have used bridging as one of five ways for transformation of small groups. These are bypaths, combination, bridge, displacement and separation (elaboration and blocking). Bypaths are described as changing a relation from indirect to direct and in so doing, by-passing an existing direct relation, while combination is described in terms of joint venturing or creating alliances for keeping others out. Bridging is using a non-member of the group to influence one of the members. This is in a slightly different usage to that of Granovetter (1973) where bridging was a way to reach other nets or networks and to create change but did not say much about the purpose of the change. The two last types of transformations are displacement and separation where displacement includes interruption or severing of a dyadic relationship by a third party. Separation is when a direct relation is changed to an indirect or when the member of a group establishes an indirect relation to a non-group member rather than a direct relation to a group member. The changes here as well as in the Granovetter (Ibid) example are to a large extent taking place through exchange with non-members of the small group or net.
Cummings (1984), discussing performance strategies for smaller action sets, concentrates on internal strategies for the whole group in order to reach common desirable outcomes. He makes the assumption that these performance strategies are primarily affected by performance norms and, if these are not agreed upon, presents four different ways to develop shared norms. These are direction setting, diagnosis, frame-breaking collective definitions and changing networks. The first three involve changing the base of the existing values either legitimating or clarifying existing norms through learning or internal discussions and perhaps creating new common values. The last strategy involves changes in the relationships among the participants in the net. Cumming (1984) comments upon the fact that the degree to which organizations are loosely or tightly connected affects the possibilities for change in the norms. Tighter coupled networks are assumed to be more difficult to change than loosely coupled ones. Boje (1982) proposed that modifying power structures (through campaigns, pressure tactics, coercion, etc) might change strategic coupling within the network.

Cook (1982) also discusses the changes in power structures in the smaller network, in terms of the possibilities for powerful players to maintain their power advantages and the processes by which the less powerful players can gain power. According to her, there are two types of power-balancing mechanisms that apply to a network, network extension and network consolidation. Network extension is an increase in the number of exchange alternatives through the creation of new relations or the addition of new members while network consolidation is a decrease in the number of exchange alternatives either by a reduction in members or by collective action. One of the conclusions was that coalitions of the less powerful players in a network occurred frequently under conditions of power imbalance. These strategies do not limit changes to the existing net but include adding new relations to the group or a decrease in the number of members in the group.

In summary, strategies formulated for the single actor, the relationship or the small group were discussed. The single actor strategies basically concern the changing of its position in the network. The strategies of nets/clusters, actions sets, etc., are changes, both within the group and between groups, through changes in relationships. The possibilities to change are a result of many things, however, and among these are the structure of the network and the existing position of the single actor, dyad or small group in the total network. Strategies can be seen as important driving forces for changes in network positions of actors or nets of actors and will as such be discussed in the theoretical discussions.

Limitations of the existing research into the network approach

As industrial network theory is a rather new field of research, there are opportunities rather than limitations in the theory since so much is left to do. As in most other fields of organizational research much of the existing study has been confined to the manufacturing industries.
Network theory is based on a different philosophy than the traditional market theories. It assumes that companies are less autonomous, that they are embedded in their context and that organizations, both in cooperation and conflict, are solving many different problems together. Yet we know very little of how networks are formed and how they continue to change over time. Also changes, not just between two parties but over a larger net or in a whole network, are in need of closer study. "There is an urgent need to obtain descriptions of various industrial networks over time in order to categorize them and try to understand the way they operate in terms of reaction patterns, propensity to change and so on" (Axelsson, 1992 p 247). Not only is this needed from a more general point of view but also from a focal company's point of view.

Since the interdependence would appear to be important for organizations (Pfeffer & Salancik, 1978; Johanson & Mattsson, 1984) it seems that it would be possible to apply the network thinking to many other areas and contribute to new ways of understanding structures and changes. There have been attempts to apply this kind of thinking theoretically to the internationalization of companies (Johanson & Mattsson, 1984) but to date, there have been only a few scattered empirical studies (Forsgren, 1985, 1990). This thesis, by applying the network approach to transport companies and the way they change in their interdependencies over time, aims at contributing to a further understanding of a process like internationalization.

3.2 Distribution

Purpose of this section
The purpose of including the field of distribution is to understand the behaviour of the transport companies, within the framework of the distribution systems of which transport systems are part.

There are certain differences between transport systems and distribution systems that might be of importance when comparing the role of transport companies to that of intermediaries in a distribution system. The reversibility in the transport system leads to a greater interdependence between the organizations in the system. Since they do not take ownership of the goods, transport companies probably give higher priority to the creation of effective transport system rather than the goods per se. These differences will have to be kept in mind when scanning existing distribution research for our purposes in this thesis.

The difference in the theoretical perspectives between transport companies and manufacturing companies (discussed in chapter 2) shows that neither of them includes the other directly in their system. The transport systems controlled by transport companies do not include the
"trading organizations" (Breyer, 1950) in the distribution channel, i.e. the owners of the goods transported. This is also in line with the tradition in the literature on distribution. Transport companies are not generally seen as being directly involved in the distribution channels. Seeing transport companies only as facilitating agencies (Revzan, 1961; Stern & El Ansary, 1988) or as non-trading companies (Breyer, 1950), has left them outside the studies of the formation, dissolution and structure of distribution channels. However, the development of logistics has brought about a certain change in attitude towards transport companies (Ballou, 1987; Stock & Lambert, 1987). As transport companies are, to an increasing extent, assuming activities in the distribution channel formerly performed by the "trading organizations", it would seem more logical and natural to include them in the channel.

**Concepts of distribution and channel integration**

Distribution is mostly defined as the flow of activities fulfilling the gap between production and consumption (Stern & El Ansary, 1982; Reve, 1986; Revzan, 1961). The basis in all distribution systems/channels is the exchange of transactions between the organizations in the channel (Alderson, 1954; Cox, 1965; Dixon & Wilkinson, 1986; McInnes, 1964).

Further, the degree to which different intermediaries are involved in channel exchange, what type of intermediaries and the number of intermediaries will define the structure of the channel. The structure is normally a result of coordination of flows of activities and the specialization of the organizations.

Alderson (Ibid p 23) argued that "to act effectively a channel must act as if it were an integrated whole i.e. a program or policy advocated by one unit must be accepted by other units to achieve coordination." Coordination between organizations in a distribution channel made with the intention of "seeing things as a whole", is called *integration* and in the terms of Alderson, is of importance for the effectiveness of a distribution channel.

However, in the channel literature in contrast to that of network (Breyer, 1950; Bucklin, 1960; Reve, 1988; Anderson & Weitz, 1986) integration is mostly used in the form of internalised coordination based on ownership rather than coordination between separate organizations.

Discussions on the channel structure have focused on the degree of vertical integration in the meaning of formal legally based integration like fully integrated, hybrid or mixed and market channel (Anderson & Weitz, 1986; Anderson & Gatignon, 1986; Klein, Frazier & Roth, 1990). Often the discussions have even been restricted to a choice between internal or external transactions, the "make or buy" question.

In the transaction cost approach Williamson (1985) argues that, under uncertainty and high transactional frequency and asset specificity, ownership integration hierarchly is more effective in controlling opportunism than both integration based on contractual arrangements and the arm's length market relations. Even though the studies of channel choice have found support
for this approach they have also pointed out certain problems when applying the transaction cost approach, its dichotomy of market and hierarchy and its reasons for integration.

Chisholm (1989) found, in a case study of the San Francisco Bay Area Rapid Transit System, that under a variety of circumstances the informal mechanism for coordinating activities of independent agencies can be more effective than hierarchically organized ones. Some of the reasons for this were that authority based formal structures can create interdependencies that would not exist otherwise, leading to internal disputes. They may suppress rather than encourage sharing of information due to internal rivalry.

Inter-organizational coordination is, in contrast to hierarchies, based on voluntary linkages or relations to other organizations. Its primary benefits are to provide information about the activities of others, to be a channel of communication, to obtain commitment of support from important elements of the environment and legitimize the focal organization (Pfeffer & Salancik 1978, p. 144-145).

Even though integration in distribution literature often assumes ownership there are authors, such as Törnqvist (1946), who recognize ways other than via ownership to reach integration and of making the distribution system into a whole. Mattsson continued this tradition and developed the concept further in his "Integration and Efficiency in Marketing Systems" (1969) by creating three major dimensions of the concept as regards integration, i.e. the execution integration, the decision integration and the institutional integration. The three aspects are present to different degrees in a marketing system. Institutional integration takes into consideration not only full ownership but also other different ways to integrate like part-ownership, contractual cooperation, etc., as lower levels of institutional integration. As for execution integration, it is expressed as a continuous scale and concerns the ways activities are performed. Decision integration is also a continuous scale and takes the degree of centralization in decisions in the marketing system into account. These three different aspects of integration were found to be interrelated.

In our study, the institution integration is not of primary interest, but rather the intention of the coordination in the channel and how it is implemented.

Changes that are taking place for many organizations such as decentralization, just-in-time deliveries and franchising agreements seem to support this wider definition of integration.

Summarizing, the same reasoning as applied to a distribution channel in terms of its structure and the importance of integration seems as easily applied to transport companies and transport systems. Integration, in a wider sense seeing ownership as only one aspect of integration, will as a concept be of vital importance for understanding changes of transport companies and transport systems and as such be used in the model of analysis.
Economies of scale and scope

One of the reasons for the importance of coordination and integration is that it is a prerequisite for economies of scale and scope of a single organization or of a channel. In Dixon & Wilkinson (1986), the distribution channel is divided into two main interrelated flows, the more physical matter-energy flow carried out by the technical sub-system in an organization and the flow of information carried out by the administrative sub-system. Both are of vital importance for the economic performance of the channel.

Economies of scale and of scope concern the effectiveness and the efficiency (productivity) of the channel, since the degree to which economies of scale and scope are gained by the company influences the cost functions of the technical and administrative sub-systems.

Economies of scale, a widely defined and commonly used economic concept, are based on the principles of bulk transactions\(^1\), of multiples\(^2\) and of massed reserves\(^3\). These different principles have effects on the costs of an organization in the channel as the total volume grows. The first two principles relate to the indivisibility of certain inputs and an unproportionality (Dixon & Wilkinson, 1986) between processes performed by the firm. The third is a special case of the principle of postponement (Bucklin, 1960) which in turn says that marketing costs are economized by deferring as long as possible the commitment of a unit of material to a specific use. Economies of scale are seen as effects of the growth of one single product in volumes and in the long run.

Lately the concept of economies of scale has been complemented with the concept of economies of scope\(^4\), which is defined as "when a single firm can produce a given level of output of each product line more cheaply than a combination of separate firms each producing a single product at a given output level." (Bailey & Friedlaender, 1982 p.1026) The concept concerns shared or joint utilization of inputs. Chandler in his large study on "Scale and Scope - The Dynamics of Industrial Capitalism" uses the term in the sense of joint production and joint distribution. Economies of scale and scope quite often support the existence of each other (Bailey & Friedlaender, 1982)

When discussing effects of scale and of scope on the technical or on the administrative sub-systems for a company as a result of intra or interorganizational coordination, they may be present in different ways. The technical system and the administrative systems usually have

---

1 Principle of bulk transactions in when transaction costs do not rise in direct proportion to the size of the transaction (Florence 1933)
2 Principles of Multiples when the optimum output is considerably different between two mechanical units.( Florence 1933)
3 Principles of massed reserves is aggregate stock can be smaller centralized than dispersed (Cox& Goodman, 1956; Florence, 1933)
different unit cost optimum volumes and for different products which makes it necessary to take both into account in order to find the optimum cost functions for the single firm in a marketing channel. A common argument is that the optimum of administrative unit costs probably is reached at lower volumes than for the technical system. In the end, the increasing administrative costs for communication and coordination will outweigh the decreasing technical costs for the firm (Dixon & Wilkinson, 1986). This will happen in spite of the fact that the firm will try to change the structure over time in order to take advantage of all possible economies of scale and scope. "The Visible Hand" shows how firms change structure over time in order to cope with the problems of communication and coordination (Chandler, 1977). A typical such change as increased diversity meant that firms altered from a functional to a multi-divisional organization.

Economies of scale and of scope might be present at different degrees but the exploitation of these economies in the channel rests upon the assumption of coordination taking place between the firms.

In summary, economies of scale and scope can be seen as important driving forces for changes in coordination and as such play a vital role for the understanding of the behaviour of firms in systems.

Conflicts and cooperation in the distribution channel

The bases for conflicts in a distribution channel, according to Stern & El Ansary (1988 p 282), are the degree of interdependence, scarcity of resources and trade-offs between members and these might lead to potential or actual conflicts. Stern & Reve (1980) characterized a conflict by mutual interference or blocking behaviour.

Further, channels cannot exist without a minimum level of cooperation among the parties. Thus cooperative and conflicting processes will exist simultaneously in any channel. However, the degree to which conflicts exist in a channel will affect the possibilities to achieve effective coordination.

Mallen (1964) argued that there exists a dynamic field of conflicting and cooperative objectives between organizations in a channel and if the conflicting objectives outweigh the cooperating ones the effectiveness of the channel will be reduced.

Palamountain (1955) recognizes three different forms of distributive conflicts; horizontal competition, inter-type competition and vertical conflict. The horizontal competition is defined as competition between middlemen of the same type in the channel while inter-type competition is competition between middlemen of different types in the same channel sector. Vertical conflict is a conflict between channel members at different levels.
The concept of inter-type competition and distributive innovation will in turn give rise to three other forms of conflict i.e. traditional inter-type competition, innovative inter-type competition and intra-firm innovative conflict (Mallen, 1964). The competition can be divided into actual and potential competition as well (Reve, 1986).

A conflict might have different intensity, depending on the stake in the relationship, the age of the relationship, etc. The intensity as well as the inclination to develop into an actual conflict will, in turn, be dependent on the cognitive and effective states of the members as well as their perception of the power relations (Stern & El Ansary, 1988).

Heide & Miner (1990) studied the effect of the expectations of future cooperation, based on Axelrod's tit-for-tat theory, taking into account trust and communication as well as open-endedness of the relationship, performance ambiguity, and frequency of delivery. As a result, not only do trust and communication but also a high frequency of deliveries, lack of ambiguity and expectation for future meetings increase the likelihood of cooperation rather than turning to opportunism. The fact that development of trust and communication are interlocked increases the likelihood of continued cooperation and solved conflicts instead of leading to dysfunctional conflict (Anderson & Weitz, 1986).

The amount of conflicts in a channel depends to a large extent on goal incompatibility, domain consensus and differing perceptions of reality, which only seem possible to solve through communication and a certain amount of mutual trust.

All methods to solve conflicts within a channel seem to involve increased communication in different forms.

However if a conflict is leading to a dissolution in one distribution system this normally would lead to a dissolution of other connected systems which shows the dynamics in the character of conflicts (Breyer 1950).

In summary, the coexistence of cooperation and conflicts in a channel, the bases for conflicts and the different types of conflicts will play a role for changes taking place between organizations in interdependent systems. Further, the extent to which the potential conflicts will change to actual ones, is dependent on frequency and intensity of communication, stake in the relationship, etc. This will contribute to understanding the bases and timing of actions taken by the organizations being part of distribution systems.

Dynamics - Evolution of channels or groups of channels

Changes in a channel or a group of channels can be seen from many different perspectives, from an institutional perspective (Betancourt & Gautschi, 1986); from a relational perspective
Since exchange is seen by many authors to be the core phenomenon in marketing (Alderson, 1965; Bagozzi, 1975; Frazier, Spekman & O'Neal, 1988, Mattsson, 1992) changes in exchange within a channel and between groups of channels will play an important role in understanding the dynamics of the behaviour in marketing channels.

Changes of a channel or groups of channels have been a subject of interest for several authors (Breyer, 1950; Coughlan, 1988; Wilkinson, 1990).

First, Wilkinson (1990) discusses changes and stability within a distribution channel based on equilibrium models, recognizing differences between structural system changes due to internal cyclical variations such as the accordion theory (Hollander, 1966) and structural changes as a result of interaction with environment. He argues that structural change arises from instabilities emerging from the underlying system of activities, and that a sequence of structuring constitutes structural evolution.

Differentiating between process structure (patterns of activities) and organization structure (procedures and rules embodied in the organization) he constructs a process model based on recent developments in system theory and urban dynamics. The model grows in complexity taking more and more account of inter-relations with environment and intra-system changes. Three different types of processes would be involved: variation/mutation, selection/retention and copying/reproduction of more stable structures. There are also assumptions that a shift of structures arises spontaneously through self-organization and that there are critical points of limits to the stability of an existing structure.

An equilibrium can be more or less stable and the structure process and organization structure do not need to be in equilibrium at the same time. The structure process is related to the flows of activities divided into matter energy and information. These two flows are both related to the organization structure in their own way.

The dynamic properties of the stable equilibrium's point on a curve can show how a continuous change in certain parameters can lead to a discontinuous change in the equilibrium size of the intermediary (Wilkinson, 1990 p 21).

Coughlan (1988) studied the international semiconductors industry from a model concerning manufacturers being on a market consisting of either independent middlemen (pure private case), middlemen integration with manufacturer (pure integrated case) or a mixture between the two alternatives. Some of the results of the study were that the presence of a pure private

---

1 A system definition by Jantsch (1980) is used which says that a system is a set of coherent, evolving, interactive processes which temporarily manifest in globally stable structures that have nothing to do with the equilibrium and solidity of technological structures.
channel at the time of market entry makes it more likely that the entrant also will use such a channel and likewise for integrated channels. Caughlan also found certain support for the fact that the same actions which turn a pure private channel into a mixed one, in general, also result in competitors following suit until the channel becomes a pure integrated channel". She argues that once the structure seems to be broken, the only stable equilibrium is the pure integrated channel.

Finally, Breyer (1950 p 25) comments that a single firm very seldom utilizes only one isolated channel but rather a group of channels and from this standpoint he discusses the formation and dissolution of a single channel and a group of channels. He differentiates between a highly flexible "easy to switch" channel, a channel with lower flexibility based on exclusive agreements and finally an ownership integrated channel with a very low flexibility.

In the highly flexible channel situation, a channel can be added or dropped without much difficulty.

In the second situation, the flexibility is lower due to trading relations persisting over time. Therefore formation and dissolution are slower since substantial commitments are involved. If the trading agreements do not involve the whole channel there might still be some flexibility left.

Finally the channel of integrated ownership has the lowest flexibility due to the investments involved.

The reason Breyer has concentrated the discussion to the formation and dissolution of single channels is the difficulty there is in telling when a group is formed or dissolved. A single channel is formed when the gap between the producer and the consumer has been fully complemented. There is no such definite and fixed point for formation of groups of channels.

Breyer states that the best way to study how a group of channels is set up is to focus on the sphere of interest of a trading concern or a common group. The identification of such a focus serves to map the channel group.

Furthermore, other studies also using external channel variables suggest that there are meaningful interactions between internal and external channel variables (Dwyer & Welsch, 1985, Etgar, 1977; Achrol & Stem, 1988).

Etgar (1977) combined external channel conditions with degree of control and found an increase in control with declining and unstable demand and strong channel competition.

Dwyer & Welsch (1985) found that environmental heterogeneity was associated with more decentralization, less formalization and more retailer control.

Summarizing, Wilkinson differentiates between structural system changes generated by internal cyclical variations and structural change generated by environmental changes. He creates a model taking both intra and inter-organizational changes into account where changes in process structure (patterns of activities) lead to changes in the organization structure over time. A shift in the organization structure comes spontaneously at some critical point as instabilities arise in the pattern of activities. This kind of reasoning is of special interest for the creation of a model of analysis taking not only relationship changes within a channel but also the context into consideration.

Then there have been discussions of how the use the different types of channels, such as private channels and integrated ones, influence one another. Finally the possibilities of dropping or adding channels to a group seem to be different depending on the flexibility in the channel organization. This also has a certain importance for the channel behaviour and as such on the transport companies in their transport systems.

Limitations

As mentioned above, the studies within the distribution field are mostly focused on internal matters within a single channel involving only the organizations belonging to it. Studies of inter-dependencies with external organizations are limited. Mullen (1990) argues that there is a need for more research on the role of international channels in facilitating economic growth and development as well as taking the distribution channel context into consideration. He points at the increasing importance of international channels in the future. Future research perspectives that could be fruitful in international marketing would be those combining socio-political and economic variables like the political economy and the relational contracting together with network studies (Mullen 1990).

3.3. Theories of internationalization

The purpose of this section is to contribute to the understanding of the behaviour of the firm in the process of internationalization, to generate certain important concepts for the model of analysis and to contribute to explanations of the empirical results.

As in the case of distribution, the perspective taken in the literature has mainly been that of the manufacturing companies. Subsequently, the great majority of theories are developed for products and not for services. However, there are, as we shall see, some attempts made by the researchers if not to include at least to comment upon the possibilities of including industrial services in the leading existing theories.
Research on internationalization of business relates to a variety of different theories derived from many other fields of research like microeconomics, industrial organization, strategic management, network approach, transaction cost theory, etc. What they have in common is that they all apply theories from their own field of research to the phenomenon of internationalization either for industries or companies. Toyne (1989) defines three streams of research: a) studies of international operations of the individual firm b) comparative studies between countries, and c) explanations of the multinational enterprise as an institution. The first and the last of these are of most interest for this study. However, we shall divide the last part of the explanations of multinational enterprises (MNEs) into two, stressing the phenomenon of global network organization. As in the case of network and distribution approaches, the focus will be on changes and patterns of changes and contextual interaction but applied first to the individual firm and then to more general driving forces for the process. However, we start with a short discussion of the concept of internationalization.

The concept of internationalization

A widely accepted definition of internationalization characterizes it as a process of increased commitment of resources to foreign activities, i.e. activities performed outside the home country. The increasing degree of commitment over time implies that internationalization is a growth process. However different driving forces are stressed in the process. The Uppsala School (i.e. Hörnell, Vahlne & Wiedersheim-Paul, 1972; Forsgren & Kinch, 1970; Johanson & Vahlne, 1977) stressed the importance of knowledge as a driving force while others stress the importance of market imperfections (i.e. Pavitt, 1971; Vernon, 1966) and intangible assets (i.e. Buckley & Casson, 1976; Magee, 1977; Caves, 1982). Most definitions of internationalization of organizations seem to include two dimensions, the number of countries to which the company is committed and the degree of commitment by a company in these countries. However Johanson&Mattsson (1988) developed the concept of internationalization from three dimensions also bringing integration into the analysis. These dimensions are extension, the amount of commitments to a country, i.e. penetration and coordination of activities between countries, i.e. integration.

An underlying assumption regarding international commitments is that the company initially starts to grow in its home country from which it internationalizes. Some authors (Porter, 1989; Vernon, 1977) specifically stress the significance of the home country as an important determinant of performance in the process of internationalization. In other later or more general studies (Casson, 1990; Johanson&Mattsson, 1984; Lindqvist, 1990; Nordström, 1990), the subject of the growth in the home country is not so highly stressed or is not considered so
important since the studies either concentrate on relative changes in internationalization or on other factors speeding up the process.

*International operations of the individual firm*

How would an individual firm behave and what could be the explanatory factors to that behaviour? What would be the reason for starting and continuing to internationalize? How does this change over time?

As Aharoni states concerning the motives behind the start of the process "in any specific case it is very difficult if not impossible to pin down one reason for the decision to look abroad or to find out precisely who was the initiator of the project" (1966 p. 55).

The motives might come from within the organization (e.g. individual interest of high ranking managers, etc.) or exogenous (e.g. competition, customers) to it. The decision to look abroad is undertaken as a result of a chain of events including organizational environmental forces, personal trait and sheer accident.

In contrast to this study of the very start of the process, the study presented by Chandler (1990) describes the development process for many individual firms for a period extending over a hundred years. In this study, the basic motives for industrial growth including international growth were found to be economies of scale and economies of scope (joint production or distribution) or reduction in the transactions costs from investments made in production, distribution and management.

Another model was presented by Johanson & Vahlne (1977). They argue that the bases for internationalization are found in the combination of market knowledge and commitment decisions, current activities and market commitment. These factors form a cycle of "learning by doing" in international growth through a knowledge-based model. "Internationalization is seen as a result of gradual acquisition, integration and use of knowledge concerning foreign markets. Market knowledge and markets commitments are assumed to affect both commitment decisions and current activities, which then in turn will affect the first two" (Johanson, Mattsson, Sandén & Vahlne, 1977).

This theory resulted from many studies made by a group of researchers at Uppsala University (Hörnell & Vahlne & Wiedersheim-Paul, 1972; Forsgren & Kinch, 1970, Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977). The model which is based on empirical studies from some of the largest Swedish international companies not only describes why companies internationalize through the model of gradually increased knowledge but also how and where. How companies internationalized was explained through the sequential establishment chain starting with no regular export, exporting through an independent agent, developing sales subsidiary and finally investing in production abroad. Further, more sales subsidiaries were often established by acquiring the agent or taking over the people from the agent (Forsgren & Kinch, 1970).
Where the investments were situated was explained by the concept of psychic distance between host and home country (Hörnell & Vahlne & Wiedersheim-Paul, 1972; Johanson, Wiedersheim-Paul, 1974). Psychic distance was based on general differences in industrial development, education, language, culture and commercial connections between countries (Johanson, Mattsson, Vahlne & Sandén, 1977) and it was assumed that internationalization started in markets where the psychic distance was small.

This theory of gradual learning leading to the sequential establishment chain and the importance of psychic distance for the choice of country has been confirmed in many other studies (e.g. Bilkey & Tesar, 1977; Bilkey, 1978; Johanson & Nonaka, 1983).

Criticism has also been levelled at this model. Basically the criticism relates to the fact that the sequential establishment chain does not take market opportunity, competition or other contextual variables into account (Hedlund & Kverneland, 1984; Sölvell, 1987; Nordström, 1991).

Also, the idea that the psychic distance between countries should decide the sequence of countries being subject of internationalization has also been criticized for the same reasons (Sölvell, 1987; Nordström, 1991). Nordström (1991) claims that the psychic distances decrease in the world of today and should therefore be less valid as an explanation for sequences observed.

Johanson and Mattsson (1988) make a point of taking the context into account in the theory of internationalization of a firm, including both the specific firm characteristics and the degree of internationalization of the market, which they argue have importance for global competition and cooperation in industrial systems.

Johanson & Mattsson show that the internationalizing firm's situation is different if it starts the process of internationalization early or late in comparison to other companies on the market. They discuss four different situations for a focal company with reference to its own degree of internationalization and that of the market context: the early starter, the lonely international, the late starter and the international among others. However this model is a comparison between static situations and is therefore basically not dynamic.

When analyzing these four situations it is really only in the case of the early starter that the sequential establishment chain plays an important role, according to the authors.

The three dimensions of internationalization used by Johanson & Mattsson i.e. extension, penetration and integration are said to vary in importance over the process of internationalization. While extension and penetration have a higher importance in the beginning the importance of international integration seems to increase over time. Further, extension and
penetration will only lead to marginal changes in a firm's degree of internationalization when it is already highly international.

Forsgren (1985) has compared the propensity to invest on foreign markets via acquisitions or greenfield investments, since these were not differentiated in the establishment chain. In his study Forsgren concluded that location, industrial structure and the firm's degree of internationalization are of crucial importance for the company's choice of investment. Further, he argued that many companies starting with greenfield investments continued acquiring firms on the market and that it was possible to keep existing suppliers and customers to a larger extent when making a greenfield investment. This would also imply that existing customers play a more important role for a greenfield investment than for an acquisition.

In summary, the motives for starting to internationalize are difficult to pin-point (Aharoni 1966). It is probably a chain of exogenous and endogenous events. Chandler (1990) as well as Johanson & Vahlne (1977) have, based on their empirical studies, pointed at important driving forces. Chandler (ibid) argued that economies of scope, of scale and reduction in transaction costs were the most important driving forces for both domestic and international growth. Johanson & Vahlne (1977) described a process of gradual "learning by doing" as a behaviour for reducing uncertainty and sequential establishments explaining increased degree internationalization over time. The concept of "psychic distance" was used as an important explanation for sequence of countries chosen for establishment.

Finally, Johanson & Mattsson commented that changes of the market had to be taken into account and not only a product of the firm when discussing the the patterns of internationalization of firms. Forsgren (1985) arrived at the conclusion that location and industrial structure as well as their existing degree of internationalization were of importance for the choice between greenfield investments and acquisitions. All of these studies are extremely important when it comes to understanding how transport companies might internationalize and what the possible driving forces can be to different patterns.

**Explaining the existence of international business**

In the traditional international trade theories, by authors such as Heckscher, Ohlin, MacDougall and Leontief, explanations of trade and production before the second world war focused on country specific factor endowment, such as differences in raw material, capital and labour supply. Export and import were supposed to take place within an arm's length market relations and not within companies.

As companies internationalized and MNEs were created in the post-war era, the question in focus for the researchers shifted from traditional trade theory to why foreign direct investments (FDI) were made and why MNEs existed (Buckley & Casson, 1976; Casson, 1987; Calvet,
The existence of MNE has then been explained as a result of structural and of transactional market imperfections, starting with the former and turning to the latter.

Hymer (1960) was one of the first to state that to make FDI foreign companies must have a countering advantage over local firms assuming the existence of market imperfections. Kindleberger (1969) saw imperfections of goods markets, of factor markets, scale economies and government imposed disruptions as dominating explanations. Caves (1971) claimed product differentiation in the home market as being the critical element giving rise to FDI and Vernon (1966) suggested the importance of product life cycle where firms react to the threat of losing markets through expanding abroad.

Even though these structural market imperfections did explain much of the basic reasoning behind the existence of the MNE they did not actually explain the very reason for its formation, i.e. the internalisation.

Instead, this fell to be explained through development of transactional market imperfections during the 1970's (Buckley & Casson, 1976; Magee, 1977; Caves, 1971). The theory assumes that there is a flow of intermediate products within a firm in the form of knowledge and skills, expertise, etc and that markets for these are difficult to keep control over (Buckley & Casson, 1976). The result is internalisation in order to control and protect these intangible assets and when this is made across boundaries it creates MNEs (Calvet, 1981).

Magee (1977) argue in line with this reasoning that the main questions are the appropriability of and returns on information. He claims that information is a durable good which brings decreasing returns over the technological life-cycle of an industry. The appropriability problem is based on the fact that the availability of the information to a second party reduces the privileged nature of the returns on the information created by the first party. The probability of leakage and the costs of preventing leakage increase with the number of and the geographical dispersion of operations.

Dunning (1977, 1988), building on the studies made by Caves (1971), Hymer (1960), Knickerbocker (1973), Vernon (1966) and others formulated the "eclectic theory" in which he argued that both the company's ownership-, internalisation- and location advantages were necessary components in order to explain foreign direct investment. This way he combined both tangible and intangible assets as well as structural and transactional market imperfections.

The locational specific advantages were seen as external to the companies and available for all companies in one country. Ownership advantages were internal, on the other hand, and
included both tangible and intangible assets. Many of the ownership advantages stem from the size of the company, monopoly power, cheaper inputs as well as the multinationality per se, i.e. the advantage of having a global network. As for internalisation advantages, he states that the ownership advantage not only arises from specific company assets but also from the ability and willingness to internalise those assets. Here he relates his idea to the writings of Coase (1937), Alchian & Demsetz (1972), Williamsson (1971) and Magee (1977) when discussing the importance of internalisation and transaction costs.

Dunning argues that the reasons for internalising might not only be a question of capitalizing on an advantage but also of avoiding disadvantages such as hindering the competitors or the suppliers to the competitors from gaining advantages.

According to Dunning, the eclectic theory will also be relevant for service industries like banks and insurance companies. It has been tested on internationalization of banks (Kang Rae Cho, 1985) and found to give a good explanation.

Buckley & Casson (1976) have criticized the eclectic theory arguing that imperfections in international intermediate product markets are both necessary and sufficient conditions to explain the existence of the MNE. The differentiation between ownership advantages and internalising of these would not be necessary. According to this reasoning, the location advantages also seem to have less importance in explaining the existence of the MNE.

The criticism has caused Dunning (1988) to restate some assumptions for international production as well as to discuss certain extensions, specifically into a more dynamic point of view. In this restatement he points out the importance of the distinction between structural and transactional market imperfection. They are both important and interrelated in a dynamic situation.

However, Dunning agrees with the argument that the theory does not allow for firms to have specific behavioural differences.

Further, Dunning (ibid), in differentiating between multinational and uninational companies, means that the greater the efficiency of the MNE as a coordinator of activities the more international production is likely to take place.

In summary, perhaps much due to the fact that earlier trade theories were so concentrated on trade between autonomous units and did not take the MNE into account, post war models have focused on reasons for the existence of the MNE leaving relationships to autonomous units out. Therefore in these post war models ownership and reasons for internalisation will be very important factors. The existence of the MNE is basically explained via structural or transactional market imperfections. While the first developments of a model concerned structural market imperfections (Caves, 1971; Kindleberger, 1969; Vernon, 1966) and internalising of goods markets, later contributions have concerned transactional market imperfections and internalisation of intangible assets such as know-how, skills, information (Buckley & Casson,
1976; Magee, 1977). The underlying driving force for internalising would be to make use and protect the existing advantages. Dunning (1977) combined both location advantage from trade theories as well as having structural and transactional market imperfections with the willingness to internalise.

**The global network organization**

The importance of a MNE’s global network has been a subject of increasing interest over time as more companies seem to have reached the situation of being established as MNEs with several subsidiaries in several countries. Basically the interest has been focused on the advantages of having a global network for MNEs. (Dunning, 1977; Chandler, 1990; Johanson & Vahlne, 1990; Kogut, 1983; Magee, 1977; Vernon, 1979; Vernon & Wells, 1976, etc.)

The advantages of a global network for an MNE according to Kogut (1983) stem from the fact that the MNEs can transfer resources across borders by optimizing a global network. Kogut (1983) saw three general categories of factors as important attributes for an MNE. These categories are the ability to arbitrage international restrictions, to capture the externalities of information or learning and to derive economies of scope in production and marketing.

Vernon & Wells (1976) specifically utilized exploitation of global scanning capabilities as an important strategy of an MNE along with other strategies like exploiting technologies, having a strong trade name and exploiting economies of scale. Global scanning capabilities were seen as capabilities to find cheaper sources of supply or to find low cost production sites. This strategy has been stressed by them as a strategy possible to use even though the products have lost their technological lead and competitive advantage.

Johanson and Vahlne (1990) discuss what they call "the advantage cycle" for an international firm. The concepts are based on the Uppsala School of increasing international knowledge and commitment in the sense that the strengths and weaknesses change in relation to a particular environment i.e. "the advantage package". Over time as the size and composition of the advantage package changes it will lower the transaction costs for the multinational firm, which might lead to an advantage cycle.

Chandler (1990) showed that companies made up of many independent unities, whether as a result of internal growth or by acquisitions, cannot fully exploit the advantages of scale and of scope unless the unities are fully integrated. He shows that when companies ignore the gains of economies of scale and scope due to lack of coordination they lose their competitive advantage.

The advantages of the global network do not come without effort though, the company has to be organized in order to be able to exploit these advantages. Bartlett (1986), Goshal & Nohria (1987) and Martinez and Jarillo (1987) are some of the authors that argue for utilizing the contingency theory when discussing the design of the global network. They claim that when
designing such a network the complexity of the environment and the amount of local resources and independency versus inter-dependency have to be taken into account.

Martinez and Jarillo (1987) discuss the problem of "how to make the most of the far flung and diverse activities of an MNE". They came to the conclusion that the crucial mechanism was coordination and integration.

Martinez & Jarillo (1987) studied vast amounts of literature on internationalization from the aspect of coordination, finding that this term was hardly of any interest before the 1980's. To the extent that coordination was present in literature the more subtle mechanisms of coordination like lateral relations, informal communication and organizational culture seem to have been lacking before the 1980's.

Bartlett (1986) discusses what he calls the "transnational organization". He starts by stating that the stage model for different structures of international companies, where companies advance from an international division to world wide product division or area division in order to end up in a global matrix as suggested by Stopford & Wells (1972), is to simplistic. It does not reflect the complex tasks and problems of such a company.

Bartlett (ibid) argues in support of the importance of the administrative heritage as well as industry characteristics, the strategic position when an organizational choice is made. In many cases it would not be possible to make the changes without considering also administrative heritage. Further, he comments that the forces on the MNE are complex and diverse and, bearing in mind their organizational effects, that they can be divided into two categories, namely, global coordination and integration as a result of scale economies, spread of technological development costs, etc., on the one hand, and national differentiation and responsiveness on the other. The intensity and balance of these forces varies from one industry to another.

Companies have to cope with national differentiation and responsiveness and simultaneously coordinate and control their activities in order to gain efficiency and effective global competition and this leads to inter-dependencies between the units rather than dependency from one side. Such companies are referred to by Bartlett (1986) as the "trans-nationals".

Further research undertaken in Uppsala by Forsgren (1991), Forsgren & Holm (1991), discuss changes in the locus of decision within large multi-centered MNEs. They see the changes as a result of internationalization of the subsidiaries in the MNE which they call a secondary degree of internationalization. The result is that subsidiaries will act more autonomously and that the parent country decreases in importance. Contributing to this development have been foreign acquisitions over time.

In summary, the MNE, being a global network organization and due to market imperfections on markets for tangible and intangible assets, seems to have advantages such as economies of
scope, skills, learning costs, scanning capabilities, etc. However, in order to be able to exploit these advantages the company has to coordinate its activities. This will in turn have effects on the organizational structure in order to exert a stronger control of their total activities but has to be weighed against the need for national differentiation and responsiveness. Furthermore, a complexity in this situation is that where subsidiaries internationalize the locus of decision seems to move more to the advantage of the subsidiaries.

The advantages of coordinating a global network seem to be several and gaining these advantages might be seen as important driving forces for the behaviour of MNEs and concerning the design of the network. Th analyzing coordination within global network organizations should be of importance for the transport companies and the network that they create.

*Limitations of the existing theories*

There are many limitations to the existing theories on internationalization and researchers in the field have also alluded to this fact.

Some of those most frequently discussed (Dunning, 1988; Casson, 1990; Johanson & Mattsson, 1988; Mattsson, 1992) are the problems of taking dynamics into account, to include the context in the reasoning, the lack of explanation for the internationalization of the service industry, looking at parts rather than taking a holistic view and contrasting markets to hierarchies rather than seeing a variety of alternatives of intermediate solutions.

Dynamics for the single firm can be attributed to many theories but they are not explicitly there. Taking the Uppsala School approach from the 1970's, one of the reasons for its attention was perhaps the fact that it pointed out changes over time for an individual firm.

Even though there are many critics, very little would seem to have been done showing the dynamics of the firm after the sequential establishment chain. Some researchers (e.g. Johanson & Mattsson, 1988; Nordström, 1991; Lindkvist, 1991) have pointed out that when starting to internationalize late in an internationalized world the sequential establishment is less valid and the investments come faster and leap-frog certain stages.

Seeing the firm as a part of a changing environment seems to attract even less study. The conceptual analysis by Johanson & Mattsson (1984) takes changes in the context into account over a period but not what happens to the individual firm, as part of this changing context. Other researchers have discussed the context, focusing on competitors (Knickerbocker, 1973; Porter, 1980) or on more general demands from context (Porter, 1988).

Casson has pointed out that existing theories do not in a satisfactory way explain how technological advantages develop. He also argues for new insight through adoption of a system view of production and emphasizes the complementarities as well as the substitution possibilities. This would mean a step towards taking part of the context into the analysis. The
discussions of the context should also bring in the problem of a more holistic view, not studying just single functions like R&D but the whole production systems (Casson, 1990). Dunning (1988) expressed the opinion that one important possible extension of the eclectic paradigm would be to include other forms of international business transactions e.g. arms-length trade, joint ventures and non-contractual agreements. He means that an integrated approach between production and trade should be promising here. As a result of these views, studying alternatives to market and hierarchies ought to be enhanced.

Internationalization of service companies that has taken place over time seems to have been the subject of very few studies as a separate industry in itself. When dealing with the subject the service companies have rather be seen as complementarities to the manufacturing industry. Much of the recent development taking place in the service industry should lead to an interest in analyses of international business operations in this sector. The limitations such as a strong focus on ownership and relative lack of dynamics, contextual analysis, holistic studies, etc., which are part of the characteristics of the network approach, would speak for a fruitful combination of the network approach and internationalization research.

Final comments
Judging from the limitations of three different theoretical approaches, the conclusion seem to be that the network approach in particular would add further dimensions to the field of distribution and internationalization. On the other hand, the network approach would gain by taking cognisance of the problems and complexities of the types discussed in these other two more established fields of research, i.e. distribution and internationalization.

In the model of analysis to be used in this study I will therefore integrate concepts from distribution research and internationalization research into a network analytical framework.
4. Model of analysis

In the construction of a model of analysis of internationalization processes, the concepts allowing for change should be in focus. In a contextual analysis, these changes would concern not only focal companies but also other organizations taking part in the process. However the context is limited to those transport companies which are connected to the focal companies as representatives, suppliers, owners or competitors. These also play the dominating role when studying the behavioural patterns of transport companies in the process of internationalization.

In this chapter, in order to distinguish patterns we intend to choose concepts that separately or taken together are suitable not only for describing internationalizing but also facilitate differentiation between changes in the process of internationalization. Then we try to find ways to categorize and operationalize these concepts in order use them in the analysis of the cases.

We start by presenting a model for change deriving from the network approach and by applying it to transport companies. In the process some basic concepts are crystallized as important for understanding change. Research from the distribution field contributes specifically to the understanding of critical problems and dynamics of systems of high interdependence.

Secondly, the dimensions of internationalization to be used in the model are chosen and adapted to the characteristics of transport companies, thereby giving an understanding of the internationalization dimensions in a slightly different way than that traditionally applied to manufacturing companies.

The three dimensions of internationalization are then operationalized and categorized utilizing the concepts of systems, nets and networks when describing changes for transport companies. In the processes of operationalization and categorization, which are made for the different dimensions of internationalization, the different theoretical approaches are combined. The change processes categorized for each of the three dimensions and the discussion of interaction between them which follows will then be the core of the model of analysis. Finally the model will be complemented by discussions and categorizing of effects mainly based on research from network theory.

4.1. Basic concepts

General concepts
Applying the network model for analysis of industrial systems by Johanson & Mattsson (1992), which distinguishes between the production systems and the network of exchange relationships between industrial actors, would allow context and changes to be brought into the
analysis. Companies are assumed to form exchange relationships at the network level through which they control\(^1\) and coordinate the production systems. Change in the network relationships influence the production systems. Changes in the resource interdependencies at production system level might then induce changes at the network level. Therefore the two levels interact. This model could easily be adapted to transport companies and transport systems (as shown in figure 4.1). Thus transport companies form and control transport systems (production systems level) through exchange relationships between different transport organizations (network level). Transport companies seen as parts of the network separated from the resources in the transport systems will make it possible to discuss change on one level and its effects on the other.

![Figure 4.1. A model of transport system/s and transport companies (A, B)](Adapted from Johanson & Mattsson, 1992 p 209)

Changes in transport systems would derive from changes in the relationships between transport companies or from changes in the resources employed (personnel, facilities, know how, equipment, capital etc) in the transport system.

However, these changes might go in different directions leading to effects for other transport companies being part of the same transport system. Interdependence in a distribution system shows a positive connectedness between the organizations (Cook 1982). This should also be appropriate to transport systems being part of the distribution system. Positive connectedness means that changes in one relation have positive effects on the organizations in other relations. A negative connectedness is the reverse situation, a positive change for one relation leading to a negative effect for the other.

The transport system is assumed to be based on a dyadic relationship consisting of the representative and a focal company. However in a reversible transport system the focal company and its representative are representing each other for a specified geographical area and

\[^1\]Control means the degree to which a company can decide when, how, where, how much and how long the resources shall be used. (Pfeffer & Salancik 1978)
all functions including operations have to be performed by both parties. Changes for other transport companies being suppliers to the same system will be positively connected while those of other systems might be either positively or negatively connected. The effects on transport companies being suppliers, competitors and owners are analysed separately.

Groups of companies related to each other could be seen as clusters or nets having a higher interdependence between the organizations than to other part of the network. When such a net of transport companies is formed at the network level it is assumed that the transport systems of the organizations in the group will also be interconnected.

The position of a transport company in such a net is defined not only by its relationships to others at network level but also in the production systems, i.e. the extended definition of position according to Johanson & Mattsson (1992).

In this study the concept "net" will be used from the perspective of a focal company including its direct relationships and its indirect relations via subsidiaries or important agents. However, the positions of these companies to the focal company might vary from being on the border of the net to being very close to the focal company. Being a representative will therefore automatically lead to being part of the focal net. However, there are other ways, such as being owner or supplier, for a transport company to be part of focal net. The study will focus on the representatives because of their importance for internationalization.

The advantage of adding the concept of a net is that it will give the possibility to take several parallel and sequential processes into account with many organizations involved and thereby take a larger part of the context into the analysis. Since the changes for transport companies in relationships at system and net level seem important in order to understand how patterns of

Figure 4.2. illustrates a net of organizations governing the transport systems in a very simplified way. A focal company of today might be part of large numbers of transport systems which in turn can be divided into sub-groups. The dyad coordinating the single transport system is one of several relationships that together constitutes the net.
internationalization of transport companies will change over time, the study will include both levels.

Who should be defined as an autonomous organization and therefore a separate representative of an international transport system and who should be defined as just being a part of the parent company? This is an intrinsic problem, which has consequences for internationalization analysis.

While the network approach has focused on inter-organizational relations characterized by non-ownership, many internationalization models have concentrated on ownership relations. In distribution research on the other hand the system, as such, is in focus rather than ownership.

We can assume that the increasing interdependence in the context leads to the need of increased coordination causing different types of cooperations (Pfeffer & Salancik, 1978). Further, we have from network studies learnt that relationships are frequently long term and have many dimensions apart from the legal tie, which is only one. Moreover the distinctions between different types of cooperation have in reality become less clear as new types develop such as franchising, management contract, leasing etc. This has led us to believe that ownership as such has become less of an issue when discussing cooperation.

In addition to this, the representatives of a transport company, whether a subsidiary or agent, are separate organizations for operations and marketing regarding a specific area and as such, have to handle their own relationship, which makes them relatively autonomous. Further, based on the development of freight transport companies in general there are strong reasons to believe that subsidiaries to transport companies like in the case of manufacturing companies seem to become increasingly autonomous through developing internationally on their own (Forsgren 1990). This emphasizes the importance of seeing the subsidiaries as separate companies when studying internationalization. Therefore, in this study, the representatives can be either agents, subsidiaries or joint ventures.

The main difference is to be found at net level since the subsidiary will always be part of the focal net. So will also the agents of the subsidiary even though they are conceived of as indirect relations to the focal company (see figure 4.2). In an extreme case the net could form a group where all the organizations are fully owned by the focal organization.
Finally, whatever position a representative has in the net, both directly and indirectly controlled resources for a transport system only concern the engaged resources for the operations in common with the focal company. Thus, the resources of an agent only concern the resources set aside or available for utilization for their activities in common with the focal company at system level and with relations in focal net at net level. Even though an agent might have very large resources the resources available for utilization in the transport system in common with the focal company might be very limited. As the extent to which a transport company is internationalized is interpreted in terms of the resources committed to foreign activities, it seems necessary to have a distinction between the agent's resources available and not available for use in cooperation with the focal firm. On net level this also shows a difference between a subsidiary and an agent since basically all resources of a subsidiary can be made available for use of the focal company in due time.

**Internationalization and the three dimensions**

Since the process of internationalization has been developed from the perspective of a manufacturing company there is a necessity to reformulate the definition of internationalization in order to make it fit the purpose of the study and to adapt the concept to the characteristics of the transport companies.
Seeing the internationalization of a focal company as a change process towards an increasing commitment of controlled resources to foreign activities, there seem to be several differences in terms of how the concept can be modified due to the characteristics of transport companies.

First, the assumption that companies first grow in a home market and then internationalize, which is important for several models of internationalization, is not always true for transport companies. Many transport companies have never been fully domestic but started as international companies, e.g. forwarders, airlines and shipping lines. In such cases the process of internationalization over time takes place through relative increases of resources committed to foreign activities.

Furthermore, the different forms of commitments, e.g. direct exports, exports through agents, and establishment of sales subsidiaries do not have the same meaning for the transport company. As the transport companies being mutual representatives to each other normally have to have all functions including operations available in the foreign country, a sales subsidiary cannot take over the full role of an agent. It must be combined with an agent or with several agents on a specific market. Therefore the only commitment abroad that can take over the role of the agent is an operating subsidiary with all functions included. One important result of this is that both mutual representatives must find another partner if the cooperation comes to an end and that the new transport systems will mostly be a competing with each other.

Therefore the alternative of the sales subsidiary used in several models of internationalization as an important entry mode lacks interest. The available alternatives are basically reduced to representation by an agent or an operating subsidiary or a combination of an agent and a sales subsidiary.

Moreover, since the transport systems are mostly reversible systems the commitment is not as much a question of export or import but rather of a balanced or an unbalanced flow of goods, which implies there is an interdependence between exports and imports for transport companies. Both distribution and internationalization models seem to be based on the idea of one way systems to foreign countries. The network approach here seems to be much easier to apply to the situation of the transport companies.

Finally, the interdependence between the representatives of a transport system, the existence of foreign activities performed in home country and the possibility to use transferable resources mean that the change in the commitment to foreign resources will have to include resources committed for that purpose in the home country as well.

From these characteristics it seems that mutuality and interdependencies are vital for the understanding of the process of internationalization of transport companies and the increased commitment of resources and activities will take place mainly in their transport systems.
and where these increasing foreign commitments are performed, however, might differ due to
the location of the system. The conclusion is that:

Transport companies internationalize through controlling and coordinating transport systems
between home country and foreign country, between foreign countries or within foreign
countries. This will also include resources and relations in home country specifically engaged
for a foreign transport system.

Considering the importance of interdependence and mutuality a model of internationalization for
transport companies should take these aspects into account. Therefore the concepts used by
Johanson and Mattsson (1988) in the three dimensions of extension, penetration and
international integration would seem to be valid, since the integration dimension is included.
This makes it possible to include the home country resources as well as transferable resources
when deciding the positions and resources committed for the transport company in the foreign
country. It is also possible to take into account not only the resources controlled directly via
having a subsidiary but also resources controlled indirectly via agents.

Giving the concept of internationalization three different dimensions will lead to a more
complex concept and will create problems of measuring the total growth. If one variable
increases and the others decrease an important international change for future growth might still
have taken place but it could in reality look like a stagnation or even a slight decrease. This will
lead us to include stagnation or negative changes of the dimensions into the concept of
internationalization under the assumption that there will be an overall growth in the
internationalization.

Based on the discussions above, the internationalization process is defined as being a change
process for growth of increased commitment of controlled resources to foreign activities which
might involve short periods of stagnation and decrease.

Before leaving the concept of internationalization for transport companies, it would seem
necessary to point out that there is a case of indirect international commitment which is not
included in this definition. This case seems relevant when the internationalization process
starts. It can be exemplified by a domestic transport company being involved in international
business indirectly as a supplier to another international company with the same country base.

Going back to the definition of internationalization as meaning committing controlled resources
to foreign activities, the definition does not really say much about this type of problem. Has
such a company started internationalizing or not? The only indirect international commitment
discussed in the traditional literature is the situation where a manufacturing company utilizes a
trading house, which hardly covers the situation of being a normal supplier without having any
control of the connection to the international activities. In this case, instead of including all
domestic suppliers to an international company in the internationalization process, the concept is restricted to companies whose resources are directly coordinated to resources and activities of a foreign organization.

An example of a change for the supplier above would be if Volvo Sweden decided that the Swedish supplier should send the goods directly to Volvo in another country in the future. Even though all social contacts, procurements and payments were made to Volvo Sweden a direct coordination would have to be made to foreign activities.

Therefore the definition of the concept of internationalization must be complemented to include not only the increasing commitment of controlled resources to foreign activities but also the assumption that there is a direct coordination with the foreign resources and activities. The process starts as the controlled resources become directly coordinated with the foreign resources and activities.

In this definition coordination gets an important role for internationalization in general but this seems even more important for the transport company coordinating and controlling transport systems with high interdependence.

Of these three dimensions to be used, the concept of integration, being a process of coordination with a specific purpose, is of basic importance since the existence of a transport system assumes a certain degree of integration. Therefore, integration plays a very important role in the creation of a transport system. Furthermore, changes in relationships between transport companies reflect changes in interdependencies, which implies that integration is vital when studying dynamics from a network perspective.

Based on distribution research (e.g. Alderson, 1954), it can be said that an important reason for increasing integration would be the intention to reach higher efficiency or, seen in a wider perspective, higher effectiveness. Integration seems even more important for effectiveness for a transport system being subject to even higher interdependence than distribution systems due to its reversibility.

4.2. Forming a model of analysis

Integration- operationalization and categorizing

In order to operationalize the concept of integration we will go closer into what the concept stands for.

Even though the concept of integration is seen as an important concept in all three theoretical approaches, the way the concept is used differs and more detailed specifications and operationalization of the concept are rare. One of the exceptions is Mattsson (1969) and his
approach to the conceptual scheme will be a base for the development of the concept in this study. Another reason for choosing Mattsson’s approach is that integration is used in a wider sense and does not limit the concept only to ownership integration. This would allow for integration not only with subsidiaries but also with agents, suppliers, etc.

Integration is defined as a process over time of combining separate parts into a whole (Webster). It is a coordination process with the common goal of combining the parts. Utilizing the concept of integration defined in this way in respect of relationships, transport systems and nets would mean that increasing integration is the relative change from looser to higher integration.

Coordination of the production system takes place through a governance structure, in this study a network structure. Integration processes will therefore be assumed to be initiated at network level (Johanson & Mattsson, 1992). For transport companies, integration will concern transport system activities. Even though the integration process is initiated in the dyadic relationship at network level there will be subsequent changes over time in the transport system that in turn influence the network level also outside the initial dyad. Changes in the positions in the net will thus be influenced by changes within and between transport systems.

The different aspects of integration elaborated by Mattsson (1969), i.e.institutional, execution and decision integration, were applied to marketing systems. The institutional aspect of integration was described by ownership characteristics and contractual arrangements. The decision integration concerned the degree of centralization of decisions. As for execution integration it concerned the way activities were performed and the characteristics of the flows in the channel. A high degree of adaption between the organizations through activity transference, exclusiveness, internalisation and homogeneity, increased the level of integration between the organizations. Furthermore the three different aspects were found to interact.

In order to make these aspects dynamic and to be able to put them into a more contextual setting, certain modifications of Mattsson’s framework are necessary. The institutional aspect will be called the legal aspect and includes legal ties in terms of ownership, joint ventures, formal agreements of various kinds. As for execution integration the cooperation between the organizations might change in terms of closeness depending on the will to adapt to each other and to increase the interdependence between the resources. This type of integration concerns the four flows i.e. the physical, the information, the payment and the responsibility flows. It will include changes in asset specificity in the specific relationship and new techniques necessitating new adaptations and more communication or new routines leading to higher adaption to each other.

Decision integration is here treated as the control aspect and is seen as who controls what and the degree to which companies in a relationship have control over each other’s resources. It
includes changes in the total resources controlled by the companies, by the relationship and by the net for their activities in common. Finally, an aspect underlying the three mentioned above is the social aspect of integration which is assumed to play an important dynamic role and to include the degree of trust between organizations.

The legal, social and control integration are characteristics at network level and execution integration in the transport system at system level.

Not only are the first three aspects of integration interacting but the social aspect of integration could also be assumed to interact with the other aspects which might increase the effects leading to increasing integration once the process starts. The interacting aspects of integration exist not only at system level but also at net level due to the interconnectedness of the company positions as well as their controlled transport systems.

Categorizing
The concepts of relationships, nets and transport systems are the base for differentiation of integration changes of single systems and nets. Changes in integration of relations at network level such as creation of new relations or changes within existing ones influence network positions. Such changes are assumed to interact with changes in two ways both in the transport system and in the nets of transport companies. Therefore the analysis will be divided into integration on these two levels.

Even though the changes of the relationships might be of similar types they cannot be the same since changes at system level is looking at an in-depth change of single dyadic relationship and are its interaction with single transport system/s, while changes at net level concern several relations and their interaction with changes of the total net. First, the assumption is that if the two controlling organizations of an existing transport system increase their integration, the transport system will become more integrated. Another assumption is that transport companies create new transport systems by combining transport systems from different geographical areas. This will be defined as integration between single systems. This assumption is based on the fact that transport systems have always existed and through combining parts of or smaller local existing transport systems new systems are created.

A growth process such as internationalization would indicate that only increases are taking place. However, the definition of internationalization includes periods of stagnation or even negative changes.

The change in integration is studied from the focal company's point of view. The change in the level of integration within/between systems is either combined with developing an existing or with creating a new relation.
The different integration categories are shown in two matrices of system integration (fig.4.3.) and that of net integration (fig.4.4.). These categories are different types of change processes showing the direction of a relative change to a former situation. Therefore comparisons between integration changes in relationships and nets can only be made as to their differences in direction and to the type of change process involved.

Integration at system level

The single system matrix is divided into four types of changes in integration taking place either within or between systems using newly established relation or an existing one. A relation is here defined as a direct relation to the focal company.

<table>
<thead>
<tr>
<th>Within system</th>
<th>Existing relationship</th>
<th>New / leave of relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change in closeness of cooperation</td>
<td>Switch of representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i.e. Leave of relationship new relationship</td>
</tr>
<tr>
<td>Between systems</td>
<td>Change in field of cooperation</td>
<td>New / cessation of (system) cooperation</td>
</tr>
</tbody>
</table>

Figure 4.3. Integration at system level

The changes in each square of figure 4.3. have been interpreted as follows and are discussed below. As has been mentioned earlier, the integration within the transport system is handled by a dyad, i.e. a focal company and its representative.

*Change in closeness of cooperation* follows from increased integration within an existing relationship of the focal company and a representative within a transport system. This increased integration in terms of any of the four aspects, can be legal, social, execution or control. An increased integration within an existing relation would lead to stabilizing the relation between the two controlling parties. Changes in closeness of cooperation are based on the assumption that the changes of the systems are smaller alterations and not larger structural changes leading to changes in the type of systems. An increase in closeness is assumed to automatically happen when the focal company acquires the agent. The result of internalising a focal company gets more directly controlled resources which is seen as closer cooperation in the legal aspect.
Change in the closeness of cooperation might also involve the adding new complementary activities within the same transport system e.g. warehousing, packing.

**Switch of representative (leave of relationship/new relationship)** is built on the assumption that the transport system, as such, is basically unchanged in functions and design and that the new agent will perform almost the same activities as the old. It might also mean leaving an agent when the focal company makes a greenfield investment.

**Change in field of cooperation** is the case when there exists a cooperation between two organizations which will be enlarged include more or other types of transport systems or be restricted to a more limited field. It is based on the assumption that the new field of activity is separate from the existing ones. In practice, **enlargement** of the field of cooperation might be exemplified by adding another transport system (traffic) together with the same representative.

**New / cessation of (system) cooperation** means that a new transport system is created that is different from the existing one, involving a new representative at the other end. In contrast to that of switching representative, the change will include larger changes of the transport systems like restructuring, changing to a new type of system, etc. The negative parallel to the new cooperation would be when the cooperation and the specific type of transport system cease to exist either through leaving the area or changing into a new type of system.

**Integration at net level**
As the number and interdependence of different systems controlled by organizations increase at systems level it seems reasonable to believe that this will result in integration within or between **nets of companies** rather than just dyads.

When does a cluster or net of organizations exist? How many organizations have to be involved? Where should the borders for the net be set?
The net is defined as limited to include representatives which are directly related to the focal company or indirectly related through some of its existing important direct relations.

The transport companies are not all part of a net. In order for a net to be said to exist there should be an awareness in the net of the interdependence. Operationally, reorganization of international activities, choice of representatives, changes in representatives, etc. can be a sign that the focal company might be aware of the interdependency between the organizations in the net. Changes at system and net level interact. However, several relationship changes taken together are assumed to be needed in order lead to a change at net level. A single system change influencing only a dyad will have a too marginal effect to be accounted for at net level.
What are the possible changes taking place at net level? The basic changes seem to concern either changing the size of the net and/or the cooperation between and within the relationships of the net. This can be seen and described in different ways. Håkansson & Lundgren (1992) mentioned coalescence and dissemination as the two dominating change processes. Mattsson (1987) discusses changes in terms of expansion and contraction of the size of the network. Cook (1983) talks about power balancing using extension and consolidation of net as examples of changing power of a net. Astley (1985) discusses closure of a net which means that the number of direct relations within the net increases. Finally quantitative network analysts discuss this in terms of distances, number of paths, etc. in the network which then is the base for identification of cliques and clusters.

Utilizing the concepts of relations and net, the changes in the degree of integration of a net will be classified into four different types of change processes, based on whether they occur within or between nets and with existing or new relations (see figure 4.4.). The changes are seen from the focal company’s net perspective. The change is assumed to involve two or more relations to be registered as a change of the net.

<table>
<thead>
<tr>
<th>Existing relations</th>
<th>New/leave of relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in closeness of cooperation</td>
<td>Closing up/ Opening up</td>
</tr>
<tr>
<td>Drifting (closer/ away)</td>
<td>Joining/ leaving net(s)</td>
</tr>
</tbody>
</table>

Figure 4.4. Integration of net level

These categories have been interpreted as follows and are discussed below.

The category *closeness of cooperation* is important from the network perspective when two or more existing relations within a net are changing in the same direction within a limited period. An example of this is attempts to homogenize the transport systems within a net, for instance adopting the same type of communication systems.
Drifting closer or drifting away is a form of development of existing relationships between organizations which belong to different nets which over time are moving closer to or further away from each other. Drifting implies a gradual change over a period of time. It is based on a change in priorities of certain relations that will lead to integration between two nets of transport systems. Drifting means that through an increase or decrease in integration in a relation between specific organization/s, a number of organizations of another net will move closer to or away from the focal net. The change in integration is assumed to be made through changes in the existing relations of the net or with the consent of firms involved in existing relations. An example of this might be that the focal company and some of its subsidiaries in existing relations cooperate closer to an agent and a sister company/subsidiary of another net leading to infrequent cooperation with other sister companies or subsidiaries of the agent in other areas. Some of these changes might be a result of gradual switching for specific agents belonging to another net as well. Such a change could be a result of continued closer cooperation and enlargement of a specific relation at system level. Another example of drifting closer is when a company acquires another company having many other international traffics. Through this acquisition the nets of the agents of the acquired firm are drifting closer to the focal company. Drifting does not change the net size but it affects the possibility for changing the net size in the future.

Closing up/opening up reflect changes in terms of number of relations in the net and the density of the net. Closing up is defined as an increase in the number of relations between the existing organizations in the net and might lead either to unchanged or a reduced net size. The final stage can be compared to what Astley (1985) discusses as "closure of a net". This case could be interpreted as moving towards a closure of a net leading to high interdependence between organizations and high complementarity in the net. It will then be increasingly difficult to let new organizations into the net.

Opening up, i.e. dissolving and/or widening a net is assumed to lead to a lower density in the net and the net will be more loosely structured. The density can decrease if the number of relations between the existing organizations within the net decreases or when a marginal change is made by adding an organization from the outside. The changes through widening are seen as marginal for the existing net. Making marginal changes of this type, adding organizations one by one through establishing new (system) cooperations at systems level over time, would lead to a gradual expansion of the net.

Joining or leaving nets means that a large and major part of the net is changed. Through leaving or joining a net a number of relations begin or end within a very limited period of time. Quite often these are radical changes for the focal company. An example of this is the acquisition of a large international company with many subsidiaries and agents that would lead
to many new relations with the existing net. Another example could be splitting a highly integrated net when a large group of companies are leaving the net almost at the same time.

Changes in resources in the domestic market for foreign activities will be taken into consideration indirectly at net and system level as prerequisites for changes in integration when the number of international transport systems increases or decreases. Cooperation taking place in many different functions like marketing, operation, finance, etc., with many agents presumes certain amounts of the same types of resources in the home country.

The changes taking place in the process of internationalization discussed in these matrices on integration show different ways to internationalize but they do not consider the actual time that it will take to go through the changes or when they start. Theoretically the discussion of speed and timing have played an important role, in general, for analysis of the internationalization process. However the concepts have not been specifically applied to the process of integration as in this case. Speed applied to the concept of integration will concern the time it will take for the companies involved to reach the degree of change intended. It can be exemplified by the speed with which the opening of a net lets new organizations come in or the choice of alternative ways to integrate such as taking a faster route through joining an existing net. The definition of timing is simply when something happened.

**Operationalization of integration**. Legal integration is rank-ordered as follows - no formal legal agreement, formal agreement, minority ownership, joint ventures, majority ownership and full ownership. Social integration is defined in terms of the existence of personal contacts. When a new relation is created it is assumed to involve social integration. The degree of social integration changes with frequency and number of personal contacts. Signs of increasing social contacts are personnel exchange between organizations, common marketing campaigns, adding new services needing common activities, etc. Control integration concerns the division of the control of the transport systems or net and to what extent the resources are shared between the organizations. It will be measured in terms of the extent to which the organizations add or take away responsibilities or new controlled resources to the system or net and to what extent they share and give the other party access to these. It concerns not only the division to the representative but includes also changes in the total resources controlled for the dyad and for the focal company in relation to other companies at net level. Examples are to share strategic planning activities, to share important information about customers and suppliers to a larger extent, set up new routines for better communication and access to each others technical and marketing resources. Finally, execution integration will be measured via actions taken to increase the efficiency of the physical flow of the transport system leading to a better utilization of the resources of the focal company and the representative.
Extension - definition and operationalization

Extension is an important concept for internationalization since it concerns the number of countries with or within which a company has business activities. The concept is more structural than processual, making us think in terms of a certain structure of a number of countries. A possible way to make the concept more dynamic would be to discuss the possibility of waves of widening and contracting of the extension dimension.

Increases in extension is defined by Johanson & Mattson (1988) as establishment of positions in relation to counterparts in national nets that are new to the firm. It means that a new country is involved as well as a new relation is established.

Extension is changed stepwise and once the focal company has a direct relation to one country it is extended to that country. The concept accumulates the number of countries to which a company is related. Extension has a limit when all different countries of the world are covered for the focal company.

Further, extension is a key concept for the internationalization theories since to extend to another country is a base for continued internationalization. Extension is also discussed in many different ways in terms of the number of countries that the company is extended to but also the speed, the timing and sequence of extension.

The extension of the focal company would be dependent on the net size. The extension at system level is always direct for the focal company while at net level the focal company can be extended through the focal net via a representative.

Waves of changes in extension such as widening and contracting of nets would include an increase and reduction of the number of transport systems. The fact that a subsidiary internationalizes would lead to certain problems when we discuss the extension of the focal company. Suppose the focal company situated in Sweden has a subsidiary in Germany which has internationalized to several other countries in Europe. To what extent will this increase the extension of the focal company?

As has been discussed by Forsgren (1990) and Forsgren & Holm (1990), when companies grew larger internationally over time, the same type of process that took place for the focal company seemed to apply to its subsidiaries. The subsidiaries will often change into centers of their own and internationalize. This is called secondary degree of internationalization and the whole net of the focal company is discussed in terms of such a multi-center firm. In line with this, we will call the creation of the first new relation between a specific pair of countries a
secondary degree of extension. This way the focal net will show increased extension for the focal company indirectly and directly for the focal net. (See figure 4.5)

![Diagram of extension dimension](image)

**Figure 4.5. Extension dimension**

First degree of extension to a specific country cannot take place more than once for the focal company, while the secondary degree of extension can take place several times.

*Operationally extension for the focal company will be measured in first degree as the number of countries to which it is directly related. Secondary degree of extension concerns number of foreign countries to which the focal company is indirectly related via internationalization of subsidiaries or agents. The order in which the focal company is extended to different countries will show the sequence of the extension. The speed is defined as the length of time in which the sequence is performed. Finally the timing is defined as when a company starts to establish a relation between two specific countries.*

**Penetration - definition and operationalization**

Penetration is the third dimension of internationalization. It is an important complementary dimension to the other two since it concerns the resources and relations of the focal company that are engaged for a specific country.

Johanson & Mattsson (1988) define penetration as developing the positions and increasing the resource commitments in country nets (markets) abroad where firms already have positions.
This definition concerns basically the extended position concept (Johanson & Mattsson, 1992), i.e. the relationships and the resource commitments.

An increased resource commitment might involve either more resources of the same type or a differentiation of the resources. When many different types of resources are available this is assumed to lead to a higher flexibility towards customers’ demands and give rise to more contacts. Types of services are used as a proxy for measuring differentiation of resources. This is based on the assumption that new types of services lead to higher differentiation.

The other part of the concept concerns the relations in the foreign country. Discussing the position of a focal company, the number of relations engaged in a foreign country will be of importance. Assuming that representatives each adds new relationships, the number of subsidiaries and/or agents in the country can be used as one proxy when measuring the position and the types of services as another proxy.

Changes can take place either through new relations and/or through changes in resources. The term position in a network is seen as a result of investments in relationships. This would indicate that the two conceptual parts, relations and resources, interact.

Penetration at net level will also change with the degree of indirectly controlled and directly controlled resources, since all the resources of the subsidiary are automatically included. The amount and differentiation of the resources of the subsidiary are dependent on their total activities. If the subsidiary internationalizes this will increase the resources of the subsidiary whether it concerns the existing types of services or new types of services. Internationalization of an agent also give the focal company more resources related to net level as well, if the focal company uses the agent’s international traffics.

In this study, we shall have to include the focal company resources and relations engaged for a transport system or for a net wherever they are situated geographically since relations and resources might be geographically dispersed. This is especially so between the home country and a foreign country. Therefore resources and relations engaged in home country for a specific foreign country should be included in the measure of penetration.

An intrinsic problem defining the engaged resources of an agent is that only small shares of the total resources of an agent might be engaged. These small shares might on the other hand be spread out on many different types of resources. When changing to a subsidiary the differentiation of resources will therefore sometimes decrease. This phenomena could be explained in terms of asset specificity where the directly controlled resources have a higher asset specificity and cannot perhaps be used as easily for other purposes.
Based on the assumptions above concerning relations and resources, the dimension of penetration is assumed to change depending on existing or new representative relations and existing and new types of services that are involved in the change.

In contrast to integration, a switch from one agent to another does not matter as long as the transport systems do not change in the amounts of resources or differentiation of resources.

The different aspects of penetration for an international transport company are described in figure 4.6.

The assumption in the matrix is that the same type of services for a single foreign and home country use almost the same types of resources, while a different type of service or services to other countries or subsidiaries involve differentiation of the resources. The combination of types of services as indicators of resource differentiation and the number of representative relations engaged for a country will together give the position of the focal company in that country. System as well as net level are represented in the figure 4.6.

Figure 4.6. International penetration - categories

The first category in figure 4.6. is when change in size of the relations leads to changes in the degree of internationalization. For example, a growth in the volumes will probably lead to an increase in quantities of resources for that specific country. At net level it would include a subsidiary expanding within the existing types of services whether they are international or domestic.

For spread of relations it is assumed that the number of relations in existing types of services will influence the amount of resources. This category only concerns net level. An example of this is adding more representatives of the same type in a country.
Scope of relations within a specific country concerns both system and net level. This is the case when the types of services performed together with the existing representative/s increase or decrease. This will lead to a differentiation of resources when a new type of service is added. This category has specific importance at net level when the focal company has a subsidiary in the country. As the subsidiary expands internationally it is assumed to increase in the size of relations but also sometimes increases in the scope of the relations due to the adding new types services.

The last category concerns the net situation when both the relation and the type of services are new to the focal company leading changes in diversification of relations within a country. An increase is assumed to further differentiation of the resources as well as add to the number of relations in the country.

Furthermore it seems important for reasons mentioned earlier to take the speed and the timing of penetration into consideration.

Interaction between and within the three dimensions of internationalization

The three dimensions of integration, extension and penetration will be combined into a dynamic model to be used for analysis of the internationalization process of the cases. The construction of the final model for analysis is divided into interaction between the international dimensions and effects of the internationalization process. The first part is focused on the dynamics while the second part more explicitly brings the context into the model.

Up to now there has only been a discussion of interaction between different aspects within the three dimensions of internationalization. In this section, we will discuss to what extent there is interaction between the dimensions as such.

A transport system must have at least a minimum of integration in order to exist. Thus in the creation of an international system integration must take place. The integration for a new system will either take place between countries or within a foreign country to be considered international. When the transport system to a new country is created it will result in extension which is a prerequisite for the first penetration in that country. Thus, by definition, there is a certain interaction between the three concepts when creating new international transport systems. The same thing takes place at focal net level but in this case it might be a subsidiary or a very close agent to the focal company that internationalizes resulting in a secondary degree of extension of the focal company.

When extension has taken place to a country, how do the concepts interact then?
The different types of integration at single system and at net level seem to interact with the different aspects of penetration. Basically, adding a new relation will show an increase in both penetration and integration. On the other hand, increased integration does not necessarily lead to any increase in penetration at all in terms of amount of resources. In fact, there are many influences between the dimensions of the process of internationalization that we do not know anything about. To what extent these interact and in what directions the interaction goes we shall hopefully find out through the empirical study.

Johanson & Mattsson (1984) assume that all three dimensions are always present and that some play a more important role for the early starter, late starter, etc., but they do not explicitly discuss to what extent the dimensions interact over time.

![Diagram](image)

Figure 4.7 Interaction of the dimensions of internationalization

In general, not only will the three different internationalization dimensions interact but so will changes at system and net level as well because the micro and macro level obviously are interdependent.

Since we are interested in the dynamics of the process of internationalization, interaction between the three dimensions would be of vital importance for understanding how patterns of internationalization change over time.

4.3. Effects

In order to show the dynamics of the internationalization process from a contextual perspective, the effects will involve not only focal companies and their representatives but also other transport companies such as suppliers, owners and competitors. These other companies might have direct or indirect relations to the focal company.

The changes and effects on the focal companies will be part of their process of internationalization and will therefore not be presented as effects. This is also true for some of the representatives whose process of internationalization is studied in the empirical specific events.
However, there are direct or indirect effects on other transport organizations such as competitors, suppliers or owners and these will be described to the extent that they are known. The positive and negative connectedness within and between transport systems and nets indicates that there will be effects present.

The effects from the changes of the focal companies or focal nets might lead to changes in positive or negative connectedness for the involved organizations at system level and to changes in the structure of the net.

Positive and negative connectedness are easily understood at systems level based on changes in integration like switching of representative, new cooperation, etc. On the other hand, nets can also be negatively or positively connected but this would seem to be less readily understood. Therefore the concepts of complementarity and overlapping will be used to describe positive and negative connectedness at net level.

Complementarity is a basic concept used in the network approach and means that the resources and activities of two organizations complement each other. For a specific transport system the resources and activities of the companies basically complement each other since each company fulfils different functions.

Nets overlap geographically if they are represented in the same areas and if their activities overlap to another net if they perform the same activities. Overlapping might cause conflicts between organizations and therefore lead to negative connectedness between nets.

There are four different categories describing complementary and overlapping which are of importance between transport companies as shown in figure 4.8.

![Figure 4.8. Complementary and overlapping areas and services.](image-url)
If nets are overlapping in one sense and complementary in the other sense this might create possibilities for positive development. On the other hand overlapping in both senses indicates towards full competition.

A discussion of complementarity and overlapping will help us to understand the behaviour of companies in their internationalization processes through seeing changes in the nets of related companies. E.g. nets moving from C/C towards C/O or O/C and then toward O/O would have to expect an increasing degree of actual conflicts between the relationships within or between the nets, since competition increases within the net and problems of leakage and spillover of intangible assets will be enhanced. Thereby it will include changes of other organizations in the context.

Indirect and direct relations in combination of the degree of positive/ negative connectedness of systems and overlapping/ complementarity of nets will be of basic importance when describing how the patterns of internationalization interact with that of the context.

Before we turn to the case studies we summarize the model of analysis in figure 4.9.
Internationalization processes of transport companies

In Nets of Representatives
Relationships
Transport systems

Measured in terms of

Three Dimensions of Internationalization

<table>
<thead>
<tr>
<th>Integration</th>
<th>Extension</th>
<th>Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspects:</td>
<td>Aspects:</td>
<td>Aspects:</td>
</tr>
<tr>
<td>Legal, social, execution, control</td>
<td>First degree</td>
<td>Size of relationships</td>
</tr>
<tr>
<td>Changes at System level:</td>
<td>Second degree</td>
<td>Scope of relationships</td>
</tr>
<tr>
<td>Closeness of cooperation</td>
<td></td>
<td>Spread of relationships</td>
</tr>
<tr>
<td>New/cessation of (system) cooperation</td>
<td></td>
<td>Diversification of relationships</td>
</tr>
<tr>
<td>Switch of representative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in field of cooperation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes at Net level:</td>
<td>Sequence</td>
<td></td>
</tr>
<tr>
<td>Joining/leaving nets</td>
<td></td>
<td>Speed and timing</td>
</tr>
<tr>
<td>Closeness of cooperation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing up/ opening up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drifting closer/away</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed and timing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effects on suppliers, competitors, owners

Aspects:
Positive/ negative connectedness
Overlapping/ complementary

Figure 4.9. Major concepts in the model of analysis
Part III Case studies - description and analysis

The case studies are presented one by one in time order and will be discussed in the terms of the concepts and the model developed above. The cases will be divided into decades except for the first period. In the case of ASG, the first period and the second period are prolonged to 15 years since the material during these early periods is less rich than during the last 20 years. The first period of Bilspedition was for the same reason also 15 years. Inter Forward on the other hand has only existed from the beginning of 1988.

In the ASG case their overseas development is included and divided into the same periods as European development. However in the general cases analysis overseas and European development are joined. This gives a richer description of ASG than in the other cases.

There are three main parts involving the case studies a) the description of each case b) the general case analysis c) the event analysis. The first two parts are discussed for each case separately in chapter 5, 6 and 7. The general case analyses of the three cases are then summarized and compared between the three cases in chapter 8.

The descriptive part of the cases include both the general development of the companies and the specific events while the general case analysis is concentrating on the general development of the focal companies using the specific events as a support for details and for interpretation of the development. In the third part, the event analysis, we focus on dynamics and the context analysing specifically the events and use the general development of the firms as support in order to seek for sequences of changes and effects over time. The dynamic analysis will then be the base for the construction of a dynamic network model of internationalization.

Finally the total empirical results based on the general case analyses as well as the event analysis are summarized at the end of chapter 9.

For those of the readers that are less interested in the details and want a quick skimming of the case, read the general development and the summaries at the end of each period and each event.

5. ASG
5.1. Case description
5.1.1. Group- international development
5.1.2. Europe - development (general development and specific events)
5.1.3. Overseas international development (general development and specific events)
5.1.1 ASG - Group international development

General development and ownership-structure

ASG was established in 1935 as the inland transport arm of a Swedish shipping line, Svea Rederi AB. The international side of ASG’s activities started during the war with transports for the Aid organizations in Sweden which were sending necesseties to refugees in the war-devastated countries in Europe.

<table>
<thead>
<tr>
<th>Year</th>
<th>Parent turnover (Msek)</th>
<th>Group turnover (Msek)</th>
<th>Result (Msek)-Parent</th>
<th>Result (Msek)-Group</th>
<th>No of employees-Parent</th>
<th>No of employees-Group</th>
<th>No of employees abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>412</td>
<td>1296</td>
<td>-0.5</td>
<td>19</td>
<td>1784</td>
<td>4695</td>
<td>422</td>
</tr>
<tr>
<td>1970</td>
<td>610</td>
<td>2761</td>
<td>16.5</td>
<td>2</td>
<td>2447</td>
<td>4289</td>
<td>597</td>
</tr>
<tr>
<td>1975</td>
<td>1012</td>
<td>3279</td>
<td>15.8</td>
<td>2</td>
<td>2705</td>
<td>5171</td>
<td>1066</td>
</tr>
<tr>
<td>1980</td>
<td>2187</td>
<td>4279</td>
<td>36.2</td>
<td>6</td>
<td>3357</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>3200</td>
<td></td>
<td>16.5</td>
<td>3117</td>
<td>3117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>5489</td>
<td></td>
<td>36.2</td>
<td>3512</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.1. Some facts about ASG

The international activities grew at a very rapid rate, particularly in connection with the rebuilding of European industry directly after the war. Over time, the international side of the Group has increased its share of total Group turnover, which amounted to SEK 7,312 million in 1989, to around 46%.\(^3\) Within that figure, foreign subsidiaries had a turnover of around SEK 1,308 million in the same year, in other words some 17-18%.

The ownership structure has changed five times during ASG’s 50 year history but the major shareholders have always been transport companies, with Svea Shipping Line and SJ always the predominant owners, the latter for the last 30 years (see figure 5.1.2.).

The fact that other transport companies have been the owners of ASG has had both negative and positive effects on the development of the company. The fact that the services offered by ASG were complementary to those of the owners contributed to some extent towards expansion but resulted in restrictions being imposed in other respects. One specific restriction was that ASG should not own the means of transportation. Exceptions to this rule had to be

---

1Excluding VAT and Customs duty
2After depreciation and financial income and expenses but before extraordinary income and expenses and appropriations and income tax
3Concerns the degree to which the turnover comes from international activities both in Sweden and abroad
made occasionally where trucking companies vital for the geographical traffic network faced crises of one kind or another.

At the same time there have also been conflicts of interest as between the owners when it came to investment priorities. Periodically these conflicts have been quite intense, especially as between ASG-T and the Swedish Railway.

1935-41  Svea Shipping Line 100%
1941-59  Svea Shipping Line 50% and
       Swedish Railway(SJ) 50%
1959-65  Swedish Railway(SJ) 100%
1965-67  Swedish Railway (SJ) 95% and
       Association of the trucking companies engaged in
       ASG (ASG-T) 5%
1967-80  Swedish Railway (SJ) 67,5%
       Rego ( Broström, Transatlantic, Lloyd, JohnsonLine ) 25%
       ASG-T 7,5%
1980-90  Swedish Railway 75%( from 1986 via Swedecarrier¹)
       ASG-T 25%
1990- Introduction to Swedish stock exchange
       Swedecarrier 59% of the votes, 41% of the shares
       Other owners (Trelleborg, Skandia, private persons, etc)
       41% of votes, 59 % of the shares

Figure 5.1.2. Owners of ASG to date

Even though ASG commenced operations as a domestic transport organization, linked first to Svea and then to SJ, the situation changed over time. The development of the door-to-door concept and consolidation traffics, but particularly the former, played an extremely important role in this context. To offer a door-to-door service meant taking full responsibility for the total transport of the customer’s goods instead of merely playing a complementary role to that of the owners. This development also increased competition between ASG and its owners. A disturbing factor was that SJ marketed its own domestic consolidation traffics in direct competition with ASG. Very often SJ and ASG even operated out of the same terminals, hardly a satisfactory arrangement. This situation grew steadily worse until 1987 when SJ decided to leave its costly consolidation traffic to the forwarders. ASG benefitted by taking over a large part of these operations. For ASG, the addition of SJ’s consolidation traffics meant increased utilization of existing facilities which had positive effects on profitability. This caused a slight increase in the share of the domestic activities and a decrease of the international share of ASG.

¹ Swedecarrier was a newly established holding company fully owned by the Swedish Railways. This change brought new members to the Board of ASG which came from the Swedish industry instead of from SJ.
The role of the ASG trucking companies, which were normally rather small, was mostly that of partners and subcontractors. Certain conflicts in the division of work did occur between ASG and the trucking companies which, lacking marketing resources of their own, regarded ASG as their marketing organization with themselves as the dominant partner when it came to domestic traffics. SJ and the shipping lines had their own marketing resources. As the international business grew, the role of ASG increased in importance while the importance of the role of the domestic trucking companies decreased. This created certain conflicts with ASG-T, partners in ASG, since they were dominated by domestic trucking companies and their interest in international development was limited.

5.1.2. Europe- development

5.1.2.1. Period 1940-54

Development of services

By 1939, ASG had already developed domestic traffics that spanned the country. Using a combination of agents and 140 trucking companies they had established what they called door-to-door traffics throughout the whole country. As a result, they had developed into being one of the dominant transport companies in Sweden.

ASG’s first international transports, for aid organizations both during and directly after the war, were to the Nordic countries, Austria, Hungary and Switzerland. The contacts created during these first transports were very valuable when establishing more regular traffics later on. As the roads in Europe had largely been destroyed and as trucking transports were subject to many restrictions, the railway provided the only alternative over long-distances and the first regular international transports by ASG followed the form of railway consolidation.

Regular traffics were established to several destinations in Europe within a few years of the war-end. In the beginning of the 1950’s ASG serviced a large number of the European countries with railway traffics.

The ASG takeover directly after the war of the domestic railway consolidation of another company, TransportKompaniet (TK), facilitated the creation of an operational and knowledge base for the rapid expansion in railway consolidation in Continental Europe. ASG, as the leading forwarder at the time, had concluded an agreement with the Swedish customs in 1942 to carry bonded goods - transit goods not yet declared - to the customs inland warehouse, which was another important factor in its development.

The growth in trade made for expansion, although export transports were to remain greater than imports for some years after the war. Industry in the war-devastated countries was in course of reconstruction. Imports increased when industrial production re-established itself in Europe.
ASG became very successful in its railway consolidation, combining its railway know-how with its proven door-to-door concept. In some areas, such as Eastern Germany where ASG had about 80% of all consolidated goods, ASG totally dominated the market.

In order to develop international door-to-door transports, a fixed price had to be set for the whole international transport. Competitors came out in strong opposition to this, as they regarded all-inclusive pricing of this nature to be a way of dumping prices on the market. As a direct result and for many years, ASG was shut out from becoming an associate of the Forwarders’ Association in Sweden.

Basically what ASG had done was to assume a greater level of responsibility towards the customer than was normal for the traditional type of forwarder. This responsibility, which was mainly for consolidated goods, helped to create efficient door-to-door traffics.

Another important development towards the end of this period was the extension of the use of pallets, previously mostly confined to local transports, to long-distance transports so as to gain greater efficiency in the railway consolidation traffics.

However, as it transpired, the European railways had the greatest difficulty in coping with the enormous increase in railway transports in the period directly after the war. Their capacity was too low at the beginning of the 1950’s, resulting in many disruptions, long transit times, heavy pilferage, loss of goods, etc. This situation, in combination with the rebuilding of roads and the new truck technology, shifted the competitive advantage in favour of road transportation. It was in 1953 that the economic result per ton for ASG’s railway consolidation traffics actually decreased for the first time.

Representation in foreign countries

As ASG developed railway consolidation traffics in Europe between a number of European areas and Sweden during the 1940’s and beginning of the 1950’s, choosing agents was one of the more important tasks of management.

Representation in the form of agents was the natural choice at the time for ASG after the war and many of the agents were already established railway agents and as such well known to SJ.

As a result of the development in railway consolidation, ASG had agents in a large number of countries in Europe in the beginning of the 1950’s. In 1953, however, the ASG Board decided that ASG should concentrate on land transportation and on what were considered the twelve most important countries which were East and West Germany, Switzerland, Czechoslovakia, Hungary, Italy, Bulgaria, Yugoslavia, Austria, Poland, Norway and Denmark.

There were more agents than countries, however, since in some countries, such as West-Germany, agents were restricted to smaller local areas. There were other countries, such as Finland, where ASG also had agents. These were of lower priority because their traffics partly involved sea transportation. France was another country where ASG had an agent but consolidation traffics, via boat to Antwerp, had failed.
The agreements between agents and ASG during the 1950’s and the 1960’s were highly informal. The cooperation could therefore be terminated by any of the partners at short notice. Most of the agreements between ASG and the different agents, whether written or unwritten, were based on the agent being granted exclusive coverage of a certain area. Basically, all agreement were bilateral.

The new agent Natural will illustrate in more detail some of the important changes during this period (p.105)

*Organization and investments*

An effect of the growth in international activities was a new way of working, since international traffic involved new functions and new personnel both in operations, marketing, communication, etc. The requirements placed on international personnel were also different due to the need for knowledge of languages, foreign cultures and more complicated routines and rules. The international operations remained highly dependent on the domestic operations for facilities, sales, administration, etc.

The growth, the higher qualifications needed and the travel even made the international side of the company more attractive, causing internal competition for personnel.

The risks were higher in the international than in the domestic traffics since the fixed costs were higher. In the domestic traffics, the basic agreement was that ASG got a commission on the revenue of transports sold while in international traffics ASG got paid according to mileage and time. In the domestic traffics the trucking companies took the main risks while it was the other way around internationally.

During this period of growth in the international transport systems, the Swedish organization changed both in size and structure. The international activities, which were limited in size compared to the domestic, were organized at head office level into a department for international transports and a special department for international railway tariffs. The operations were performed by only a handful of the local offices in Sweden. In all, the separate investments made for the international traffics during this period were mainly, with a few exceptions, in know-how and people and less in offices and terminals.

*Summary of period 1940-54*

ASG developed door-door railway traffics with local agents to 12-14 foreign countries. The agreements with the agents were exclusive and mostly informal. The international development, which was very successful, led to the creation of some new departments at head office. The international know-how and number of employees increased.
5.1.2.2. Period 1955-69

Development of services

From the mid 1950’s and during the 1960’s ASG trucking services grew as a complementary service as well as in substitution for rail consolidation. However, the combination of ASG’s strong position and high profitability in railway consolidation and the ownership and opposition of SJ had caused a delay in the acceptance and expansion of international road transports for ASG. Another factor that probably contributed to the delay was that the agents were mainly railway agents, in many cases owned by the railway companies. Few of these agents had any interest or know-how in road transportation.

ASG applied to Biltrafiknämnden (the Board of International Trucking) for international trucking permits several times in order to organize road transports to European destinations but the bulk of these applications were rejected, SJ being part of the Board. In 1958, ASG had only 6 trucks in regular traffics on the continent of Europe. It was not until the beginning of 1961 that ASG received a larger number of permits (137) from the Board of International Trucking and a year later they received another 324 permits as well as the possibility to expand a hundred existing destinations. Also, as the permits were mainly restricted to transports to/from specific areas in a given foreign country.

At this time the railway consolidation had declined considerably in importance, which ASG had begun to feel. In 1963, railway transports decreased by 400 tons while trucking transports increased by 27,000 tons.

An important step towards more effective transports was taken in 1962 when ASG obtained permission from the Customs to take bonded goods to an approved and controlled warehouse in ASG’s own inland terminal.

Not only trucking transports but also airfreight and later on sea-freight were developed during this period. This caused ASG to place emphasis on the fact that they could offer international transports choosing between the different means of transportation. Moreover, during this period ASG assumed full responsibility towards the customer for all goods transported by ASG in its own name. When Nordic Forwarding Association (NSF) finally accepted these practices in 1974, ASG had been working in this way for several years. This responsibility on the part of ASG for the total transport system as a freight carrier and forwarder facilitated the possibility to choose the most suitable means of transportation.

The technological development increased the competition between air and sea transports. As the airlines grew and the aeroplanes were further developed, it became possible to organize airfreight on a larger scale and it became an alternative to other means of transportation for certain categories of goods. At the end of the period when containerization in combination with faster ships was developing, this competition became obvious. Containerization made it possible for ASG to establish its own international traffics for sea-transports.
Representation in foreign countries
The demands on the agent were very different for trucking transports than for rail consolidation. In order to have a profitable road transport the truck also needed goods for the return trip. This implied that the agent had to market the service to customers in order to establish a regular traffic. It was a new way of thinking for many agents. Many of the existing rail agents were not able or not willing to take on this new type of service. This resulted in the number of agents being extended further. This was especially the case for short and medium distances where the truck offered a competitive alternative. Due to this development the conflicts increased between ASG’s agents. For some agents like Natural i Switzerland, Saima in Italy, etc., this change did not create any big problems since they had had their own earlier development into trucking services or due to the fact that the rail continued to exist as a competitive alternative because of the long distance.
In the beginning of the 1960's, when ASG had got most of the trucking permits they had applied for, many of the rail agents lost market shares to trucking services. Some rail services over shorter distances had to close down after a period of competition. Even though some of the railway agents left and some of the existing agents took on the new services during this period, quite a few new trucking and airfreight agents seem to have been appointed. Therefore the total number of agents increased.
During this period ASG established its first international offices. The very first was a sales office in Berlin established in 1955. An airfreight subsidiary was established in Copenhagen in 1959 and one in Hamburg in 1960 for trucking services. In Denmark, as well as in West-Germany, the subsidiaries were situated in transit places for their type of traffics and they had a certain coordination function to begin with. In both cases, there were other agents in the country. In Denmark there was another agent for land-transportation and in West-Germany there were a large number of local agents but in other local areas. The sales office in Berlin was closed down after a couple of years and the agent took over the main part of the activities. New sales offices were opened in Düsseldorf and London in the mid 1960's but even these new sales offices were closed down after a couple of years.
The functions of these sales offices were basically to support existing operating agents in the country in their marketing activities, to get "routing orders" for freight being paid by the receiver, give feed-back of the market development to the Head Office, give information as to the quality in the transport services offered by the agents together with ASG and finally to be supportive to the Swedish customers abroad. Most offices only had 2-5 persons employed.
In the discussions with the agents, ASG always demanded the right to handle the procurement of the long-haul trucking services. If the agent did not agree, either because it had the same policy or did not want to accept this type of domination, the cooperation did not come through. It was only in very specific cases that ASG accepted some other type of agreement for trucking
services. Therefore the normal agreements specified that ASG should decide what subcontractors to use for the trucking traffics.

Adherence to this one reason for starting the early representative offices was that ASG was responsible for setting the price for the main part of the transport system. This caused difficulties for the agents to make special agreements with the large customers.

The specific event involving Switzerland and West-Germany can well illustrate some of the changes taking place during this period.

**Organization and investments**

In the re-organization in 1967, the international transports were combined in a functional organization with domestic activities. The new functional organization was divided into operational, traffic, marketing, administration, accounting and planning and development departments. The new traffic department were divided into special sections for road, rail, air and seafreight. The new departments were all working in close contact with the local Swedish offices and agents as well as with the international agents and offices according to their specific function.

The main investments made for the international transports were investments in terminals in Sweden. Even though the terminals were to a high degree made for the purpose of the domestic traffic, large handling and office space was also created for international traffics. Very few landtransport terminals were built primarily for international purposes.

Over time, the international activities started to create resources of their own, like the building of terminals specifically for international traffic, specialized marketing resources, administration, etc. Services like airfreight and seafreight were developed later than the European land transportation and the dependence to begin with was as much on the domestic services as on the existing international activities. The local resources for airfreight as well as seafreight were, however, to a large extent separated from both the domestic and the international transports for trucking and railway since they needed special offices at the airport or at the harbour, close to the airport or for sea-freight close to the harbour, etc.

In 1967, a smaller part of the head office sales force was specialized on larger European transport projects and also performed direct selling to large European customers.

In the same year, ASG also acquired 50% of Road Ferry and 100% of Transfrigoroute, both small Swedish firms, which had trucking operations and owned certain trucking equipment used partly in international operations. The year after they acquired 25% of the Finnish agent.

**Summary of the period 1955-69**

Trucking traffics took over both in expansion and dominance. ASG started to develop airfreight and seafreight services. The number of agents and countries increased further. Three
sales offices were established and two operating offices, one in Denmark and one in West-Germany. The responsibility towards the customers increased, which made it easier for ASG to choose the suitable mean for landtransports. Investments were made in more efficient terminals and transport equipment. Further, ASG acquired a minority share of the Finnish agent. The international activities gained in importance. Separate departments were developed for air and seafreight, special salesmen were employed for direct selling in Europe and the contacts with the foreign agents increased.

5.1.2.3. Period 1970-79

Development of services

The services of ASG became increasingly diversified during the 1970's. In addition to the basic services of consolidation, full loads and some charter transports, ASG developed new specialized services like bulk transports, hanging garment transports, furniture transports, project transports, trailer transports, etc. Most of these services resulted from technological changes and some in combination with a further adaption to the problems of the customers which made it possible to create more effective transport systems for certain type of goods.

In the course of time, ASG has created other types of services in conjunction with its customers which included logistical functions previously undertaken by the customers themselves. Among these services were warehousing, packing, consultancy on customer logistics, custom-painting of refrigerators, cutting carpets, etc. Some of these are individual services for one or two special customers while others have developed into being an important integral part of the company's total business, like warehousing, which comprised around 300,000 square meters at the end of 1970's. For example, an importer wanting to have a quick delivery could be very interested in this service in the host country and nearly all international agents and subsidiaries had or developed a warehousing capability since this became an important complementary service for the total transport system.

In 1974, there was a change which led to further possibilities to increase efficiency in the international traffics. The new customs regulations in Sweden allowed customers or their agents, the forwarder, to make their own customs declaration after a registration. ASG, like many other forwarding agents, expanded their services to customers by making customs declaration as well.

Representation in foreign countries

At the end of the 1960's and during the 1970's ASG decided to re-assess the whole network of agents in Europe. Basically, ASG was rather dissatisfied with the marketing activities of many of the existing agents, the profitability of the traffics, etc. The reasons for this, as they saw them, were their agents' expansion into other countries, a lack of marketing resources, too
small an area of representation, a lack of coordination between their marketing resources and ASG's, lack of EDP development etc. This led to an activation of closer contacts with some agents, a switch to some new agents and finally a restructuring in terms of coverage and representation for local areas. These changes seem also to have resulted in a certain reduction in the number of agents. Several airfreight agents also left their former cooperation with the land transport agents during this period, which will be further discussed when dealing with the subject of overseas transports.

ASG established new sales offices in Hamburg (beginning of 70's), Belgium (mid 70's), Italy and France (end of 70's). These were all closed down within a couple of years after which the agent or a subsidiary took over the sales activities in combination with direct sales to certain customers from ASG head office in Sweden.

In the beginning of the 1970's only the subsidiaries in Copenhagen and Hamburg remained. However, both of these had grown in size and types of services. In 1976, ASG acquired the former agent Atege in Stuttgart and a year later it established a subsidiary in Belgium. The combination of a subsidiary and agents in the same country caused certain conflicts over a period, especially in those cases where both specialized in the same type of services, as in West-Germany. They seem to have caused a certain uncertainty about ASG's future plans. The same would appear to apply in the case of sales offices.

As ASG developed internationally into new areas like airfreight, furniture-, bulk- and project transports during the 1960's and 1970's, the same problem of shifting to a new technology was present as in the case of rail and truck. The result was that many of the existing agents could not, would not or were not even asked to take on the new transport service. This increased the number of agents and subsidiaries further in the different countries in Europe. Furthermore, ASG acquired a new company ERT (European Road Transport Co) in 1979, a company specializing in international trailer transports. ERT already had established agents, different to those of ASG, in certain places in Europe. Since the companies were not merged, this meant that more agents and subsidiaries were added to the existing net.

Norway was an extremely complicated case when it came to the choice of representatives. Due to ASG's increased land transportation freight volumes and the growth of the Norwegian agent NG (Norske Godscentraler), the capacity of the Oslo terminal became insufficient for their needs and the problem was further aggravated by the fact that the agent ran into economic problems at the same time. In the attempts to solve the crises, a joint venture was created between NG and Globe, another Norwegian transport company. This new company became the agent of ASG in 1970. However, the Norwegian Railway (NSB), which was also experiencing operational and economic problems, had been helpful in the construction of the new company with a view to taking over a part of it. This happened after a short period, giving
NG-Globe a new constellation of owners consisting of NG with 1/3, Globe with 1/3 and the Norwegian Railway with 1/3

As the NG-Globe constellation ran into serious economic problems, ASG took over 70% of the agent in 1971. A year later NSB formed a new state owned company (Linjegods A/S) together with a group of trucking companies and demanded to be ASG’s agent in Norway in place of the subsidiary NG-Globe. ASG wanted a change, since the company it had taken over was continuing to experience big economic problems, and so in 1973 it reverted to an agent situation in Norway once again. The choice was in part determined by the Swedish and Norwegian Railways which demanded that ASG should take the newly created company Linjegods as an agent in Norway. Therefore the situation changed from an agent to a subsidiary and back to agent again, all within a few years.

In 1976 ASG had the possibility of acquiring 100% of a Norwegian airfreight forwarder owned by a Norwegian shipping line, but the deal did not materialize due to tax problems. However, in 1979/80, ASG was able to acquire 65% of Flygods A/S, a company related to the former NG as well as to the agent Linjegods. Apart from acquisitions and special individual cases, ASG’s agreements with agents during this period comprised a mixture of the formal and the informal. In many cases, the cooperation had existed for more than twenty years and yet there was still no formal agreement. However some kind of basic agreement always existed, whether formal or informal, which set out the economic conditions (tariffs or price-lists) for the different services, agreed policies and routines for marketing, economic transactions between the parties, etc.

Organization and investments
ASG changed the organization from a functional to a divisional structure in 1974-76. The international divisions were the Nordic, Continental, Overseas (Air/Sea) Divisions, added to which there was the Domestic Division.

The European traffics became part of the three different international divisions depending on geographical area and means of transportation. In this way the agents and subsidiaries were seen as the responsibility of a specific division. Such a separation of the transport systems was facilitated by the fact that land-transportation and airfreight at that time mostly had separate representation in the European countries as well as separate offices in Sweden.

To a very large extent the divisional structure only existed at the head office and did not really affect the situation of the local operating offices in Sweden or abroad very much. The only exception was the air/sea division which also assumed responsibility for the operating offices specialized in air and sea. On the other hand, the air/sea -overseas division was small in comparison to the other divisions of the company at that time. During this reorganization, the company consolidated itself into a Group with a special group staff.
The main investments made in Sweden for the international activities were in terminals, offices, EDP and increased know-how in all new specialized types of transports, through training and recruiting. Specialized terminals for international transports were created in Malmö and at the Skandia harbor in Gothenburg during this period and in many other instances terminals came to incorporate specialized sections for the handling of international goods.

As the international resources were distributed throughout 40 different localities in Sweden it was not only handling but also office space, special communication systems and administrative systems that were demanded. This was especially the case since international traffics needed more space in offices and handling than domestic traffics. In the terminal, the space per ton was higher due to the lower frequencies and the export packing. In offices, more space was needed because the requirements per consignment were 3-10 times greater for export/import consignments which meant more employees per consignment. Increasingly simplified Customs systems in the different countries and improved communication systems should reduce the additional demands made by international traffics.

Other important investments were the acquisition of Atege in Stuttgart, ERT and the establishment of ASG Belgium. In most cases the investments abroad have been very modest in size compared, say, to the cost of a larger terminal in Sweden. However, there has been a continuous need for working capital for expansion over the years.

It was very advantageous, therefore, that a change in the Customs regulations, allowing ASG - like many other forwarders with a reasonable share of imports - prolonged credit time, enabled the international side of ASG to contribute towards improved liquidity to the extent of SEK 150-200 million over a period of 8 years from 1974 to 1982. This also had positive effects on profits since interest rates were very high in Sweden during these years.

**Summary of period 1970-79**

ASG diversified into new services such as warehousing, logistical services etc. At the same time they developed special transports for hanging garments, bulk transports, furniture, etc. These new services were performed partly with existing and partly with new agents. This development combined with the downturn in volumes after the oil crisis created problems with non-involved existing agents, which either caused a reactivation of or a departure from their existing relationships with ASG.

Investments were made in more efficient communication systems, terminals and transport equipment in order to perform these new services in the international traffics. Increased training and recruiting also became necessary. Three international companies were acquired. Two were former agents in Norway and in West-Germany and one was a Swedish competitor specialized in trailer traffics. The Norwegian subsidiary failed economically so ASG changed to a new agent after a couple of years. Furthermore ASG made a greenfield investment in Belgium.
Finally, the international activities became as important as the domestic for the total ASG organization.

5.1.2.4 Period 1980-89

Development of services
During the 1980's, the changes in services resulted in ASG splitting up the traditional consolidation and full load transports into certain new categories, with different service standards, according to size and/or time for delivery including or excluding guarantees. Examples were small package transports, guaranteed transport within 24 hours or 48 hours, etc.

Another development resulting from the increasing volume of combi-traffics using trailers, containers or flats was that the choice of carrier became of secondary importance in some cases. This changed the situation both for ASG and its agents. The choice of the means of transportation, especially for temporary traffics, might be solved ad hoc depending on access, price and standard, while the basic and regular volumes transported seem to have been even more strongly tied to a specific supplier.

At the end of 1980's, the transports between Sweden and the individual European countries still dominated ASG's transports, even though there was an increasing share of third country transports between continental Europe and the Nordic countries. The strength of the positions in the Nordic countries contributed to this. The fact that the intra-European traffics in continental Europe had a small share was probably due fact that the ASG subsidiaries in Europe had been directed in their marketing for the Nordic countries and that the agents only had bilateral agreements.

This is also reflected in the business idea for 1988 which was expressed in the 1988 Annual Report as follows "ASG offers high quality transport, forwarding, and warehousing services to the Nordic domestic markets and to foreign markets important to the Nordic business and industry. ASG utilizes efficient transport and information systems to provide competitive advantages for the customers."

Representation in foreign countries
Up to the 1980's, there had been an increase in the total number of agents in Europe when including the expansion of subsidiaries, special transports and airfreight. During the 1980's there was a change towards concentration by having fewer representatives. The few subsidiaries added a few representatives to their existing number but not so as to outweigh the decrease for ASG, Sweden. ASG landtransports as a whole reduced the number of their
representatives by 21 between 1976 and 1989 (see appendix 3). The main reduction took place in West-Germany and France while a few agents were added in the Soviet Union.

A clear example of this concentration is West-Germany, where the number of agents has been gradually reduced (see below):

<table>
<thead>
<tr>
<th>Year</th>
<th>Agents</th>
<th>Subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955-75</td>
<td>20-30</td>
<td>1 (est.1960)</td>
</tr>
<tr>
<td>1976</td>
<td>18</td>
<td>2 (acq.end 1976)</td>
</tr>
<tr>
<td>1979</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>1989</td>
<td>3</td>
<td>3 (all included in ASG holding company)</td>
</tr>
</tbody>
</table>

In spite of the move towards having fewer representatives, ASG still has more than one representative in most West-European countries, if air and sea-freight are included. If the agents of the subsidiaries are added, the number increases still further. However the reduction of the total number of European representatives could have been higher since the concentration of several services to one agent or subsidiary does not seem to have worked out well in every case although much of the concentration has been to existing agents with long relations to ASG. In some cases there were a split again into separate agents or subsidiaries like in Switzerland, Belgium, Finland and Austria.

In 1989, the average period of cooperation with the existing agents was in excess of 20 years even when excluding the Eastern German States. Since subsidiaries numbered only 8-10 and as several were established during the 1980's, their period as representatives is shorter on average than for the agents.

During this decade ASG acquired or established four new airfreight companies in Europe while three companies were added for landtransports. In airfreight, Flygods A/S in Norway was acquired (65%) 1979/80 and ASG U.K. (100%) was established in 1980; later during the period ASG Finland and Nova Traffics in Switzerland were added. A holding company was established in Holland in 1988 for the non-German international companies. Two new landtransport companies were acquired in West-Germany and one in Norway.

Over a period of time the existing subsidiaries developed into transport companies in their own right, with their own area of coverage becoming increasingly more independent of their parent in Sweden. ASG Hamburg and Atege Stuttgart grew internationally from their areas of operation and ASG Denmark developed into one of the largest airfreight forwarders in Denmark. However, they remained much smaller than the Swedish company, with fewer agents than ASG Sweden. In some cases, their representatives are the same as ASG Sweden's but others are different (see list of subsidiaries/agents in Appendix 3).
During the 1980's, the percentage of shares held in the subsidiaries increased, ASG Belgium, Flygods as well as Nordex becoming fully owned. The only exception was Finland where ASG reduced its share in the company to less than 20% so as to remove the legal impedement against its agent from owning land caused by the previous 25% foreign shareholding in Finland. Later on, ASG established its own wholly owned company.

The expansion by the subsidiaries, however, often resulted in the establishment of new offices or small subsidiaries within their own countries.

In order to adapt to the new type of services with time guarantees and to the increase in combi-traffics, ASG in Germany set up a supporting ASG office in Travemünde to direct, decide and negotiate which companies to choose as carriers for the German traffic. The subsidiary in Stuttgart also had a special trucking company for carrying trailers and flats to/from Travemünde which were used not only for their own traffics but also on behalf of other transport companies being customers. The development of combi-traffic has also changed the usage of the railway.

The last decade has seen ASG increase the level of investments made in trailers, containers and flats.

As during the 1970's, changes became especially complicated for ASG in Norway. When the ASG agent Linjegods faced an economic crisis in 1984, ASG did not want to buy the company but Bilspeditions did. As a result and within a week, ASG and their Finnish agent had to find a new solution for their goods to/from Norway of roughly 500,000 tons/year. However, ASG had got to know the Norwegian agent of ASG's Danish agent, TK Nord. This was a rather small forwarding company named Nordex. Through Nordex, ASG obtained access to the facilities and contacts needed to take care of the vast amount of goods that ASG and Finnexpress had daily in their Norwegian transport systems. ASG wanted to buy part of the company, as well as its Finnish agent Finnex, but Finnex refused. Instead ASG bought 60% of the agent Nordex; about a year later, ASG bought the residual 40%. Many Swedish employees were stationed in Norway during the initial period and some personnel from the former agent joined. The total transport systems had to be reorganized and in the beginning period of changes there was a heavy reduction in the volumes of goods. After a year it started catching up again partly through the old contacts with the industry.

As the Norwegian agent was sold to Bilspeditions, ASG bought 100% of the former part-owned aircargo subsidiary.

In Finland, Bilspeditions did almost the same thing as in Norway, since it acquired the ASG landtransport agent, which was 20% owned by ASG. Within a short period ASG had to find another alternative. However, in this case, a subsidiary ASG Finland already existed even though it was restricted in its services to air and sea. This subsidiary expanded to include also land-transports and with the help of a domestic transport company could take care of the
existing volumes. As in the case of Norway, some personnel from the former agents joined the new ASG company.

In Denmark, there was also a change in ownership, since ASG obtained the possibility to acquire a minority (10%) interest in its agent in 1989. As the dominant partner, ASG had held a seat on the Board of that company for almost twenty years.

Furthermore, in 1990 ASG acquired the majority in the Swiss airfreight company and changed in Holland from the very old agent, van Gend & Loos, to a new agent. The old agent had recently been acquired by the Neddlloyd Group.

During this period the cooperation with agents became more formalized. As an example, the first formal agreement between ASG and the agent in Italy (Saima) was written in 1986, with whom ASG has been cooperating since directly after the war.

**Organization and investments**

In 1983, the Nordic and Continental divisions were combined into a European division and this division was given full responsibility for operations and marketing of international land-transport activities in Sweden and abroad. At that time, domestic transports became entirely separate from the international transports. Eventually, at the end of 1990 and in the beginning of 1991, ASG created one international division out of the European and Overseas divisions, covering all international activities.

Different departments, specialized in international transports, had developed over a period in each location in Sweden having international traffics. In 1989, the European division had more than 30 separate offices in Sweden and the Overseas division had 10 offices at airports, in harbours, etc. These offices were, of course, the base for the international transports on the Swedish side. However, the need for complementing services and for the diversification of services, communication needs, etc., within the transport network involved establishing new activities and functions which implied construction of new departments in the organization like customs declaration department, international projects, etc. These departments were to a greater or a lesser extent dependent on the traditional organization of ASG.

In the main, the offices and terminals abroad were and still are owned by agents. During this period, the shareholders did not increase their capital investment in the company, in spite of all the investments made during 1970’s and 1980’s. The solidity of the company therefore fell to 8-10% in the early 1980’s. It was not until 1985 that the shareholders increased the amount of owners’ capital in the company from SEK 46 million to SEK 92 million in comparison with a turnover of almost SEK 5 billion that year.

The dominant area for investments during the 1980’s was in communication systems which have grown enormously and are expected to increase further during 1990’s. ASG has tried to reach an investment level in communication systems of around 2 % of turnover but this has not been possible except during some extremely profitable years. ASG has developed several
communication systems for different purposes in the European countries for air/sea-freight and their connected offices (Actor, Access etc), for the Nordic offices (Nordcom) and for the Continental Europe (various). However the increasing number of subsidiaries, the new services with time guarantees, logistical services, etc., lead to a need to create effective communication systems for ASG.

Summary of period 1980-89/90
The development of combined traffics continued, which made the choice between different means of transportation less relevant and quality in traffics in terms of speed, timing and frequency increased in importance. There was a concentration to fewer agents and the operating landtransport subsidiaries showed a certain expansion while the sales offices were closed down. One Norwegian company for landtransports and two new West-German companies were acquired. As for airfreight, four European new subsidiaries were added over the period. The organization went through several reorganizations leading first to an increase and then a decrease in the importance of international activities. Large investments were made in communication systems.

5.1.2.1 Specific event - Start of cooperation with an agent in Switzerland

Natural was one of ASG’s first agents for international traffics. The cooperation between the two companies started in 1946 and is still developing. It has been important for ASG’s international development over its duration.

Before the event
Natural S.A. is an old international company, established by E. Natural in Geneva in 1859. Very shortly thereafter the Head Office moved to Basel due to that city’s strategic position in Switzerland as well as in Europe. Natural were mainly shipping agents and international sea-freight forwarders at that time, utilizing the river Rhein as an important gateway. The importance of the river for transports diminished, however, as new railroads were constructed in Europe during the 19th century (the first railway in the Basel area dates from 1844). As a result of this, Natural diversified into railway transportation. Over time Natural grew and became strong in railway as well as sea-transports.

In 1946 after the war, the manager and owner of Natural wanted the company to develop strong traffics to/from Sweden. Natural had several existing relations in Sweden for shipping, with Svea in Gothenburg, Hillerström & Co in Malmö, United Forwarding and Shipping Agencies in Stockholm (connected to Svea), etc., which had been developed after the first world war. Natural also had a small representative office in Sweden but what they now wanted to confine
themselves to was one agent. A dependable and active agent was very important for them since a large number of Swiss firms were selling f.o.b. Swiss-border.

In search of an agent, they contacted their existing relations in Sweden and through these contacts they came up with two alternatives of interest. One was ASG, partly owned by Svea. As we know, ASG had been established originally to act as a complementary surface transport company for Svea and, as such, had created an extensive network of domestic traffics in Sweden. It was also by that time 50% owned by the Swedish railways. The other alternative was a shipping agent and international forwarder Wilson & Co, which already had a well-known established agent, Danzas, in Switzerland. Wilson wanted to change agent in Switzerland due to certain conflicts between the companies during the war.

The negotiations between ASG and Natural started in 1945 and lasted half a year. During that period ASG took over the domestic railway consolidation business from Transportkompaniet in Sweden as well as the established traffics to Denmark and Norway.

ASG wanted to develop a fixed price concept with Natural for the total transport including all special charges and it also wanted to become Natural’s exclusive agent.

The event
The first layout of an agreement was made in the form of an agreement between United Forwarding and Shipping Agencies (Svea), ASG and Natural. In April 1946, the final agreement was signed by the two parties ASG and Natural only. They agreed to start a common railway consolidation traffic between Switzerland and Sweden on an exclusive basis, using their existing to/from traffic resources and by mobilizing new resources. Natural’s representative in Stockholm (Mr Burri) was sent back to Switzerland and the cooperations with all the other agents were cancelled as a result of the agreement. What ASG-Natural presented to customers was a fixed all-inclusive price for the whole distance, which offered the possibility of quoting door-to-door prices.

After the event
The development of the traffic was very positive, which to a certain extent was due to the high general increase in the trade between Sweden and Switzerland but also as a result of the new way in which the service was marketed and organized. The successful development of the railway consolidation, however, created counter-actions among competitors. The competitors claimed that ASG-Natural had subsidized certain parts of the transports. The formation of joint ventures by their competitors was one form of such counter-action. The new joint ventures were given advantageous freight prices by the subcontractors. This gave ASG and Natural a difficult time and forced them to develop an increasing number of direct rail traffics to different destinations in Sweden.
In 1948-49 long-hauling by truck became permitted in Europe and ASG and Natural wanted to complement their services with trucking services. This was important, especially as trucking services became very competitive since it became possible to collect and distribute partloads directly to/from the customer without extra costs.

The very success of the railway consolidation traffic became a drawback when ASG-Natural wanted to start a trucking traffic. The Swedish Railway (SJ) did not allow its partly owned company ASG to get the rights to start international trucking services until the competition had grown strong. When they eventually got the permission, several of their direct traffics did not exist any longer as a result of loss of volumes. ASG had no wish to stop the railway consolidation services even after they had begun trucking services and in the end the railway services remaining had to be supported by the trucking services. The first Swedish registered lorry in Switzerland after the war was a result of their common traffic. Ever since ASG-Natural initiated their trucking services, the services have dominated the traffic between Sweden and Switzerland.

During the first years of cooperation, ASG and Natural had extensive inter-changes of people selling the common traffics and especially so when new traffics were to be started. The inter-changes subsequently became less frequent and more regulated which was also interpreted as a sign of a higher degree of mutual understanding. In a speech given at the celebration of the 25th year of the cooperation (1971) a director of Natural argued that it was important for the two parties to discuss common policy and planning as well as to continue the coordination between the two companies. The top management from both sides were present during this conference. Over the years ASG and Natural have developed an assortment of different complementary products to offer customers in both countries and this has increased their cooperation. For a long time and until recently, ASG-Natural have had the largest market-share of the exchange of goods between Sweden and Switzerland. At the end of 1989 they had regular traffics to/from 4 Swedish destinations. They have offered heavy goods transports, project transports, full loads, warehousing, etc. The means of transportation varied but combi-transport had become very important.

During this period of cooperation both ASG and Natural have had an intensive period of international development in other areas as well as in other countries. This international development has in some cases increased the degree of cooperation between the two companies, e.g. in Norway and Finland where ASG has daughter companies with which Natural has a cooperation and in Portugal where ASG works with a sister company to Natural. In Norway and Finland Natural became the agent after ASG had changed to fully owned subsidiaries while Portugal had another history. When ASG needed an agent in Portugal they called Natural, which had been very strong in the traffics on Portugal since the war, and asked
them as to their view about possible agents. Natural recommended its own sister company which ASG started to work with and this new Portuguese traffic has been a success for ASG. Natural and ASG do not have the same agents anywhere in Europe apart from Norway, Finland and Portugal.

In certain cases this situation has caused an increasing degree of conflict between the partners. Some of the services added by each of the partners during this period did not necessarily develop in step or along identical lines, which led to demands which the other company could not live up to. This often caused someone else in Sweden or Switzerland to be selected as the partner with whom to work, in airfreight for instance. Partly as a result of this and except for a short period, ASG and Natural have been competitors in airfreight. This causes problems, especially as ASG has been part-owner of a small airfreight company since 1990 named ASG. Similar problems are caused by their international development outside their common cooperation forming an international image and the priority that they have put into the different areas.

A smaller conflict developed due to a decrease in the basic geographical area within which ASG and Natural had agreed to work. This was a result of the fact that ASG had chosen another company as their partner for a small but distant part of Switzerland without informing Natural. The cooperation between the two companies reached a low point and experienced many difficulties because of the many changes in personnel following a reorganization in ASG. From an operations viewpoint, it has changed to the better which facilitates the understanding between the two companies. The establishment of the traffic planning office in Travemünde has increased the operational contacts between Natural and ASG. The office in Travemünde coordinates most transports for continental Europe for ASG but also checks the conditions of the trucks and material utilized.

Another problem as regards to competition that they met with, at the end of the period under study, arose from the merger of Scansped and Bilspedition International, involving all formerly competing international companies like Wilson & Co, Skandiatransport, Fallenius & Leffler, Transport Kompaniet and Autotransit. This merger made Scansped very large in resources in Switzerland though Scansped still had many problems to solve towards the end of 1989 with regard to personnel, customers, etc. On the other hand, this merger caused Danzas, the agent of Wilson & Co until 1988, to buy part of a Swedish forwarding company, Rationell Spedition, which in turn has heightened the competition in respect of export/import goods Sweden-Switzerland.

\[\text{In 1991 Natural changed from Lassen in Portugal which was a sister company. As for ASG Lassen remained their agent in Portugal.}\]
Summary of the event

Natural, an old established European forwarder and shipping agent, wished to develop strong traffics to/from Sweden. Through their existing contacts with Svea shipping line they came in contact with ASG. The cooperation with ASG started in 1946 after half a year of negotiations and the sales representative of Natural was withdrawn to Switzerland. The first traffic was by railway and more direct railway traffics were added shortly. Over time the services changed. Railway services decreased, road traffics increased and several other services were added such as warehousing, logistical services, airfreight, etc. ASG also started to cooperate with Natural’s sister in Portugal, Natural used the ASG part-owned company in Finland and as ASG had acquired a company in Norway, Natural started to cooperate with them.

5.1.2.2. Specific event - ASG’s establishment of a holding company, ASG (Deutschland), in West-Germany

ASG Hamburg is the oldest operating foreign subsidiary for land-transportation in ASG. The subsidiary in Hamburg, and later on the development of ASG (Deutschland), including Atege Stuttgart, has had an important influence on the international development of ASG in Continental Europe. Therefore the start and growth of ASG Hamburg, as well as the acquisition of Atege Stuttgart, are of interest when discussing the internationalization of ASG in Europe. In 1976, ASG Hamburg for practical reasons changed name to ASG (Deutschland) and came to include a few other West-German companies and, as such, was regarded as a holding company in West-Germany, with ASG Hamburg as a base.

Before the event

After the war, Mr H. Andresen was one of the first persons in Hamburg to start a small company "H.C. Andresen" for international transports. By 1950, the firm had already established contacts in Sweden, Denmark, Holland and Belgium. During this period Mr H. Andresen met people from ASG for the first time. ASG only had a railway traffic to/from Hamburg, together with an agent, Wendschlag & Pohl. In 1956, ASG was about to establish international trucking traffic to/from Hamburg as well as for other parts of Europe and they needed an agent in Hamburg and a contact point for their total international trucking traffics. The firm of H.C. Andresen provided the answer to their needs and started as to represent ASG in 1957. This agreement only concerned trucking services and did not affect ASG's relationship with Wendschlag & Pohl who were specialized in railway and sea transports. The operational center for ASG in international trucking services was Norrköping in 1957. In the beginning they had to co-load with a traffic Holland-Sweden (twice a week) since volumes were too small to utilize a full truck. In the two years, the development was rather slow. Then it
changed very quickly, due to more intensive marketing both in Sweden and in Germany. In ASG in Sweden the organization changed in 1958 so that Helsingborg became the center for international trucking transports instead of Nortköping.

A few customers having regular and quite large volumes came to be very important in the attempts to establish a traffic from Hamburg to Sweden. These were Nordmende in Bremen which sold tv-sets to Sweden and a papermill Feldmühle AG. They are both still customers of ASG. The cooperation between Sweden and Hamburg was very close during this period and the company H.C.Andresen became totally concentrated on the transports with ASG. New facilities were needed - instead of the furnished old bus (without wheels) that served as a terminal and an apartment serving as office in a partly burnt-out house!

**The event and after the event - in Hamburg**

The Scandinavian traffics developed very quickly and as H. Andresen was in need of more capital ASG took over the more important segments of the company in the beginning of 1960 but the company continued to exist a couple of years. Mr H. Andresen became the new manager and stayed on as such for more than 20 years. ASG, Hamburg was registered as a company in the official Hamburg register at that time and in the same year became a member of the Forwarders’ Association in Hamburg.

During this period the railway traffic as well as the cooperation between ASG and Wendeschlag & Pohl would appear to have ceased.

As Hamburg was a strategic point for the traffics to/from Sweden and large parts of Europe but especially so for West-Germany, ASG Hamburg had to organize certain domestic traffics in order to take care of transit consignments to other parts of Germany. These traffics could be to/from areas in Germany outside the specified area that ASG Hamburg was supposed to cover for ASG Sweden. This caused complaints from the agents with whom ASG had agreements in the areas concerned.

The area that ASG Hamburg should cover in terms of marketing and traffics was Schleswig-Holstein, Hamburg area and a part of Niedersachsen. To the south and east of this area ASG Sweden was represented by other agents. This restricted the possibilities for ASG Hamburg to develop new traffics. Even within this area there were and there still are other agents representing different types of transports where ASG Hamburg lacks the necessary expertise, such as special transports by railway and airfreight. During a period in 1972 ASG Sweden had its own sales representation in the area through E. Westling. When the sales representation office moved to Brussels and became the European Sales Representation, the representation in Hamburg closed down. In most cases, the sales representative was selling together with the agent for the local area.
Through special agreements with different customers ASG, Hamburg extended the borders of its territory as in the case of Gambro, for which ASG Hamburg started a small office and warehouse in Hechingen in order to store their goods and distribute them to different hospitals, etc., in Germany.

The conflicts between the parent company's agents in West-Germany as well as between ASG Hamburg and its agents have been many over the years. Some agents have suspected ASG of taking their business or getting confidential information about them from head office in Stockholm through the sales representation and the subsidiaries. On the other hand, the agents have on their side developed into other spheres both in Germany and internationally and most cases Sweden constitutes only about 10-20% of their total business. Further, the conflicts are enhanced with the German agents as some customers prefer to use ASG Hamburg and use their domestic traffics to Hamburg and from there onwards the international traffics to Sweden. ASG Hamburg has a higher frequency and direct traffics to more places in Sweden which gives it an advantage. Another complication is the takeover of ERT, a former competitor of ASG's, specializing in trailer traffics to different parts of Europe. ERT were competing and still are to a small extent with ASG Hamburg even though nowadays they also help each other. The manager of ASG Hamburg (J. Andresen) is today also the manager of ERT Germany as well as being a member of the Board of Atege Stuttgart, ASG Belgium and ASG Bielefeld.

ASG in Hamburg was totally concentrated on trucking traffics to/from Sweden during the first ten years. Their cooperation with Sweden was so intensive that the manager in Hamburg even learnt to speak Swedish! They struggled all the time to increase the frequency so as finally to be able to offer daily traffic but they did not get the volume of goods necessary until an agreement was signed with Siemens in Germany in 1965, to transport all their exports for Sweden which before had been transported by sea. ASG Hamburg increased immensely its market-share of the total amount of goods that were trucked between Sweden and Northern parts of Germany. The number of places to which they had direct traffics also increased during this period due to the increase in volumes. In 1966, the turnover of ASG Hamburg was DM 1.2 million and the number of consignments handled was 21,524. This can be compared to the size of ASG (Deutschland) GmbH 1990 with a net turnover of around DM 100 million and 225,000 consignments.

To begin with, the development came as a result of better and more frequent services mainly to/from their own area to Sweden or domestically. They expanded within their area either via larger distribution systems or through the establishment of new offices. One important expansion in 1975 was the office in Travemunde for customs clearance which had previously been handled by Schenker. Shortly after ERT became part of the ASG Group the Travemunde
office could handle their customs clearance as well (In 1981, 24,000 trucks were custom-cleared).

ASG Hamburg did not have the possibility of developing any international traffics until the 1970's following which the number of international traffics increased steadily. Today they have established traffics to/from many countries like Italy, Norway, Denmark, Holland, Belgium, Switzerland, etc. ASG Hamburg's agents have changed over time. In Denmark, however, they have used the same as ASG, TK Nord, for 20 years. In Norway they started with a company Linjegods and then changed to Nortrail in 1985 when ASG changed agent to Nordex. ASG Hamburg then changed to ASG Norway a period after its establishment. In Finland ASG Hamburg has worked with Maaja Meeri for many years but has recently changed over to Teamtrans. In Holland they had an agreement previously with van Gend & Loos, the same agent as ASG used, but when van Gend & Loos was bought by Nedlloyd the agreement ceased. Nedlloyd had their own company in Germany (Uniontransport). At the end of 1980's ASG Hamburg got an agreement in Holland with Beijer belonging to the Belgian transport company Ziegler instead. In Italy the agent is the same as ASG Sweden's agent. In Belgium, in addition to ERT, they use Gonrand, part of the Gonrand Group. In Switzerland, Berger is their agent and not ASG Sweden's agent, Natural, which already had an agent in the Hamburg area.

The event and after the event - acquiring an agent in Stuttgart

On account of the ill-health of the owner of the agent Atege Stuttgart, ASG acquired the company in 1976. As it so happened, ASG had another agent in West-Germany with the name of Atege but it was not under the same ownership.

For practical reasons, Atege Stuttgart became owned through ASG Hamburg. ASG Hamburg had to change its form to that of a holding company and its name to ASG (Deutschland) GmbH. Important questions concerning Atege Stuttgart were discussed, however, directly with the head office in Stockholm. Traditionally, Atege Stuttgart offered a number of different services to those offered by ASG Hamburg.

Atege's development in international transportation in Europe, which included long and close connections to the well known Swiss families, Gonrand and Girard, dates back to the late 19th century. The Gonrand family owned one of the largest transport companies in Europe before the second world war. Atege Stuttgart was sold to a Mr Vogelsang during the war. Atege Stuttgart's first connections with Sweden and the Scandinavian countries came after the war in the beginning of the 1950's. At that time Atege Stuttgart concentrated to a large extent on railway traffics and had also started to develop airfreight. Sweden became a very important market for Atege Stuttgart at an early stage and in 1959 Sweden accounted for about 25 % of its total turnover.
While ASG Hamburg concentrated on Scandinavia and trucking traffics in the beginning, Atege Stuttgart started with railway traffics to Switzerland, Italy, etc., as a part of an international transport Group. Atege added trucking traffics later on.

In 1990 Atege Stuttgart, like ASG Hamburg, had many international traffics (see Appendix 3) and they had its own agents for those traffics which were not the same as those of ASG Hamburg. Furthermore it expanded its area of representation in West-Germany. In 1980, however, it decided to discontinue its traditional domestic services and, in a separate company, started a carrier service for trailers, flats and containers in the international traffics. The new company has developed positively. By the end of 1989 airfreight had become a very important business for them and even though it did not cooperate with other parts of ASG in airfreight, it wished to do so in the future.

In 1987, ASG in Sweden established a company at Bielefeld, through acquiring the assets of the agent, Linie, in Bielefeld. This company is formally organized under ASG (Deutschland) GmbH. When Linie experienced its economic problems, its former agents in Sweden, SKT, changed to another agent, H. Boes, and ASG took over.

Both ASG Bielefeld and Atege Stuttgart have continued their own international traffics and their own agents which only corresponded to a certain extent with those of ASG Hamburg. For Atege Stuttgart, the agents in Sweden, Italy and Denmark were the same as for ASG in Sweden and Hamburg. In all other places they were working with competitors to the agents of ASG Sweden as, for instance, in Finland, France, Austria and Benelux and also for airfreight the agents are different. ASG Bielefeld on the other hand used ASG in Norway and Sweden as representatives and used the same agents in Italy and Switzerland as Sweden and to an extent in Finland. In other places the agents are not the same as those of ASG in Hamburg and Atege in Stuttgart.

ASG Hamburg, as Atege Stuttgart, have expanded over time into more complex and combined services like hanging garment transports, sea transports, warehousing, including bookkeeping of the products, invoicing, etc., in combination with distributing products to many places within West-Germany as well as abroad. Different destinations can be reached in many different ways, like combi-traffic system using flats, trailers, containers by railway, trucks, ships, barges, etc.

In 1990, Atege Stuttgart, ASG in Hamburg as well as ASG Bielefeld complement each other in many different activities and they have developed a number of international traffics to countries other than Sweden. All this has meant a decreasing share of the Scandinavian business for ASG Hamburg. Sweden traffics have never held such a predominant position for Atege Stuttgart (at maximum 25%) as it has for ASG Hamburg.

The expansion of ASG Hamburg and Atege Stuttgart has resulted in that they have outgrown their terminals over time. The third terminal of ASG Hamburg lasted until 1978 but had to be
complemented with other facilities within the area. The terminal in 1990 is built for and owned by ASG with quite large warehousing space. Atege Stuttgart also got new facilities during 1980’s. In addition, over the years ASG has rented warehousing facilities for specific customers. The number of offices in Germany has increased to 9, located in Hamburg, Travemünde, Hechingen, Villingen, Stuttgart, Bielefeld, Ludwigsburg, Hechingen and Rostock.

(In 1991, there was an exchange of shares between ASG (Deutschland) and Atege, the largest agent, giving ASG 30% in Atege and Atege 30% in ASG (Deutschland) GmbH. Atege belongs to a large international transport group called Gondrand. The two other agents in Germany still remain unchanged.)

Summary of the event
ASG wanted to start trucking traffics to/from Hamburg and to have a support office for other European traffics. HCA became the agent and developed successfully with ASG during late 1950’s. In 1960 ASG Hamburg was established. The managing director and owner of the agent became the manager of the new company. ASG Hamburg expanded over time both in services, in its area of representation in West-Germany and internationally. This caused several conflicts with the existing agents in West-Germany. As ASG acquired Atege Stuttgart, which was an agent to ASG, in 1976 their coverage of West-Germany increased and so did the international traffics to/from Germany. A holding company was created in West-Germany with ASG Hamburg as a base. In the late 1980’s another company was acquired in Bielefeld which added to the existing expansion in Germany.

5.1.2.3 Specific event - a greenfield investment in Belgium

Before the event
In the beginning of the 1950s ASG obtained an order from SAS to arrange for the transport of airplane engines from Derby in England to SAS in Sweden. The transports were supposed to go via Tilbury and Antwerp and on from there to Sweden by truck. To undertake this assignment, ASG needed an agent in Antwerp capable of taking care of the motors on arrival by sea and loading them onto trucks for transport to Sweden. An approach was made to AMA (Agence Maritime Anversoise S.A.), a shipping agent, broker and forwarder who showed interest, although having no experience in trucking services. However, the fact that AMA had an employee (Mr Meier) who had been handling SAS transports from Denmark contributed to the selection of AMA as agent.
Since AMA as a company lacked experience in trucking services they needed a lot of input from ASG in organizing their part of the traffic, even to the extent that ASG set the pricing terms. These transports subsequently became the base for the Swedish-Belgian traffic, which developed positively and in due course became very important for AMA.

AMA was also very active in marketing the normal traffic for many years, both in Belgium and in Sweden. The CEO (Chief Executive Officer) and owner of AMA (Ver Holst) had excellent relations with Belgian industry.

For personal reasons, Mr Ver Holst sold the company to the Pluvier Group, although he continued as a CEO of AMA. This gave no reason for ASG to make any changes in the relationship at the time. However, after a few years, certain key persons, like Mr Meier and the sales manager, left AMA and with that AMA’s in interest developing the common traffic with ASG decreased.

Mr Meier joined a competitor (West-Friesland) and wanted ASG to start a cooperation with them. ASG declined, preferring to continue with the then twenty year-old cooperation with AMA.

Although ASG had already had an earlier offer to buy AMA, the Pluvier Group subsequently sold AMA to United Transport Corp, which also owned West-Friesland. West-Friesland also cooperated with TK (Transport Kompaniet) in Sweden.

It was then that the situation in Belgium changed negatively for the Sweden-Belgium traffic and those engaged in the Sweden-Belgium traffic in AMA became very concerned. The new CEO of AMA was also the Chairman of the Board in West-Friesland, the biggest competitor. This was when the stage was set for a change.

The event

In 1976, ASG realized that the situation in Belgium had to change. The traffic that AMA and ASG had together could not possibly continue to develop under the conditions that existed. Personnel in AMA engaged in the Swedish traffic contacted the ASG European Representation Office in Brussels and asked for help. ASG tried to find a solution, looking at the different alternatives such as buying a local company, setting up its own office or finding another agent. To continue with AMA did not seem possible.

In 1977, ASG set up a company of its own and at the same time took over some of the personnel in AMA responsible for the Swedish traffic. In order to get the company operational at very short notice ASG decided to let Gyssens & Co buy a share of the future ASG Belgium. Gyssens & Co, in the main a small airfreight company, had office space available in the right place. The only possibility to start without giving the agent the chance to break the relationship
and inform the customers before the new company was ready to operate was to use existing available facilities.

During the period of negotiations with Dr Gyssens, the owner of Gyssens & Co and an active member of FIATA, ASG came in contact with Edmond Depaire SA which was a big transport company in Belgium. Edmond Depaire SA was partly owned by the Belgian Railway and partly by Van Gend und Loos which, in turn, was a Dutch railway-owned company as well as ASG’s agent. Both Dr Gyssens and the management of Edmond Depaire insisted of being partners in the future ASG Belgium SA. The result was that ASG got 76 % of the shares. Gyssens & Co and Edmond Depaire got 12 % each. It was important for ASG to have a shareholding as high as 76% in order to have full control over the new company. Most of the negotiations in Belgium were undertaken by the manager of the ASG European Representative Office (E. Westling). Mr Westling also became a member of the Board and took on some AMA management responsibilities. This did not mean though that his activities at the European representative Office were altered.

The company started its activities over-night, as planned, in order to prevent the agent from taking immediate counter-measures. At the same time a marketing campaign started in Sweden as well as in Belgium to inform customers of the new order and of the new possibilities for transportation between Sweden and Belgium. During the first months ASG Sweden provided the new ASG Belgium with a lot of marketing support by sending down salesmen, making brochures and pamphlets, designing administrative systems and traffic systems, etc. To a very large extent the customers seem to have remained loyal to ASG. Some of them had been with ASG and AMA since the 1950’s and were very pleased with the new arrangements. AMA sued ASG for breaking the contract; ASG lost the case being fined some SEK 30,000-40,000.

ASG Belgium was supposed to continue the existing Swedish-Belgium traffic as before which it seem to have done. There were terminal facilities available both in Brussels and in Antwerp from the outset and the trucking companies, being mainly subcontractors to ASG, stayed with the new company.

The company returned a small first year’s profit as a result of all these activities.

After the event

After a period of support from Sweden, problems came very quickly upon the company which seemed unable to manage all the activities according to the terms set by the head office in Sweden. The terminals were too costly for the size of the traffic and the management did not work out quite as expected. In 1979/80, the manager of the European Representative Office also had to take on the role of CEO of the Belgium company but this double role was not satisfactory either for the company or for the Representative Office. The latter closed down in 1982. The company did not develop as expected when it came to volumes or profitability and
the terminal and office in Brussels had to be closed on account of the high cost. After a few years, Dr Gyssens ran into problems and could not remain a shareholder in the company.

Edmond Depaire SA also sold its shares in the company to ASG a few years after. The company was totally dependent on ASG in Sweden, both trafficwise and for sales and administration. Another complication was that the Managing Director of the company became very ill and, in spite of several attempts to continue as normal, finally had to leave.

ASG Sweden also required activities to be done in a certain way which led to an increased workload. In many ways it seemed that ASG Belgium was supposed to mirror ASG Sweden. To begin with head office in Stockholm provided the personnel to solve the problems in ASG Belgium but later on many of such personnel came from other ASG subsidiaries. Apart from the management problems, ASG Belgium experienced problems with a computerized system for administration and traffic that they tried to develop. This became an expensive experience for such a small company, which finally led to further changes in staff.

In the first year, ASG Belgium concentrated on the traffic to/from Sweden. They also expanded the number of direct traffics to Sweden in comparison to what AMA had achieved. After that, they started to develop traffic to/from Denmark, Finland and Norway. Even though ASG Sweden was still the dominant partner, the resources were split among several activities.

In establishing other Scandinavian traffics, ASG Belgium tried to work with ASG Sweden’s partners in other Nordic countries. This succeeded in Norway and Finland to begin with, but not in Denmark since the Danish partner already had an agent in Belgium to begin with. However, after a couple of years ASG Sweden’s Danish agent started cooperating with ASG Belgium. On the other hand, as ASG had to leave its partner Linjegods in Norway, Atege Stuttgart, ASG Hamburg and ASG Belgium also had to look for a new Norwegian partner. The new agent was not the same agent as that of ASG Sweden.

Over time, the Board of the company also changed, resulting partly from the changes in ownership and partly from a change in priorities in ASG Sweden. To start with, the ASG persons responsible for the Continental traffic and the finance director were members of the Board, then also the managers of ASG’s subsidiaries in Hamburg and Stuttgart. In 1985, a change in management in ASG Sweden led to another change in the Board of ASG Belgium, the new manager for Continental Europe and another employee from that Division becoming the new members.

Over the years, the company in Belgium has tried to establish different traffics together with other ASG subsidiaries in Europe without much success. By 1990 the company was still very small, with limited resources and the profile of being a Scandinavian specialist. Partly for that reason the ASG subsidiaries in Hamburg and Stuttgart, both having traffic on Belgium, did not cooperate with ASG Belgium.

Further, ASG sea-freight agent in Belgium has been acquired by a competitor, the Nedlloyd Group. This has caused certain complications.
The shareholders capital had to be raised several times during the period, as a result of the low starting capital as well as the losses along the way. By 1990, the Company seemed to have stabilized and was profitable but at a low level. Belgium as such will increase in importance, with the development of EC and this will probably lead to further changes in the role of ASG Belgium. The Company was owned via ASG (Deutschland) for a while but is now owned via ASG International B.V., the holding company in Holland.

Summary of the event
ASG started a trucking traffic to/from Belgium with Ama as an agent in 1954. Over time ASG and Ama developed more trucking traffics and other complementary services. After a period Ama was sold to the Pluvier group. However, ASG continued the cooperation. In the mid 1970’s, however, the Pluvier group was sold to another large transport group, United Transport, having competing traffics to that of Ama and ASG. Then ASG made a greenfield investment in Belgium in 1977 and took over certain Ama personnel. Gyssens & Co and E. Depaire became part owners in ASG Belgium. A few years later the company became a fully owned ASG company. The company had in 1990 developed international traffics to the Nordic countries but was still rather small and several attempts to develop further had been disappointing.

5.1.3. Overseas development
Overseas in this context is regarded as the world outside Europe, mainly reached by sea and air. Traditionally within ASG responsibility for the overseas markets has been assigned to the air and sea departments within the organization. The development of ASG airfreight and sea-freight development will be described below and now and then the description will also in detail include changes in European activities.

Period 1955-69
Development of services
As the international development, especially in railway consolidation, had been very successful, ASG declared it intention of becoming "a travel agency for goods", which made it open to international development in other areas. As regards sea-freight, ASG had been connected to sea-freight via the owners from the outset, but this was basically in terms of inland service with some forwarding activities. Sea-freight services were seen as a complementary services to Svea Shipping Line and as such they
continued to live a rather quiet and half forgotten life without any support within the organization until the 1960's.

Airfreight also started as a complementary services, with infrequent transports, but the business was young and the development became more intensive.

As industry expanded and its utilization of production capacity was high the interest for faster means of transportation including airfreight increased. Airfreight was mainly used in the beginning for emergency consignments as a result of temporary capacity problems or lack of goods in stock.

ASG really started to get into airfreight when it opened a small office at Bromma international airport in 1954. Before that not much progress seems to have been made, even though ASG had an agreement with SAS, being an agent for the Stockholm area. Even so, in 1955 the small office handled 2980 import consignments and 1139 export consignments. A person from ABA (one of the forerunners to SAS) was employed to start the business. In terms of the traditional IATA (International Air Transport Association)¹ agent agreements with the airlines, ASG received a 5% commission on the freight sum of goods but other important sources of revenue were handling and documentation fees. Cargo was normally only a complementary service to passenger flights as far as the airlines were concerned.

In the beginning of the 1950's, there was really no competition between seafreight and airfreight apart from the fact that in many cases these were the only possibilities of reaching the majority of overseas markets.

In 1959, ASG signed an agreement with a large international American airfreight company Emery. This started not only the first consolidation services in ASG airfreight but also the first regular services with time guarantees. Through Emery, ASG could offer delivery within 48 hours in their consolidation services to/from U.S.A. and Canada.

Another type of airfreight service was developed in 1961 when ASG started a regular full charter of flowers from the French Riviera to Stockholm, Gothenburg and Malmö. ASG had special forwarding agents on the French and Italian Riviera for that specific flower charter traffic.

During the 1960's, the airfreight to/from Sweden continued to grow evenly but at a relatively high pace from 13,000 tons to 40,000 tons (Comén, 1986) and this was partly due to the fact that a new category of goods was transported. These were perishables, in the physical as well as the economic sense. This continued growth created many new traffics for ASG and volume increased. It also created capacity problems for the airlines as regards terminals, handling equipment, etc. Many airports experienced problems with congestion. Furthermore, the fact that airfreight was a complementary service for the airlines enhanced the crisis, since the

¹A voluntary organization for scheduled airlines.
passenger services received priority. This situation, in combination with the growing interest in logistics in the industry, made ASG start its own consolidation traffics.

The rate-structure of the airlines was very complicated and was based on the value of the goods and sometimes of the economic conditions for certain types of goods. In this rate structure, consolidation units were not specifically advantageous for agents in spite of the fact that they facilitated handling for the airlines. The increased control of the goods and the increasing possibilities to create door-to-door transports, however, still made consolidation attractive enough to continue. Adherence to the development of consolidation traffic created a need for more active marketing activities both by ASG and by the agents.

In the mid 1960’s, the first regular sea-freight services were established in ASG and these were trailer and container traffics to/from the U.K and the USA.

The large change for ASG sea-freight came in 1968 when Rego, consisting of four large shipping lines (Broström, Svenska Lloyd, Transatlantic and Johnson Line) bought 25% of ASG. This was basically a result of containerization and other new techniques (trailers, flats etc) which made an integration between inland and sea-transport necessary. These new techniques also made it easier for a forwarder or broker with a large breadth of international experience and an inland organization, like ASG, to start their own consolidation traffics which offered new economic terms and a possibility to create door-to-door traffics.

Certain policy problems arose, however, since Rego wanted ASG to give priority to their services while ASG wanted to remain neutral. At the same time, the shipping lines represented by the owners did not want to favour ASG ahead of other sea-freight forwarders who were their customers. Much discussion took place in setting the policies in order not to disturb the market.

The sea-freight services that ASG offered at the end of the period were consolidation and full containers and to a limited degree traditional sea-freight services, with USA, Canada and UK as the most important markets.

**Representation in foreign countries**

The representation abroad in sea-freight was very loosely structured in the beginning. As the traditional receiving broker or despatching forwarder, ASG only had a corresponding agent, used for specific purposes. In a normal situation, the exporting forwarder took no responsibility for the shipment after it had been accepted by the shipping company. The shipping lines played the predominant role at that time. By the end the 1960's though, as ASG started its own traffics, the establishment of cooperating agents became necessary in USA, Canada and in the UK. The idea was to create door-to-door transports also for transports by sea. In search of suitable agents, ASG sea-freight used existing contacts with the shipping lines, the corresponding agents and agents of ASG airfreight or European traffics.
In the same way, in airfreight the connections to different agents abroad was very loosely structured in the beginning. However, ASG needed agents to take care of the goods in the receiving or despatching country. Since emergency goods were often paid for by the receiver it was important that these agents had economic stability in addition to having sales and the traditional forwarding and distributional function. To begin with during the 1950's and 1960's ASG airfreight used existing agents for the surface transports (rail, road and sea). Gradually there was a change towards a new type of agent specialized in airfreight.

A first crucial change came as a result of the cooperation with Emery Airfreight in 1959. The cooperation with Emery, as an exclusive agent for Scandinavia, became very important for ASG as an airfreight forwarder. It gave ASG an opportunity to be very strong on the US market which was one of the most important markets for the Swedish customers. At the same time, the high quality services that Emery offered with a 48 hour guarantee put high demands on the ASG organization also.

During the same period in 1959/60 Linjeflyg, the dominating domestic airline of Sweden, and ASG started a cooperation. ASG was appointed handling agent at all domestic airports and was supposed to collect and distribute all international consignments for Linjeflyg in Sweden as well as between Copenhagen and Ängelholm. As a result of these agreements, ASG set up an office in Copenhagen in order to solve local handling and transfer problems. In Sweden, ASG started separate airfreight distribution and collecting systems to be able to keep the guaranteed time-table. The Copenhagen office became very important for ASG when negotiating with the airlines and agents.

The combination of the cooperation with Emery and Linjeflyg gave ASG a possibility to create specialized inland transports for airfreight.

The establishment of the joint-venture in the Far East with Schenker in 1961 also came to be very important and created a certain stability for ASG in its representation abroad. As the joint venture with Schenker meant the establishment of more offices in the Far East, ASG built up an even better coverage of the Far East over time. Through the cooperation with Schenker, ASG also obtained access to many other Schenker offices and agents throughout the world. At that time, ASG even had discussions with Schenker regarding establishing a more widespread cooperation for land-transports in Europe as well as Schenker-ASG offices all over the world (outside Europe).

One of the important connections developed during the 1960's through Schenker was the cooperation with Nippon Express in Japan and another example was Lee & Muirhead in India. The existence of the joint venture with a large organization like Schenker made ASG quite strong in the Far East.
Organization and investments

As a result of the Emery and Linjeflyg cooperation, a separate department for airfreight was created head office in 1960.

The 1960's became an important period for ASG airfreight, since many crucial investments were made in airport offices in Sweden and Denmark, airfreight trucking distribution started, the joint venture with Schenker in Hong Kong was established, etc.

The first investments in sea-freight came in 1966 when a separate department was created for the new U.K./USA unit traffics. Special marketing campaigns were formulated in order to increase the growth of sea-freight and a new office was opened in Gothenburg. As airfreight increased in ASG the differences in demands on speed, size and value of the consignments created difficulties in the ASG organization, which was accustomed to road and rail transports. By the end of the 1960's ASG began to invest in terminals, in better know-how, in operations and in marketing.

The development of larger and faster ships and planes increased the volumes handled and the speed of carriage and this in turn put pressure on handling and transports on land. This worked to the benefit of forwarders with terminals and office space close to harbours and airports.

Summary of the period 1955-69

During this period of growth, airfreight as well as seafreight became established among ASG services. In 1954 ASG set up an airfreight office at Bromma, which became the official starting point for airfreight development. In 1959/60 two important agreements were made, an agent agreement with Emery in U.S. and a handling agent agreement with the Swedish domestic airline, Linjeflyg. Further, ASG also established an airfreight office in Copenhagen in 1960 and a joint venture together with Schenker in Hong Kong in 1961. This intensified the development for large parts of the Far East. New agent cooperations were established in Japan and India. The existing European landtransport agents were often used for airfreight. As the airlines experienced capacity problems and agents became increasingly important for the creation of effective transports for ASG.

The first regular international seafreight traffics were established in the mid 1960’s to/ from U.K. Shortly afterwards new container traffics were established to U.S. and Canada. The shipping lines of Rego, being the new owners of ASG, facilitated this development. Investments were made in new terminals and new offices for air and seafreight. Specialized domestic transport services for airfreight were set up and separate departments were established at head office.
Period 1970-79

Development of services

The continued growth of the 1960's and then the need for improved fuel economies during the 1970's led to airlines investing in larger and faster airplanes like jumbo jets and eventually these investments created an over-capacity. This over-capacity changed the situation not only for the airlines but also for the IATA agents and forwarders like ASG. The airlines became more open to change in their rate-structure, at least unofficially, and were prepared to offer discounts in order to utilize their over-capacity. As a result of the lower prices, new categories of non-perishable, planned and non emergency type goods were taken over by airfreight. To begin with, new rates did not seem to ameliorate the terms for consolidations, as such, but the advantage of consolidation traffics was the control over larger volumes which normally gave favourable rates. As containerization then developed in airfreight, consolidation became a more accepted service by the airlines and the rate structure took full containers and consolidation into account, increasing the competition between air and sea-freight as a result.

During the 1970's the number of traffics to overseas countries increased both for air and sea-freight. Even though it had become possible to establish unit load traffics in many of those countries, in others it was either not possible or it was not preferable depending on the type of goods. Therefore part of the sea-freight was still traditional forwarding and brokerage and in the same way part of the airfreight continued to be direct airline goods.

When sea and airfreight container traffics became more common, the new demands on communication, handling and inland transportation made it necessary to choose agents having suitable facilities, know-how of the new type of traffics as well as marketing capabilities.

During the 1970's airfreight was evolving into different types of services such as split charter, part and full charter which were combined land-transports and airfreight services. The goods were trucked to/from some larger European airport in Holland, Luxembourg, etc., where the airlines had permission to offer split or part charter.

The predominant markets for airfreight to/from Scandinavia were for a long time Europe and North America though other markets like the Far East and Australia/Pacific have been growing in importance with Europe reducing in importance.

Representation in foreign countries

As airfreight grew in importance and ASG started consolidation traffics many of the existing agents, who regarded airfreight as peripheral and whose principal interest lay elsewhere, were not able to live up to the changing demands.

In the beginning of the 1970's, ASG and many of its agents at the time were members of a group called Constar, made up of strong domestic companies with airfreight departments that worked together world-wide but not on an exclusive basis. For many of the members of
Constar airfreight was regarded more as a complementary service and therefore the necessary commitment to airfreight was not shown. When Constar started to break up, ASG was invited to join a newly formed group called WACO. WACO developed out of parts of the Constar Group but was intended to work under stricter rules, with more commitment to airfreight and with exclusive agents only.

After considering alternatives, such as closer cooperation with Schenker or Emery, ASG joined the WACO Group in 1973 as an associate member. As ASG already had Emery in the States, Schenker-ASG and Nippon Express in the Far East they could not have full membership to begin with. The agreements with these representatives in important areas of the world created problems between ASG and members of the WACO Group. ASG’s link to WACO was also a negative factor for the cooperation with Schenker and Nippon Express.

WACO formed a chain of companies, all of whom could claim to be part of the WACO organization. WACO and the effects of WACO for ASG airfreight will be developed separately later on.

The fact that Schenker had established an operation in Sweden, marketing their own services, and that the larger land-transport cooperation did not exist further aggravated the complications between ASG and Schenker in the Far East.

When sea and airfreight became part of one division in 1974/76 which was the time when prices for airfreight were declining as a result of the over-capacity, ASG tried to influence some airfreight agents and subsidiaries to take up seafreight as well, but its efforts really only had effect on some of its own subsidiaries like ASG Denmark. In most cases, the sea and airfreight agents remained separate as in USA, Canada, etc. during this period.

In 1976, there were 19 agents outside of Europe (sea and air) and 15 within Europe (air) in all. Seafreight still had very few agents internationally. Out of the 15 airfreight agents in Europe, 5 agents also acted for ASG in landtransports. A number of sales offices were established in airfreight in Canada (1974), Japan (1976), and USA (1978). Further there were three more sales offices set up in South Africa, Nigeria and Australia together with some of the WACO members.

During this period of change ASG also tried to buy Aircargo Contact A/S, a company in Norway. Since Norwegian government approval was a pre-condition and this was not forthcoming, it did not work out. As a result, the company was sold to some other company and the relationship with ASG was broken off. However, ASG did get the possibility to buy its new agent, Flygods A/S, a sister company to the surface agent, Linjegods A/S, later on in 1979/80.

In some cases ASG representation in an overseas country developed as a result of aid projects. This was the case in Tanzania and Kenya. In 1978, ASG was given the job by the World Bank (IDB) to reconstruct the trucking business in Tanzania. This project came to be the first of several projects for the Overseas Division (at that time called Air/Sea Division). It was placed in
a separate company named Transport Development which was used exclusively for projects from 1979 onwards. As a result of this project and some later projects, ASG set up its own offices in markets like Tanzania and Kenya.

Because Emery broke the relationship with ASG in 1978/79, ASG had the possibility to buy a part of the existing regular WACO agent, Intercontinental Forwarders Inc.(IFI), in the USA. Buying into that company eventually resulted in breaking with the whole WACO organization which, in turn, led to breaking off relations with a large number of agents worldwide at the same time. These development will be described later.

**Organization and investments**

In 1972, ASG invested together with Olson& Wright in a 50/50 joint venture for aircargo handling and distribution, SACT( Swedish Aircargo terminals), in order to improve door-to-door service as well as to expand and economize on the special airfreight collecting and distribution transports to and from the international airports in Sweden. In the long run the idea was that the cooperation should expand into other areas.

The fact that ASG started consolidation traffics and became freight carrier both in sea-freight and airfreight meant that ASG was responsible also for handling the goods when consolidating and stripping the unitloads. Therefore investments had to made not only for operations in Sweden but also by subsidiaries and agents for operations abroad. ASG continued to invest in offices and terminal space in order to meet the growth. The same situation existed for some subsidiaries like ASG Denmark which built a new terminal for office and handling.

Another joint venture Baltic Air was created together with Wilson & Co, to a large extent for marketing flower charters but also for other charter operations. The company was to give service to ASG and Wilson with charter alternatives and to make arrangements for the operations.

In 1974/76 sea freight and airfreight were organized into a separate division. This intensified the investments in those services both in Sweden and abroad. An important difference was that ASG’s sea and airfreight overseas division became directly responsible for the operations at the airports and seaports. This made it possible to economize and to be more flexible in the choice of suitable airports for goods leaving or entering Sweden. The new specialized marketing resources were another important factor. Earlier, the sales resources had been combined with domestic and international land-transports, which not only were much larger than sea and airfreight and but also were based on a very different know-how. Being member of WACO, in combination with the development of consolidation traffics, demanded more intensive marketing efforts which the former organizational structure could not handle.

The new division made it possible to gather into one unit the personnel in traditional sea freight forwarding and unit load traffics. The investment in the new organization therefore changed the total situation for sea freight in ASG.
At the end of the period the shipping lines had less interest in common activities with ASG, but sea freight had already strengthened its position within ASG.

Summary of the period 1970-79
The number of services and agents increased both in Europe and overseas. In 1976 there were 19 agents overseas (air and sea) and 15 agents within Europe. New countries were added in Australia/Pacific region, Africa and the Arab States. Development of door-to-door consolidation traffics in airfreight made ASG change to specialized airfreight agents. ASG became a member of WACO, a world wide exclusively airfreight group.

New cheaper service alternatives were developed for intercontinental traffics based on trucking traffics to/from Holland or other European airports. Further air and seafreight started to cooperate closer in ASG as they became part of the same division at head office level. Sales offices were established by ASG in U.S., Canada and Japan and together with WACO in South Africa, Nigeria and Australia. New operating offices were set up in Kenya and Tanzania for aid projects and seafreight services.

ASG created a joint venture with another large airfreight forwarder, Olson&Wright, for handling and distribution of airfreight goods in Sweden. At the end of this period ASG and its U.S agent Emery broke their cooperation. ASG started to cooperate with the new WACO agent, IFI.

Period 1980-89

Development of services
During the 1970's and in the 1980's the actual time spent in the air decreased in relation to the total transport time. Surface transports to/from airports, handling activities increased in importance and a large proportion of the air cargoes for long distance as well as for European destinations were trucked to/from Sweden, a phenomenon that had grown extensively. One important factor contributing to these road transports was the development of the wide fuselage aircraft which with their increased possibilities could lower price on long distances.

When ASG left Waco in 1980 it resulted in many complications and placed ASG under considerable strain. This will be described in detail later. However, it also became a period of fast growth internationally since ASG went on to establish new subsidiaries in three different countries of the world within a year.

The fact that ASG had several international subsidiaries also increased the number of cross-border traffics. In order to achieve profitability the newly opened offices needed to complement services between each other which meant that ASG got cross-border traffics not involving Scandinavia. From these different offices in combination with other existing agents ASG built a new network of international representation. The fact that these offices were established in the
name of ASG worried some of the existing agents, however, and caused them to break off their cooperation with ASG and this caused a second wave of changes. Even though other countries worldwide increased in importance for ASG, the total airfreight organization was based on Sweden and Denmark. It was not until the end of the 1980's that the other subsidiaries in the network took over in terms of importance. During the 1980's there was a development towards more time-based transports which started with the development of Europex, a time-guaranteed service for the European destinations. In 1990 there were a number of service levels from which the customers could choose depending on the quality and price needs. ASG has been cooperating with Federal Express, a large multinational express parcel company from the beginning of 1990. The year before ASG had an agreement with XP, another small parcel multinational, but XP was sold to a competitor so ASG changed to Federal Express.

During the 1980's the sea-freight services started to diversify into new areas. ASG sea-freight developed a complementary service in the beginning of the 1980's through buying a small agency in Denmark for the Trans-Siberian railway. This small Danish company cooperated with a Swedish transport company recently acquired by ASG in Sweden. The Trans-Siberian Railway was an alternative way for transports to reach countries in the Far East like South Korea, Japan and even Hong Kong. The Trans-Siberian agency soon became integrated in the operations of ASG Denmark and resulted in an intensified cooperation between ASG Denmark and the Overseas division in Sweden. In many cases the Trans-Siberian agency meant a cooperation with agents in the Far East other than the regular agents for air and sea-freight. ASG has since then developed an agency on other markets, both in the Far East and in Europe, for the Trans-Siberian railway.

Gradually more sea-freight traffics were developed internationally. The difference can be found in the number of consolidation traffics, the combined transports, express transports, special type of customer transports or special type of goods transports, project transports, etc. To a large extent the existing consolidation and other unit load transports are divided into these different kinds of services. Airfreight within Western Europe in 1989 would seem to have changed to a very large extent into being an express road transport, even though it might still have been called airfreight by the airlines performing some of the transports.

**Representation in foreign countries**

A development of the representation abroad in both operations and marketing was a basic necessity in order to match the changes in the type and number of traffics. Through a delay in the separation from WACO until 1980, due to certain technicalities and lack of alternative for WACO, ASG managed to get enough time to form subsidiaries in UK and in Australia as well as to provide for alternative agents for the Scandinavian countries and the
U.S. During this year ASG also acquired part of the agent Flygods in Norway and two small broker companies in Australia.
The establishment of ASG Hong Kong came about a year later, as an indirect result of the separation from WACO.
Schenker had established its own office in Sweden and as the extended cooperation in Europe between the two companies was not effectuated, the climate between the two companies deteriorated. Therefore the joint venture Schenker-ASG decided to split in two in 1981 following which ASG established a fully owned subsidiary, ASG(HK) Ltd. In the late 1970's, ASG had sent a Swedish salesman to protect ASG's interests on the Scandinavian markets in Hong Kong, since the Schenker-ASG company seemed to have increasingly grown into a part of the Schenker organization world-wide. That salesman became responsible for the new ASG company and then part of the staff from the joint venture were taken over together with him. The new company had grown to be the sixth largest airfreight forwarder in Hong Kong in 1989.

In order to find alternative agents in Europe in such a short space of time ASG asked its existing land-transport agents in other areas for help. All of those approached were also able to help. Some of them were still agents of the Overseas division in 1990.
The ASG companies that were established in the early 1980's have led to an increased engagement worldwide for ASG. In 1981, ASG had 26 agents (7 more than 1976) outside Europe and by 1989 that number had increased to 33 despite the fact that in some countries the existing agents had taken on both air and sea-freight. In Europe the airfreight agents had increased to 20 (from 15 in 1976) out of which 9 were the same as the land-transport agents which shows a further concentration between land and airfreight agents in Europe. The sales office in Canada had been closed down and the offices in USA and Japan had turned into companies having operations of their own. The WACO sales offices disappeared with the WACO cooperation.
After virtually having only agents world wide except for one subsidiary and one J/V, the separation from WACO led to having four new subsidiaries. As ASG established more subsidiaries the conflicts increased with partners like Schenker-ASG Hong Kong which had intensive cooperation with a world-wide Schenker network. The newly established companies needed agents, at the same time, in other parts of the world since they could not exist on the profits from the Scandinavian traffics alone. When trying to find these, they soon found out that most of the existing ASG agents, like Schenker, already had partners and did not want to break their relationships.
ASG overseas division also established 12 partly or fully owned companies during 1980's both in Europe and overseas. Examples of these were companies in Norway, Finland, Switzerland, UK, Hong Kong, U.S., Australia, Japan, Taiwan (part owned), Singapore (sales
office) etc. The office in Kenya still existed but had been reduced to one person and Tanzania
there was a franchising agreement instead.
At the end of the 1980's, not only the Group but also the subsidiaries were acquiring
companies in their area of representation. At Group level, ASG European and Overseas
Divisions had set up companies in Finland and Singapore and increased to 100% their share in
other companies such as ASG U.S., SACT and Nova traffic in Switzerland, etc. As regards the
subsidiaries' acquisitions in 1989/90, ASG U.S and ASG Australia both acquired shipping
companies, ASG Germany and Norway acquired trucking companies, ASG Hong Kong
acquired a company in Taiwan, etc. This illustrates the fact that ASG developed many
companies of its own during the 1980's.

Organization and investments
Many acquisitions were made during the 1980's. The first wave of acquisitions came during
1980-82 after the separation from WACO and the next wave came at the end of the 1980's after
the company had been registered on the stock exchange.
After the WACO event, where companies were already part owned ASG followed up the
investment by increasing its share to 100%.
As the subsidiaries have continued to grow, further investments in know-how, terminals,
ofices, handling equipment, etc., have been necessary. For instance, a large new terminal was
built in Hong Kong. The exceptions are the small companies in Africa in which limited
investments have been made due to the restrictions on taking any profits out of such companies.
In recent years, ASG has purchased a shipping agency and forwarder in the US and has
acquired a part of the agent in Taiwan which also represented ASG for shipping services. The
investment in the agency for the Trans-Siberian Railway can also be seen as an investment in
shipping in the Far East markets.
Perhaps the most important investments to have been made lately are the investments in
communication systems, like Access, which are used between the different subsidiaries. Here
ASG has had many difficulties in getting the different agents world-wide to invest in the same
system. Their willingness to expand is dependent on their relationship to ASG and the joint
future they could see for themselves in this cooperation. This led to an even stronger tendency
to create fully or partly owned subsidiaries.

Summary of the period 1980-89
ASG airfreight developed time guaranteed and express services during this period. At first they
created their own express system within Europe which intensified the cooperation between
ASG and the agents in terms of resources and communication. However, at the end of the
period ASG made an agreement with XP and a year later they changed to Federal Express.
Further ASG became an agent of the Trans-Siberian railway in Denmark. In many cases the
Trans-Siberian service also had its own agents in the Far East. In the late 1980’s ASG subsidiaries in U.S and Australia also became shipping agents through acquisitions. The total number of representatives for ASG Sweden increased over the period both in Europe and overseas. As ASG left WACO, several new subsidiaries and agent relations were established. In the search for new agents both for the existing and the new subsidiaries cross-country cooperation increased between the subsidiaries. Important investments were made during the period in new communication systems. Acquisitions came in two waves. The first was when ASG left WACO and the second at the end of the period as ASG became registered on the stock exchange.

5.1.3. Specific event - ASG -ISA and the WACO organization

Waco as a specific phenomenon has been of significant importance in the process of ASG’s internationalization.

5.1.3.1. ASG and WACO

Before the event

When one of the managers in a company within the Constar Group left for another airfreight company, he had the idea of forming a new Group to be named WACO and ASG was invited to be the member for Scandinavia in early 1970’s and became associate member in 1973. Due to this ASG had to change most of their existing European airfreight agents and acquired some new outside Europe.

The idea of WACO, World Air Cargo Organization, was to create an exclusive net of the predominant airfreight forwarders in each country. All the agents should cooperate on an exclusive basis with each other. This net of agents was to be an alternative to the multi-nationals in transportation like Schenker, Panalpina, etc. The local strength in combination with the world-wide representation would be even better than for some multi-nationals who were strong mainly on traffics to from their home markets. Another advantage would be that it should be possible to invest in new communication and information systems. WACO created a common logo-type for the total organization which would be a sign of membership and could be used in marketing. Five of the European companies formed an executive committee (EC), which was responsible for control and development. EC decided which countries and companies should be members and also supervised that the members followed the rules. The members of this committee were supposed to meet frequently while all
the members of the organization met only once a year. ASG was one of the members of the Group and of its EC.

Being a member of the EC of WACO, ASG had the possibility to influence the choice of new agents in the new markets of interest.

A result of the over capacity of the airlines was that they offered high off-the-record discounts which gave the members of a large organization like WACO certain advantages. At the same time these discounts made consolidation less profitable which in turn made investments in communication and information system less interesting for a period.

After a period of positive development some of the disadvantages started to show. One of the problems was the difficulty to get the members to invest in the common communication system, since the need for such systems varied between a company in a highly developed country and a company in a developing country. Many members were very dependent on demands from specific customers which was also a problem when acting in common as regards investment. As separate companies WACO members gave priorities to short term profits rather than WACO related long term investments. Furthermore were the biggest agents in the Group already had their own agents on the most important markets like U.S., Japan, West-Germany, etc., and were unwilling to break those relations. These agents would indirectly gain access to the communication and information systems that WACO invested in.

Positive spin-off effects for ASG were that ASG together with the English participant set up a representative office in South Africa, in Nigeria and one in Canada. Another project was to set up a support organization at Maastricht airport for split charter traffics.

Certain attempts were made to create a holding company for the organization so that the members could be more closely tied together. This did not work out.

As WACO was looking for a better agent in the U.S., Emery became concerned and decided to leave the cooperation with ASG. This created the need for WACO to find an agent in the States that suited ASG as well. This became a problem since the States, being a very important market, was to a large extent dominated by the multinational transport companies. Finally IFI, Intercontinental Forwarders Inc., an existing U.S.agent for a limited area U.S., they invested in a better coverage of the country and became the exclusive agent. Shortly after that they said they were prepared to let some of the companies buy 50% of their company, but they could not accept having 3-4 owners with different views as to how the company should be handled. They asked ASG to be part-owner, therefore, since ASG had some of the largest traffics and was in the greatest need of finding a satisfying agent.
The event
Thus ASG bought 50% of the shares in IFI. The basic reason for this was that ASG would owned an agent outside the Nordic market, the area of representation for ASG in WACO. This would make ASG too dominating in the WACO Group it was felt.
A separation from WACO meant a change of agents in 10-20 different places at the same time. Most of those places were to be found in Europe but others were in areas like Australia and South America. Fortunately, ASG had some of the primary countries like U.S., Japan and other places in the Far East not tied to WACO.
Since there were some technicalities in following the rules and members of WACO could not find other agents in Scandinavia as well as in US in such a short time they had to let things continue unchanged for the time being. This gave ASG some time to look for alternatives for the markets of the EC members, who were very eager to leave the cooperation as soon as another agent was found. The other WACO members were prepared to stay on as ASG agents, at least for a while. During this period ASG acquired part of the Norwegian agent
As it was necessary to find a new solution rapidly in most places in Europe, ASG asked its European surface transport agents for help. All were willing to do so. Two very difficult countries were the UK, since the predominant member of WACO was English, and Australia, since the agent did not want to continue with airfreight because of low profitability. In the UK, ASG employed the marketing manager of the WACO member to set up a subsidiary and in Australia they bought two small brokers to form the base for a new company. Both the subsidiary in U.K. and Australia started at the same time in 1980. ASG had just before acquired 65% of the Norwegian agent. With these arrangements, ASG airfreight had the capability of solving the problems that came with the break with WACO. The common sales representation in Canada stayed with ASG while the representation in South Africa stayed with the UK agent.

After the event
After ASG had resolved its immediate problems, the problem then became to get these new agents and newly formed companies to work. The partly owned company in the U.S., being a member of WACO, also lost many of its agents. The newly formed subsidiaries needed agents in other parts of the world. They could, of course, have worked together but this did not solve the problem of the Far East or of many of the European countries. Finding new agents for these companies led to a separation from Schenker in the Far East and the establishment of ASG Hong Kong to support the Scandinavian traffics. Many very large changes stemmed from the severance of the relations with WACO in 1980 and many indirect effects still existed in 1990.
In Scandinavia, ISA, a subsidiary of Wilson & Co, took over the role of ASG in the WACO Group in 1980. The effects on them will be discussed below.
5.1.3.2. ISA and WACO

Before the event

InterScandinavian Airfreight, ISA, was formed as a separate airfreight company in 1974. The basic rationale for its formation was the dissolution of the former airfreight company, UAF (United Airfreight), in Stockholm, which had been jointly owned by Wilson & Co and TK (Transportkompaniet). TK was part of the Scansped Group, which had recently formed another competing airfreight company, Scanflight, with some of the parties in the Scansped Group. These conflicts made it impossible to continue the cooperation.

Wilson & Co saw the opportunity to expand in airfreight and by taking over the managing director of UAF, the problem of finding agents to ISA for the necessary markets was facilitated. The agents specialized in airfreight seem to have stayed with ISA to a larger extent than with Scanflight. In areas for which new agents were needed, ISA utilized the contacts or agents of the parent company. Basically all agreements were bilateral and most of the agents were receiving agents, which ISA was as well. As a receiving agent there were very few formal agreements signed. Each company was only interested in exports. Only in a few cases did ISA have another form of agreement where imports were also important. One such case was in the Far East (Hong Kong) where ISA sold import traffics in their own name.

ISA also entered into two joint ventures, one in Brasil and the other in Singapore neither of which coming up to expectations. It was especially the joint venture in Brasil which created many problems. The cost of establishing traffics worldwide was very high and ISA's resources were not sufficient.

The parent company Wilson had a subsidiary Wilson Inc. in the U.S. which was also an agent for ISA. This company ran into economic problems at the end of the 1970’s, which in turn caused the Wilson & Co in Sweden to suffer severe economic damage.

Such was the situation when the WACO Executive Committee contacted ISA concerning being a member in the WACO organization.

The event

ISA was offered the alternative of becoming either a traditional bilateral agent or of joining as a full member of the WACO system. Joining as a full member meant changing agents in about 25 different places, taking over after ASG in most places. Being a full member also offered the opportunity to be a member of the Executive Committee after ASG. In a situation where they would not have made any larger international investments anyhow, ISA decided on full membership in 1980 based on the fact that thereby they would be getting a more extensive and higher standard of agent representation world-wide.

The advantages to WACO were obvious. The volumes would increase, the agents were not only receiving agents but were closer tied to each other, the development of an international
communication system would be possible, buying power would be higher, etc. The disadvantages considered were mainly the problem of getting tied up to one total system and the agents in it.

After the event
ISA’s expectations from WACO membership were only partly realized. The several advantages, such as getting better partners world-wide, would seem to have been true to a certain degree, but the number of disadvantages was larger also than expected. As a result of the Waco membership many marketing activities were possible to plan ahead instead of working on an "ad hoc" basis, but it necessitated a reorganization of ISA in marketing and many other areas. Due to the WACO membership ISA got a change in profile on the Swedish market and established a number of new traffics. Even though the number of customers did not seem to increase, the profitability became better.

As ISA did not at that time have a strategy as to develop a world-wide network of their own, a membership in WACO suited them. Furthermore the WACO cooperation helped ISA in the negotiations for withdrawal from the joint venture in Brasil. It also caused them to reconsider the investment in Singapore.

Being member of WACO gave ISA many international contacts and through these contacts new opportunities developed, like being a partner of UPS (United Parcel Systems) a world-wide integrated chain in Sweden. The WACO member in the UK was already a partner in UPS in the UK.

Being a member of the Executive Committee meant spending time together with the 6 other committee members in managing the total WACO-organization. ISA found it difficult to be in accord with all the members of this Committee. Instead Scandinavia, UK and Holland formed a small group that worked together more intensively. For instance, they formed a new company "Space Air" in Holland for split-charter together, which sold their services also to other members of the Group.

A problem was that many members of the Group did not stick to the rules. This was even the case with some members of the Executive Committee.

The investment in the total communication system ceased, due to the fact that most members were not interested in joining the system due to differences in priorities and lack of knowledge in utilizing computers. It made it too expensive for the few companies utilizing the system. In the beginning of the 1980's, ISA together with 13-14 members of WACO created WACO-express system. ISA organized a separate department with separate salesmen for the purpose. The system was effective but the numbers of members interested were too few. Even members of the Executive Committee did not join. Either they had a functioning express system already
or they did not want the system suggested. In the end only three companies really put their efforts into the system. This resulted in the system developing along partly false premises, since it was based on higher volumes.

Further the large number of members created problems of deciding upon the needed common investments as well as upon changing agents. Waco developed a bureaucracy when it came to decisions. In the case of the communication system this bureaucracy resulted in that the technical development of the suggested system was surpassed.

Shortly after ISA became a member of WACO, the total Wilson Group was sold to the Bilspedition Group. The Bilspedition Group already had a small airfreight company, which was a competitor to ISA.

In 1987, it was decided that ISA and Scanflight, both nowadays subsidiaries of Bilspedition Group, should be merged into one company under the name of Scanflight. The agent situation had to be discussed and a large number of agents had to disappear which caused both new problems and opportunities for the WACO organization in Scandinavia. The new Scanflight developed rapidly and the loyalty to the Waco organization decreased gradually. In the end, therefore, Scanflight changes their status in WACO from an full member taking an active part to an associated WACO member.

Finally it seemed that ISA, due to the cooperation with WACO, became more international and grew in market share in Sweden while ASG concentrated hard on developing their worldwide net of establishments.

**Summary of the WACO event**

As ASG became a member and exclusively tied to a world wide organization WACO, it had to change many of its existing agents. ASG took an active part in recruiting new agents as members and in the development a new common communication system. As WACO was looking for a more suitable agent in U.S, ASG’s existing agent Emery left. IFI became the new WACO agent. ASG was asked to be a part owner of IFI. This created internal conflicts within the WACO group and ASG was asked to leave.

ASG had to find around 20 new agents in different countries. In solving this problem ASG acquired and set up new companies in Norway, U.K. and Australia. Some of the existing European landtransport agents took on airfreight as well. The newly created companies and existing ASG companies in Sweden, Denmark and U.S had to find new agents in many countries. They turned to each other for cooperation when possible. Schenker -ASG J/V in the Far East was divided into two separate companies and the new ASG HongKong started to cooperate with many of the existing ASG airfreight subsidiaries. Over time many new changes for ASG airfreight resulted from this event.
The new Scandinavian agent, to which the remaining agents in WACO had to switch, was ISA. ISA had to change 20-25 of their existing agents in order to become a member of WACO. They became very active in WACO and the competition with ASG increased. As Wilson & Co, parent company of ISA, was acquired by Bilspedition, ISA was merged with Scanflight. This decreased their loyalty to WACO and they changed into being an associate member.

5.2. General case analysis
The analysis comprises the development of land-transports in Europe as well as that of overseas including air and sea transports in Europe. The specific events are used as examples for better understanding of what has transpired during the periods. The events are analysed in more detail when discussing context and dynamics (chapter 9).

5.2.1 Period 1940-54 - Beginning of internationalization
ASG had existed only seven to eight years when the first international aid transports were undertaken. In spite being only recently established the company was one of the largest domestic transport companies providing trucking services in Sweden. Due to restrictions on trucking transports, some railway traffics were established in the early 1940's.

**Integration**
During the period from 1945 to 1954 ASG established something like 12-20 new cooperations resulting in even more transport systems. These were basically all railway consolidation traffics.

The first direct international relations were developed through the international contacts of the owners, the shipping line Svea and the Swedish Railway. In some cases former aid transport contacts were used.

In the Swiss event, the contacts were taken in 1946 via relations to the Svea shipping line while in many other cases existing railway agents or former aid transport agents were chosen to represent ASG.

The legal integration was extremely low. In most cases there were informal exclusive bilateral agreements. The social contacts were relatively strong and only in a very few cases did formal written agreements exist. In the Swiss event, ASG and Natural negotiated for more than half a year before agreeing on their future cooperation and transport system in common. The door-to-door concept that ASG demanded necessitated a higher integration of the system to be executed than was normal at that time. The control aspect between ASG and the agent differed depending on the size and international experience of the agent. In the case of Natural, the control from Natural was probably higher during this period, Natural being a more experienced international transport company than ASG. In general, the control seems to change during the period as the
balance of trade was changed. In the beginning it was in favour of ASG since exports dominated and most customer contacts were taken in Sweden. However this changed as industries in the war devastated countries developed.

The specialized departments for international transports increased the knowledge and efficiency. This in combination with the high growth led to closer cooperation developing between ASG and its representatives. The profitability was high in the railway traffics during this period. In a few cases, the closer cooperation led to an increased number of transport systems in common between ASG and the representative through initiating new direct traffics to other parts of Sweden.

5.3. Internationalization - integration at system level 1940-54

As a result of the establishment of these cooperations, a net of cooperating transport companies was created even though there was very little interdependence between the different companies in the net.

Extension
ASG's activities expanded to 12 different countries through the establishment of the agent cooperations and the transport systems between Sweden and the different countries concerned. The extension was of first degree, starting with the Nordic countries in combination with Switzerland, Austria and Hungary. Next in line were West and East Germany, Czechoslovakia, Poland, Yugoslavia, Bulgaria and Italy. There was an attempt to establish a traffic by boat to France via Antwerp which failed.

Penetration
At least 20 different traffics were established together with agents, of which several were in West-Germany and in the Nordic countries. Sometimes the same agents had many traffics with ASG and at other times there was only the one agent for each traffic.
The high growth in volumes caused large increases in the size of relations as the resources for the existing type of services increased. The resources for the international traffics increased very much within ASG during the period, both in terms of personnel and terminals. The number of local offices handling international traffics increased in Sweden. The fact that there was more than one agent in West-Germany caused a change towards an increase in the spread of relations.

<table>
<thead>
<tr>
<th>Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exist. relation</td>
</tr>
<tr>
<td>size of relation</td>
</tr>
<tr>
<td>Exist. type of services</td>
</tr>
<tr>
<td>scope of relations</td>
</tr>
</tbody>
</table>

5.4. Internationalization - penetration 1940-54

The home country resources grew as well as the resources in foreign countries through agents. Further the growth resulted in very high market shares in some areas.

Conclusion and effects of representatives
Through a number of new cooperations (12-20) and an even larger number of transport systems created, a gradual international expansion was taking place. This caused first degree of extension to 12 European countries as well as increasing volumes of resources committed for these countries.

Effects on suppliers, owners and competitors
Both Svea and SJ played an active role during this phase. For SJ, the result was a very positive contribution to their railway traffics. As the growth in volumes caused capacity problems for the railways, ASG and its agents took greater control over their consolidation systems. The trucking companies which had participated in the foundation of ASG were concerned about the increased SJ engagement and the direction in which ASG was developing. Once the war was over, the conflicts arising from these concerns became more open. At the end of the period, when SJ had a negative influence on ASG’s possibilities of getting international trucking permits, the conflicts became severe.
During the period, other Sweden-based competing forwarding companies tried to stop ASG's internationalization process through forming a coalition for international transports, threatening to use their joint power on SJ as well as on ASG.

5.2.2. Period 1955-69 - Expansion of trucking traffics and start of airfreight
During this period the railway expansion slowed down and the trucking transports took over. Enormous increases had taken place since the second world war.

Integration
On the system level the relations to the existing railway agents were changed during this period, especially for shorter distances such as the northern parts of Europe. For many of such agents there was a stagnation in development as the trucking traffics were taking over. In some cases, this resulted in looser cooperation or a ceased relation to the existing railway agents while in other cases there was an enlargement of the existing cooperation. In the Swiss event, the cooperation was enlarged since trucking services became a complementary service to the existing railway services. In the West-German event, on the other hand, the existing cooperation first became looser as a result of the ASG Hamburg establishment then it ceased to exist. A high number of new trucking traffics started during this period and as volumes increased new direct traffics were added.

The aspects of integration were slightly different during this period compared to the earlier. Perhaps the most noticeable change was the increased execution integration as a result the formation of so many new trucking systems, since trucking traffics demand a higher degree of integration in operation including handling, marketing, communication, etc than railway traffics. ASG also increased its terminal and marketing resources and intensified its total marketing efforts both in Sweden and abroad. As a result of the higher level of execution integration the social integration seem to be increase as well, since communication had to increase on many levels.

ASG was more active as regards legal integration, starting a subsidiary including operations in Hamburg but also opening and, within a couple of years, closing four different sales offices. Three of these were situated in West-Germany at different periods. The earliest was established in Berlin in 1955. These sales offices were supposed to lead to intensified social integration with the agents in the country. However they also created certain conflicts since they increased the degree of ASG's control at the expense of the agent. ASG took direct contact with many existing customers of the agents.

Even though these sales offices were to disappear after a while, the customer contacts did not, since ASG shifted the direct selling to the head office in Sweden. Moreover, the trucking transports increased the degree of control exercised by ASG over the agents on account of the fact that ASG insisted on supplying the systems with the trucking resources. This was very
obvious in the first new cooperation in the Belgian event where ASG supplied not only the trucking resources but also the trucking traffics know-how to the agent.

The changes mentioned above concerned land-transports but during this period ASG started airfreight and seafreight activities as well, on account of which new cooperations were established both outside Europe and within Europe. In Europe, many of the agents chosen for airfreight were existing land-transport agents having airfreight as a complementary service. In airfreight, some extremely important agents in the U.S and the Far East caused ASG to make investments and increase their legal integration in those areas. ASG established a subsidiary in Copenhagen exclusively for airfreight in 1959 and started a joint venture in the Far East with Schenker in 1961. These cooperations developed quite quickly into a closer cooperation. The American agent had designed a transport system with a very high executional integration, with time guarantees. However, the control of the systems was higher by the agent than by ASG. Other airfreight cooperation, basically concerning direct consignments with airlines, involved only a low degree of integration, since many of the agents were merely receiving agents. As for control, it was divided between ASG and the agent, depending on whether export (ASG) or import (agent) was concerned.

As for seafreight during late 1960's, ASG started new cooperations in the U.K. for the establishment of trailer traffics and new cooperation concerning container traffics to the U.S and Canada. The seafreight transport, whether utilizing trailers or containers, included a relatively high execution integration compared to traditional seafreight.

![Diagram](image-url)

Figure 5.5. Internationalization -integration at system and net level during 1955-69

In the figure, the development for the railway is shown as connected to that of the process of trucking traffics.
On a net level the formerly created net was opened up. Some existing railway relations were dissolved and a number of new agents and transports systems for trucking, airfreight and seafreight were added gradually. The intensified cooperation with Schenker and Emery resulted in a drifting closer to many of their other offices or agents. Sometimes the cooperation was infrequent and only when there was a specific need and at other times ASG started to do more and actively cooperate with one or two of their agents or subsidiaries over the period.

Extension
During the period first degree extension took place to many new countries in Europe such as France, U.K. Spain, Belgium, Holland, etc. The change in extension in Europe was, however, smaller than during the earlier period.

The first extensions to overseas countries to take place during this period were those to U.S, Canada and to a number of countries in the Far East, such as HongKong, Japan, India and Thailand. Second degree of extension was a result of the international traffics of the Danish airfreight subsidiary.

Penetration
Resources for railway traffic decreased while resources for trucking traffics, airfreight and seafreight increased heavily. Therefore size of relations decreased in the case of existing railway traffics while the others increased. The scope of relations increased for agents adding trucking traffics and on airfreight to the existing railway services. It was a case of new diversified relations in other situations where ASG cooperated with new agents for this new type of transport system. Both the latter developments were present at the same time. The development during the period also allowed for a certain spread of the relations due to the increasing volumes and the increasing number of new trucking permits.

During this period the total penetration increased, both in terms of quantity and differentiation of resources and relations. Moreover, the expansion in resources committed for international activities in Sweden was equally strong.

Figure 5.6. Internationalization - penetration 1955-69
Basically the growth came through the new types of services and not through the railway traffics, which decreased in number of agents and profitability. Speed of penetration was also higher during this period than during the former.

**Conclusion and effects on representatives**
Several parallel processes have taken place during this period leading to changes in different services. Not only have system changes taken place but also changes at net levels. The main part of the changes led to a higher degree of integration at system level through new cooperations and to a lower degree of integration at the net level, since part of the existing relations were dissolved and other relations were added. The extension was still concentrated the first degree and the speed in Europe was lower than in the former period. The speed of penetration assumed greater importance during this period partly due to the growing volumes combined with the new types of services that were added. The trucking services agents’ connection to the railway services within their own geographical area deteriorated.

**Effects on suppliers, owners and competitors**
Basically the effect during the period was that of increasing integration with the trucking companies, both legally and executionally and with regard to control. The expansion of trucking traffics which continued over the whole period was made together with trucking companies. Due to this, some of the existing domestic trucking companies related to ASG became internationalized. The risk and the control also seems to have been higher for ASG in the international trucking traffics than in the domestic. As to legal integration, the ASG Truckowners Association (ASG-T) got the possibility to buy 5% of the shares in ASG from SJ in 1965 and in 1967 they acquired another 2.5%. As for SJ, the integration seems to have gone in different directions during the period. First SJ increased its legal integration with ASG to 100% in 1959. Then in 1965 this decreased to 95% and in 1967 there was a further decrease to 67.5%. During the period the executional integration between ASG and SJ was reduced in some areas and increased in others. In Sweden many terminals were built together with SJ. On the whole, however, the competition between ASG and SJ seems to have increased. SJ managed to delay development of ASG’s trucking traffics for many years by systematically influencing the Swedish Board of International Trucking to refuse ASG’s applications for permits. The control of the rail traffics also seems to have increased for ASG since they wanted to choose the type of traffics best suited to the customer.
For the shipping lines, the changes also went in different directions during the period. On the one hand, Svea shipping line sold its shares in ASG and decreased its integration with ASG in most aspects. The trailer traffics to the U.K. were an exception. On the other hand, a group of shipping lines, Rego, acquired 25% of ASG in 1967. The development of ASG seafreight at the end of the 1960's further increased the integration with Rego shipping lines. Finally, the airlines and ASG also increased their degree of integration during this period both executionally, socially and controlwise. Executionally, ASG and Linjeflyg (a Swedish domestic airline) had made an agreement that ASG should perform the necessary land-transports and some of the administrative work connected with their international consignments. This included transports to/from Copenhagen. As ASG developed its own international airfreight, the cooperation with SAS increased, since they held the monopoly on Scandinavian international traffics. This meant that the control in airfreight was predominantly in the hands of SAS and to a lesser extent with ASG and its agents.

Period 1970-79 - Specialization and diversification
The growth which had persisted for so many years stagnated after the first years of the decade and did not come back until the end.

Integration
Many new cooperations were established during the period both as a result of specialization and of diversification.

The existing relations in land-transportation were under pressure to increase the effectiveness of their transport systems as a result of the stagnation. This resulted in either intensified closer cooperation or in a switch of representative. In many cases it was combined with an enlargement of a former cooperation adding some of the new special transport services.

The aspects of integration demonstrate the wave of changes taking place during the period. The legal integration continued to be low during the 1970's but increased somewhat during the period's last phases. However, there were several events on the way that led to both increases and decreases. In 1971, ASG took over the majority interest in the agent in Norway, but due to economic and political problems that lasted only two years, after which ASG acquired a new Norwegian agent. A further event was the opening of four new sales offices. First there was an office in Hamburg, which was later moved to Brussels during the mid-1970's, and then there were the two other sales offices opened in Italy and France. All were closed down in the early 1980's.
Finally, ASG acquired two internationally operating companies, the first the agent in Stuttgart, West Germany and the second a competitor in Sweden. In addition, a greenfield investment in Belgium was made during the last part of the period. Similar changes in the other aspects of integration, representing increases, decreases and a stabilization had taken place before the period was through. For execution integration, there were decreases, *looser cooperation*, which caused ASG and the agents to dissolve some cooperations and to intensify others. However, by the end the period effectiveness of the transport systems had increased. Some of the reasons behind the increased effectiveness were better know-how, new and more efficient terminals and transport equipment, communication systems development and a specialization and divisionalization within the organization. Through these changes the social contacts had to increase to solve the problems. Finally, Control became more symmetric for ASG and the representatives since the traffics had to be intensified from both sides. The strength in market position came to be more important for the control of the traffics in common. *Air and seafreight* developed positively during the period both in Europe and overseas, ASG made a change from its existing airfreight agents to specialized agents who either were or became part of the WACO group. Many *new cooperations* started in airfreight, therefore, and the previous traffics *ceased* to exist. Since several of the existing land-transport agents in Europe were among those affected, there was a *decrease in the field of cooperation* due to this. Furthermore, other *new cooperations* for seafreight as well as for airfreight were being formed in new overseas countries during the period. As regards to airfreight, the number of agents overseas came to exceed the number of agents in Europe. *At net level*, several parallel changes were happening. The net was *opening up* both in terms of dissolving a limited number of relations for railway and airfreight transports and adding both some new airfreight and seafreight agents as well as some specialized agents. The internationalization of the subsidiaries was another reason for the net to open up. However, parallel to these changes a great deal *closer cooperation* took place between the existing agents due to the increased know-how, the new organization and the new communication systems that were developed. Two cases of *joining nets* took place in landtransports through the acquisition of ERT and Atege, Stuttgart. Further, there were changes in priorities, both as a result of new agents being brought into the net as a consequence of acquisitions and because of changed priorities towards some of the larger international representatives. In the former case, the nets of the added agents were *drifting closer* as in the case of many WACO agents. In the latter, ASG was *drifting away* from nets of the large international representatives Schenker and Emery and "drifting closer" to Natural and van Gend &Loos.
Extension

During this period the first degree of extension still took place even though the second degree of extension became much more common, not only through the internationalization of subsidiaries but also due to the acquisition of international transport companies. The first degree of extensions from a Nordic horizon were basically to the outskirts of Europe, like to Turkey, Greece, Sovjet Union, etc., and overseas countries while the second degree of extension was to West-European countries which had already been the subject of first degree extension. In airfreight, ASG gained coverage of a lot of new countries, especially after joining the WACO group. At the end of the decade a large part of the world was covered through airfreight agents. Seafreight expanded to many new countries as well, not only in the industrialized world but also to countries like Tanzania and Kenya. South America and Africa had the lowest coverage in terms of agents or subsidiaries. The speed of secondary degree extension seems to be higher than first degree extension since many countries were added through acquisitions of international companies.

Penetration

Air and seafreight on the whole, and trucking traffics to an extent, increased their penetration during the 1970's. This was basically a result of specialization and diversification leading to increased differentiation of resources shown in the form of increased scope of relations in some cases and new diversified relations. However, the differentiation of resources into special systems and functions caused decreases, to a certain extent, in the size of some existing relations performing a more general type of transport system. The addition of so many new functions and the development of special transport resulted in a wave of training of personnel. New offices and terminals were also opened in Sweden especially for international traffics. The number and size of airfreight offices and terminals in Sweden and Denmark grew,

Figure 5.7. ASG internationalization - integration changes 1970-79
partly as a result of the change to consolidation traffics entailing higher risk, greater utilization of resources than traditional airfreight and calling for increased marketing activities. Also during this period, ASG created a joint venture with another large international airfreight forwarder, Olson & Wright, in order to achieve effective handling and distribution of airfreight. At the same time, ASG Hamburg, taking on new functions and new international traffics, increased its penetration, creating the need for more resources for development.

The volumes increased strongly in the beginning of the decade. The oil shock changed the situation and the mid-70's saw the total volumes internationally for ASG decrease (-16% in 1975) as a result of the international recession following the oil crisis. A slow decrease in spread of relations for the general land-transports could be detected, a few of the existing local agents having seemingly disappeared from the scene.

The internationalization of the subsidiaries, essentially made within the framework of services that existed, therefore increased the size of relations in the countries in which ASG had subsidiaries as well as in the countries to which those subsidiaries had established traffics.

<table>
<thead>
<tr>
<th>Exist. relations</th>
<th>New relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>size of relations</td>
<td>spread of relations</td>
</tr>
<tr>
<td>/ +</td>
<td>/ + = Decreasing and increasing processes going on</td>
</tr>
<tr>
<td>scope of relations</td>
<td>new diversified relations</td>
</tr>
</tbody>
</table>

Figure 5.8. Internationalization - penetration 1970-79

Penetration increased subsequently during this period, primarily through adding new functions, special transports and new types of airfreight and seafreight traffics leading to scope of and new diversified relations. Further, the size of existing relations with agents decreased in land-transports and the "spread of relations" decreased slightly. A certain increase in the size of relations occurred for the subsidiaries on net level due to their internationalization.

Conclusion and effects on representatives

During this period there were many parallel as well as sequential changes. To a large extent, the number of parallel changes depended on different changes in airfreight, seafreight, rail and road transports. Through the change in the organization into divisions where the relationships to the representatives as well as to the suppliers became divided between three international divisions i.e. the Overseas, the Continental and the Nordic division the parallel changes became
more visible. These part-nets were both complementary and overlapping (O/C and C/O) and fully complementary (C/C). The creation of these part-nets within the focal net also calmed the increasing conflicts between the negatively connected agents in the focal net. The internationalization in combination with the increased specialization and diversification of ASG, as well as that of both agents and subsidiaries, increased the degree of negative connectedness between the representatives.

The period showed an instability leading both to increases and decreases in volumes which also influenced the changes that took place as well as the speed of those changes.

**Effects - suppliers, owners and competitors.**

During this period ASG decreased its execution integration with SJ internationally since the consolidation traffics continued to decrease. ASG's priorities were changed to the disadvantage of SJ, in spite of the fact that SJ still was the majority shareholder in ASG. SJ was negatively connected to the development in other fields.

Resulting from the diversification of services into bulk, heavy transports, combined transports, etc., there was a need for specialized equipment. To the extent that **truckling companies** were prepared to invest or adapt, the degree of integration could increase but many of the others had the possibility of facing a decrease in volumes, sometimes resulting in lower degrees of integration. Therefore during this period there seemed to have been a change in priorities. Some of the more effective trucking companies willing to change and invest were cooperating more closely with ASG while the cooperation with others became less.

Similar changes in priorities seemed to take place for airlines and shipping lines. The **shipping lines** chosen for ASG seafreight had a positive connectedness to the development of ASG. To the extent that these were Rego organizations, the integration with ASG increased. In those cases where ASG used competing shipping lines to that of Rego, the level of conflicts rose. Other cooperations were initiated, directly with Johnson Line in a cooperation on the Sovjet Union, domestic transports of unit loads, etc. As ASG increased in knowledge and size in seafreight so did its control.

ASG increased its degree of integration with the domestic airlines, SAS and Linjeflyg, in the beginning of the decade due to their agreement of being their agent.

When ASG began developing international airfreight consolidation, the increased integration with airlines in general became varied. Integration with some international airlines increased and decreased with others. On the whole, however, the creation of the WACO group and the overcapacity of the airlines brought about a reduction in the control exercised by the airlines which worked to the advantage of ASG and its representatives.
During this decade the trucking of airfreight goods to/from Continental airports increased for certain long distance destinations like the Far East. This brought about a reduction in the dependence on the home country or national airlines and an increase in the control over the air transports for the agents.

**Period 1980-89 - Overseas expansion and European consolidation**

*Integration*

During this period, the change in integration was dominated by net changes rather than system changes.

The European land-transport net of representatives underwent a period of consolidation and concentration while air and seafreight expanded overseas.

The concentration of the European land-transport induced a *closer cooperation* and a *drifting closer* at the net level during the period. In Europe, the number of land-transport agents in West-Germany decreased from 17 to 3. At the same time the number of subsidiaries increased through the acquisition of two companies. Also a concentration took place in other European countries, such as in France where ASG had several representatives. At system level, there was a *switch of representative* from some agents to other representatives leading to an *enlargement of cooperation* with a few agents and subsidiaries. The concentration was basically to old established agents which can be appreciated by the fact that average period of cooperation extended over more than 20 years in 1989.

New types of services such as time-guaranteed and express systems were developed over this period. These services could be built into the existing general transport systems or they could be constructed as special transports and form complementary transport systems. In either case, they brought about an increased need for integration with the representatives through more effective communication systems, etc. For those representatives prepared to adapt, this resulted in a higher degree of integration through *closer cooperation* or *enlargement*.

Legal integration increased for the focal net during this period more than ever before. For the part net of land-transports, acquisitions were made in Norway and West-Germany followed by the taking of a minority interest in the Danish agent. The change in Norway was necessitated by Bilspedition’s acquisition of the then ASG agent. The new Norwegian agent, which was also the agent of the ASG agent in Denmark, started a cooperation with ASG when, after a short period, the company was acquired by ASG, Sweden. In three cases it were legal integration with the agent.
As for the airfreight part-net, many changes took place during the period at the net level and at system levels involving all aspects of integration.

In 1980 the cooperation with the WACO organization broke down and in many countries ASG had to leave 20 agents since the WACO organization was an exclusive, highly integrated worldwide organization. The loss of Emery as an agent in U.S. and the acquisition of 50% of the US agent of WACO, caused severe conflicts with the other agents (for more details see the WACO event).

ASG had to leave WACO net and opened up their net for new agents and a combination of greenfield investments in U.K. and Australia as well as acquisition of the agent in Norway. In Europe several of the existing landtransport agents took on ASG airfreight as well. In some cases this was only a temporary solution. The existing ASG subsidiaries for land­transportation, however, lacked the necessary knowledge to take on airfreight.

A short period afterwards, Schenker ASG in the Far East had to break up since ASG wanted a representative for their new subsidiaries in the Far East. The ASG joint venture with Schenker in HongKong had been drifting closer to the Schenker net almost worldwide. The joint venture was disbanded and ASG HongKong established.

The newly ASG opened offices, through homogenizing their activities, increased the integration with Sweden in all respects. The new airfreight subsidiaries also expanded into other airfreight markets important for their countries and increased the integration with their sister companies thereby making an effort to move towards closing up for airfreight. Their expansion also led to new (system) cooperation s with many agents.

The legal integration increased during this period since formal agreements in writing, as opposed to informal agreements, became standard. Still, many of the formal agreements seem to be focused on exclusivity for a certain system in a certain geographical area and not generally at net level.

Later during this decade, air and seafreight part-nets slowly developed towards a concentration to fewer overseas representatives as in HongKong, U.S., Australia. At the end of the period, ASG even acquired an international seafreight forwarder in US which would help the ASG company in pursuing seafreight traffics. The result was a switch of representative and enlargement at the system level and closer cooperation and drifting closer at the net level.

During this period the focal net had been opened up , adding many new cooperations overseas. Some of these cooperations, resulting from the Transib railway agency, meant that new cooperations were established with several new agents in the Far East. In other cases, the existing representative took on the agency for Trans- Siberian railway. The transport systems of the normal seafreight was negatively connected to that of Trans-Siberian railway.

The organization within Sweden changed became divisionalized into Division Europe and Overseas.
The development of time-guaranteed transports and logistical services in airfreight also created new cooperation with other types of agents like XP and later on Federal Express. These transport companies offered specialized services for which they had a world wide transport net for time-guaranteed transports of small parcels already. ASG first joined the XP net and then left the XP net and joined the Federal Express net. The execution and control integration is higher in those systems than in a general transport system without time-guarantees. Even though the sales offices in Europe had been closed down, at that time ASG had sales offices overseas in Japan, U.S and Singapore which were changed into operating companies in these areas later during the period.

ASG - Period 1980-89

Finally there was a movement towards the closing up of the focal net at the end of the period since the representatives of the net seemed to be cooperating to a larger extent with each other. This seems to be especially true not only for the newly started airfreight companies but also for the Scandinavian land-transport companies and within West-Germany.

**Extension**
During this decade the *first degree* of extension did not increase. Only small peripheral increases and decreases took place. However the *secondary degree* of extension changed very much, primarily as a result of leaving the WACO group which decreased the secondary degree of extension. On the other hand, the number of subsidiaries established both in airfreight, seafreight and land-transport increased the secondary degree of extension.

**Penetration**
The focal net went through different phases of decreasing and increasing. In Europe there was the concentration to fewer more closely cooperating representatives and this decreased the *spread of relations* and increased the *size* and *scope of* the existing relations.
However, in the case of the newly established airfreight offices, these were smaller and less differentiated than the former agents and therefore the scope of relations often decreased as a result of breaking with WACO. To begin with size of the relation also decreased since the WACO agents, being important organizations in their own countries, were controlling an important part of the traffics through their customer relations. Furthermore, for the greenfield investments there were very few, if any, established customer relations in the country concerned. However, the volumes increased over time as the ASG net was marketing the new organization.

On the other hand, since the ASG subsidiaries started up new traffics to third countries very quickly and as investments were made in communication systems, terminals, equipment, etc., the penetration increased the size of relations, again at net level, after a short period. At the system level, the penetration could well have continued to be low in comparison with the earlier level.

As regards airfreight, penetration decreased both in size and scope for a period, especially in the countries where ASG started its own offices. This was also the case for some land-transport investments, as in Norway.

**Penetration**

<table>
<thead>
<tr>
<th>Exist. relation</th>
<th>New relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>size of relations</td>
<td>spread of relations</td>
</tr>
<tr>
<td>scope of relations</td>
<td>new diversified relations</td>
</tr>
</tbody>
</table>

Figure 5.10. Internationalization -penetration 1980-89

In Sweden large investments were made in the international net not only through acquisitions abroad but also in acquiring the necessary resources in the home country. The investments came basically in two waves. The first one came in the beginning of 1980’s as ASG broke-off with WACO and the second one when ASG became registered on the Swedish stock exchange and therefore had much more capital available.

**Conclusion and effects of representatives**

Net level changes predominate rather than system level changes. The clustering into separate nets seems to continue as new specialized fields of services are added and these nets differ in their directions of change.
At the same time as these part-nets are *drifting closer* while many of the former representatives became competitors. The part-net of landtransport Europe, which was C/O (i.e. complementary in services but overlapping geographically) to that of airfreight Europe, was actively used to solve the airfreight problems of finding agents.

The fact that the foreign subsidiaries were expanding domestically and internationally made them negatively connected to many of the international agents either within Europe or on overseas markets. Therefore, the ASG net became more and more overlapping with some of the internationalized agents like Schenker. The same situation of an increasing degree of overlapping seems to have taken place between agents as they grew nationally and internationally and diversified in services. There is also a question of difference in expansion between the types of services. As air and seafreight or other special transports increased in importance in comparison to land-transport, the conflicts between agents and subsidiaries representing ASG in the different services in the same country (C/O) were enhanced and especially so when they were diversified. This in fact occurred in those cases where the agents were acquired by larger international nets competing with ASG. In those cases, there seem to have been a decrease in integration due to real or perceived leakage or spillover of information.

Of importance was also that the increasing number of subsidiaries made a number of the agents lose some of their trust in ASG cooperation. Where subsidiaries and agents were internationalized, it was more likely that both deal with many aspects of the same customer’s business. Through this the possibilities of competition increase which in turn increases conflicts between the agents and/or the subsidiaries. Homogenizing the nets tend to make the conflicts larger since it shows more clearly which companies are part of the net.

The complexities inherent in all these nets comprised of all these different representatives and agents is exemplified in the figure 5.11.
Effects on ASG representatives -Period 1980-89
Situation West-Germany

Figure 5.11. Changes in number and types of representatives in West-Germany 1980-89

Breaking relations with many agents when narrowing down to fewer agents means that most of these agents have to find another representative and therefore start cooperating to a large extent in competing with ASG and its agent. This happened both in the WACO event and in the concentration in land-transportation.

**Effects- suppliers, owners, and competitors**

In 1980 the shipping lines decreased their legal integration with ASG and sold their shares in ASG to SJ and the trucking companies. The Swedish Railways, SJ, increased its share from 67.5 to 75% of the shares in ASG. Both legal and executional integration with SJ increased. In 1984 SJ doubled the total capital invested in ASG and a year later the domestic competition with ASG ceased as SJ discontinued its own consolidation traffics. Part of these consolidation traffics were taken over by ASG.

ASG expanded the sea-traffics worldwide and some of the shipping lines continued to have a close execution integration to ASG, being positively connected in their consolidation services. The fact that ASG was agent for Trans-Siberian railway gave ASG an alternative to/ from the Far East. The shipping lines were negatively connected to the Trans-Siberian agents.

In spite of an increase in legal integration with the trucking companies from 7.5% to 25%, the continuation of the combi-traffics and the increased costs of Swedish trucking companies led to an increase in the utilization of foreign trucking companies. Many of the Swedish trucking companies, being part-owners of ASG, were negatively connected to the foreign trucking companies, leading to decreased integration for some of them.

Airfreight also presents a divided picture, with increasing integration towards some airlines by performing handling on their behalf, giving priority of cargo to them, etc. and with decreasing
integration towards others. In other cases, much of the airfreight within Europe transferred over to carriage by truck in preference to airplanes. Where the airplanes are partly owned by the agent, as in the case of Federal Express, some of the regular airlines are negatively connected to that type of transport system.

Using the same suppliers for many systems in the net also results in some of the suppliers basically being more closely connected to one net than to others. In changing agents or acquiring a company, this will have effects on the suppliers as well.

**Interaction between the dimensions of internationalization**

Combining the three concepts integration (I), penetration (P) and extension (E) would lead to different combinations over time. During the first two periods (1940-69) the changes took place on system level. The establishment of new cooperations, which created new transport systems led to extension of the first degree to many new countries and then increased the resources and the relations in those countries causing increased penetration (I→E1→P→). Over time, as development continued in the already extended countries increased integration between companies only added to increased penetration (I→P).

Further the investments made during these first periods in Sweden as well as in foreign countries in know-how, technical facilities, terminals, etc. for the international traffic, leading to increased efficiency of the transport systems show that increased penetration also led to increased integration (P→I).

However, it seems that over time when there was a change in the balance of resources between the focal company and the representatives in other countries there would be a disturbance in the relation which might affect integration between the two partners.

During 1970-79 the balance between several land transport relations became disturbed which called for a higher interaction between integration and penetration (I<P). As for the overseas development it was similar to what land transport had during their first period (I→E1→P). However, since the few existing subsidiaries were internationalizing there was an interaction between I→E2→P at net level.

In 1980-89 as ASG was extended to most countries the changes were dominated by integration changes on net level having effects on penetration (I→P). During this period there was a combination of increases and decreases taking place at net level but also on system level. As ASG was leaving the WACO net and making a number of greenfield investments there was an increase in integration in comparison to the earlier situation but at the cost of penetration. However, it seemed that penetration caught up after a while, first at net level and then at system level.

Secondary degree of extension, it played a more important role over time as the net expands and the number of subsidiaries or very closely cooperating agents increases and the first degree of extension become less common as the company net becomes globalized.
6. Bilspedition

6.1. Bilspedition Group - case description

6.1.1. Bilspedition Group - International development

General development and owner structure

When Fallenius & Leffler in Gothenburg took the decision in 1918 to complement their seafreight services in 1918 with domestic trucking services in order to reduce the number of calls at different Swedish harbours, they founded a company in the name of AB Göteborgs Skeppselevator. This company, in which Bilspedition has its origins, continued in being until 1936 when the name was changed to Fallenius Godstrafik Göteborg AB. Fallenius Godstrafik Göteborg AB was the first company to offer the Swedish market consolidation services by truck.

The company developed positively during the 1930's but the expansion ceased with the second world-war when new restrictions and regulations were imposed. In 1940, the Swedish Railway acquired a 50% interest in ASG, the other large domestic broker and transport company. Two years later, in 1942, SLF - Svenska lastbilsägare förbundet (Swedish Truck Owners' Association) bought 50% of Fallenius Godstrafik Göteborg AB from Fallenius & Leffler AB. The basic reason was to secure a private alternative for the Swedish trucking companies for the future.

The name of the company was changed in 1944 to AB Godstrafik and Bilspedition (Bilspedition or GBS) which was altered in 1977 to Bilspedition AB.

In 1947 the domestic network of the company had 12 regional offices and agreements with 26 agents in Sweden. Total volumes transported came to 230,000 tons and the turnover was SEK 7.1 million.

Over time Bilspedition established an increasing number of offices in Sweden, to a large extent part-owned by the local agents. As expansion continued, these part-ownerships became a problem when Bilspedition wanted to create a web of domestic traffics between the offices. The problem was finally resolved through a new issue of shares in Bilspedition in 1952 which enabled these local interests to be exchanged for shares in Bilspedition, the parent company. The share issue was directed not only to the agents but at the same time towards other industries, which were offered up to 1/3 of the shares in Bilspedition. As a result, important

---

1 This situation was similar to that of ASG and Svea Shipping Line which started in 1935.
companies in other Swedish industries like Billerud (Forest), Boliden AB (mining and trading), etc., became part-owners of Bilspedition at that juncture.

The heavy expansion of road transports in Sweden as well as its political effects interested SLF in buying the remaining shares in Bilspedition from Fallenius & Leffler. SLF and indirectly all of its truck-owning members, then became the majority owner of Bilspedition. Only a limited number of these members cooperated regularly with Bilspedition. In 1957 they formed a separate organization called BTF - Bilspeditions transportörförening (Bilspedition’s Truck Owners Association). This association came to play an important role in the development of Bilspedition.

The high growth in road transports continued during the 1950’s and in the 1960’s. The turnover changed from under SEK 20 million in 1950 to more than SEK 550 million in 1970. This situation created problems for Bilspedition since it needed capital to invest in the necessary facilities to handle the larger volumes as well as to cope with an expanding organization. The industrial shareholders did not want to make further investments in the company and SLF did not have the necessary capital available. The situation became acute in 1964. However, the members of SLF were divided among themselves due to the fact that only a limited number of the transport companies were cooperating with Bilspedition i.e. the BTF truck owners. The other truck owners were very largely prepared to sell their shares in Bilspedition in 1964/65, especially as some were cooperating with competing organizations like ASG. As a result of this situation and the internal problems it created, SLF started to look around for buyers for their Bilspedition shares.

The BTF truck owners reacted negatively to this and canvassed members in order to raise the necessary capital for Bilspedition. They managed to raise SEK 2.6 million which together with the capital of other shareholders (SEK 4 million) gave Bilspedition the necessary capital for expansion at that time. BTF created a separate shareholding company, BTFAB, which bought the new shares in Bilspedition. At this stage SLF decided to stay on as a shareholder in Bilspedition and even decided that 1% of the total turnover for transports made for Bilspedition was to be retained for future investments in the company. Through these measures and investments Bilspedition obtained the capital necessary for survival and expansion in the long-term also. The company was majority owned by the truck owners in BTF and SLF until the beginning of 1983 when it became registered on the Swedish Stock Exchange. BTFAB(ACC) still dominated after that through their voting shares of 44%. However their domination decreased over time and was 35% in 1990.
Figure 6.1, Ownership of Bilspedition

1918 - 1942 Fallenius & Leffler
1942 - 1952 Fallenius & Leffler 50% and SLF 50%
1952 - 1953 Fallenius & Leffler 1/3, SLF 1/3 and Industry 1/3
1953 - 1965 SLF 2/3 Industry 1/3
1965 - 1983 SLF and BTFAB majority owners, transport companies (e.g. Salen Shipp. Line, Wilson & Co, Skandiatransport, etc)
1983 - 1985 BTFAB largest owner 44% of voting shares 31% of capital
1985 - 1989 ACC(BTFAB) largest single owner 39% of voting shares
20% of share capital, Wallenius Shipping line, Skandia Assur. Comp., Trygg-Hansa Assur. Comp., etc.
1990 - ACC(BTFAB) largest single owner 35% of voting shares

Sources: Annual Reports, ACC - ett kvartssekel and Special Prospectuses when issuing new shares

Bilspedition remained predominantly domestic until the mid-1980's when a large acquisition increased the share of international activities to more than 50% of the total turnover. However, the first international transports started to the Nordic countries during the mid-1950's and a few years later to Continental Europe.

The growth in the newly started international traffics was very high during the 1960's. The number of trucks used increased by around 20% yearly and turnover by even more.

After the rapid growth of the 1960's, the 1970's became a period of stagnation and instability leading to structural changes for the company. Rationalization was necessary both for the trucking companies as well as for Bilspedition. Large investments were made in terminals, warehouses and special terminal equipment for more efficient handling. Trucking companies were in need of concentration to larger units and BTF even created a special company BTUAB (Bilspedition Transportörer Utvecklings AB) in 1975 to take care of the reconstruction of trucking companies.

The international expansion slowed down during the 1970's even though the international share of Bilspedition's total turnover rose from 20% in 1970/71 to 24% in 1980.

In 1977 the company changed its name from AB Godstrafik and Bilspedition(GBS) to Bilspedition AB and the share capital was further increased by a new share issue.

The structural changes and the investments made during the 1970's also resulted in a low level of profitability for the Bilspedition Group until the early 1980's. Due to regular new issues of shares, the solidity was kept in the range of 20% over time in spite of the low profitability. The company suffered from a scarcity of capital during this whole period.
The situation changed in the 1980's when Bilspedition obtained access to new and larger amounts of capital through its introduction on the stock exchange. This allowed for a total reconstruction of the company and an immense growth by acquisitions. In 1982/83 Bilspedition acquired the transport and forwarding activities of Wilson &Co, an old family owned company. Wilson & Co was one of the larger international companies in Sweden with a turnover of SEK 1.6 billion but with low profitability. The owner of Wilson &Co had shares in Bilspedition before the acquisition and through the acquisition increased the size of his participation to around 8%.

Through the acquisition of Wilson &Co the international activities of Bilspedition grew in one year from 35 to 50% of the total turnover.

In 1985/86 Bilspedition bought another large Swedish group of international forwarders Scansped (SKT/F&L, NTS and TK), one of the largest competitors in international transports. Scansped was registered on the Swedish Stock Exchange and as a Group was larger than the international side of Bilspedition at the time. Scansped’s turnover at the end of 1984 was SEK 3.6 billion on international transports whereas Bilspedition’s international transports including Wilson totalled only SEK 2.3 billion. NTS had no desire to belong to the Bilspedition Group once Bilspedition bought Scansped. Since the companies involved in the Scansped Group had worked as separate entities and as the former owners of the different Scansped companies had to a large extent retained control of their companies it was possible for them to leave the Group. NTS therefore left the Scansped Group and joined the investment company Ratos. NTS then became the first company to join the Inter Forward Group, a new international transport and forwarding group created by Ratos. In the end Bilspedition acquired the Scansped Group, less NTS, and formed a new international part to the company.

Cool Carriers, the shipping line that Bilspedition bought in 1987, became part of Bilspedition Group the same year. In 1988, Bilspedition also bought two more large shipping lines Gorthon Lines (specialized in forest products) and Transatlantic. Through buying the different shipping lines the internationalization of the company increased, not only in Europe but through Cool Carriers and Transatlantic also overseas.

In 1988/89, Bilspedition consisted of three different groups of transport companies, namely, the Scansped Group (consisting of Scansped companies, Wilson and ATA), the Scanship Group (consisting of the shipping lines Gorthon¹, Cool Carriers and Transatlantic) and Bilspedition Domestic (the traditional domestic transportation business).

¹Sold in 1991
Table 6.2. Some facts concerning Bilspedition

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover Group (msek)</td>
<td>310</td>
<td>649</td>
<td>1485</td>
<td>2380</td>
<td>5116</td>
<td>15432</td>
</tr>
<tr>
<td>Share international (%)</td>
<td>11-15</td>
<td>20</td>
<td>19</td>
<td>24</td>
<td>52</td>
<td>68</td>
</tr>
<tr>
<td>Result - Group (msek)</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>14</td>
<td>140</td>
<td>733</td>
</tr>
<tr>
<td>No of employees - Parent</td>
<td>1092</td>
<td>1321</td>
<td>1343</td>
<td>1822</td>
<td>1431</td>
<td>1608</td>
</tr>
<tr>
<td>- &quot; - - Group</td>
<td>1285</td>
<td>1761</td>
<td>1978</td>
<td>3386</td>
<td>4235</td>
<td>10341</td>
</tr>
<tr>
<td>- &quot; - - Abroad</td>
<td>100</td>
<td>116</td>
<td>220</td>
<td>287</td>
<td>847</td>
<td>3387</td>
</tr>
</tbody>
</table>

Through these acquisitions the 1980’s became a decade of extreme growth and especially so for the international businesses. The total turnover increased almost 5 times. For international activities the growth rate was 15-20 times. The number of employees abroad increased 11-12 times, decreased in the parent company and increased 3 times for the Group.

The year 1990 became the best year ever in terms of profitability with a profit 10 times as large as in 1980. Furthermore, in 1990 the Bilspedition Group came to an agreement with a large Finnish Group, Spontel, to acquire 100% of Speditor OY, the largest Finnish international transport group with a number of subsidiaries abroad. The international transport and forwarding part of Speditor was to be called Scansped while the domestic transport companies and shipping agents and specialists were to retain their own names. Speditor’s turnover for 1990 is not included in that of Bilspedition.

Another important event that took place during 1990 was the acquisition of 50% of Linjeflyg, the leading Swedish domestic airline.4

The business concept of the mid- and late 1980’s was: "The carriers and forwarding companies in the Group will provide transport and information systems of such high quality and efficiency that they create prerequisites for customers of Bilspedition companies to attain an optimum balance in the tying-up of capital" (Annual Report 1987)

In 1990/91 the economic development has stagnated and the business concept of the 1980’s had been changed to "Bilspedition will develop and produce transport and logistics as well as

---

1 The period of accounting is set to 1 Sept- 31 Aug until 1975/76.
2 Excluding VAT and Customs Duty
3 Before taxes and dispositions
4 These 50% of shares in Linjeflyg was sold during 1992 to SAS.
information services which meet the market demands for quality, efficiency and simplicity" (Annual Report 1991). As the company has grown in size and diversification the business concept of 1990 seem to have changed to be less customer oriented and more interested in creating efficient standardized transport systems.

6.1.2. European Development

6.1.2.1. Period 1955-69

Development of services and foreign representation

The international development started mid 1950's together with agents within the Scandinavian countries as a complementary service. In 1960 Bilspedition established its own company, Nordisk Bilspedition, in Denmark and in 1962/63 another subsidiary, Skandinavisk Bilspedition, in Norway. As a contrast in Finland Bilspedition started together with agent in 1966.

At an early stage, Bilspedition also became owner of 10% of Autotransit (ATA), a small international transport company established in 1957. The majority of ATA was owned by several forwarders such as Skandia Transport & Spedition, Nordisk Transport & Spedition and Fallenius & Leffler, etc. and it was used for services complementary to its owners' normal business activities. Further, GBS took over 50% of the company in 1964. In 1965/66 the company became a fully owned subsidiary of GBS. Buying ATA gave GBS a base for an expansion into Continental Europe.

The size of the total Continental traffics were smaller in size than the Nordic traffics to begin with. This probably continued to be the case during the 1960's. As an indicator of this, in 1967 the number of trucks used in the total Continental traffics was 1,577 compared to the 6,527 used in the Nordic traffics; in 1971, the figures were 3,573 and 12,505 respectively. Even though the Continental traffics grew very solidly during the 1970's the Nordic traffics have continued to be very strong for Bilspedition over time.

During the 1960's, GBS had a gradual expansion of traffics to different European countries through ATA and the subsidiaries in Denmark, Norway and, at the very end of the period, in the U.K and through a sales office in Hamburg.

In 1968, ATA, with trucking traffics and its recently started trailer traffics, was represented through 15 agents, 3 subsidiaries and 1 sales office in 14 countries, namely, the Nordic
countries, Belgium/Holland, Luxembourg, Italy, Poland, Switzerland, West-Germany, U.K., Hungary, France and Austria.

The international development both for ATA and the sister companies in Denmark and Norway took place predominantly together with agents. In spite of the growth in Continental traffics, around 80% of the total international traffics were concentrated to the Nordic countries during this period. The services were only traditional trucking services at first but from the end of the 1960's a few other types of services developed such as trailer traffics, tempered transports and warehousing. As new types of traffics were developed new agents were often added in Europe.

In 1967/68 GBS bought Flyttningsbyran in Gothenburg, which included several companies and among these Trailer Express, specialized on international trailer transports mainly to the U.K. but also to Holland and West-Germany. Autotransit and Trailer Express were merged into Autotransit Trailer Express AB. TrailerExpress had a subsidiary in the U.K. which increased the importance of the U.K. for GBS. Very soon a new office was opened in Felixstowe and new agents were added. The cooperation with at least one of the former agents in the U.K. ceased as a result of this.

Other companies in which Bilspedition acquired a part-ownership at the end of the 1960’s were Scandinavian Ferry Trailers and Scanfreight AB. This intensified the international growth into new countries like the U.S. and Canada.

**Organization and investments**

In 1950, the company handled under 0.4 million tons while in 1960 it handled 2.1 million tons and had 111 employees of whom only 10 were terminal workers. In 1970/71, the company handled 5.7 million tons and there were almost 1761 employees in total, out of which more than 200 were employed by the international part. The basic reason for the very high increase in the number of employees was the fact that Bilspedition took over the personnel from the agents in Sweden but was also as a result of the expansion abroad. The need for new terminals was immense during this period and therefore the major portion of all investments was made in terminals. At the end of the period investments were also made in trailers and other transport equipment through acquiring part of Scandinavian Ferry Trailers and the ownership of Trailer Express.

As for the organization, the growth in the number of employees called for changes almost every year. The international side was rather limited to 6 international offices and since ATA did not
become fully owned by GBS until 1965/66 it could not become a fully integrated part of the Bilspedition organization before then.

In 1967, one of the larger reorganizations started. Domestically the different profit centers in Sweden changed into fewer but larger districts and at the same time sales and other marketing activities grew in importance. Domestic and international traffics were separated as ATA became responsible for all international traffics to/from Sweden.

Two years later the work started on another reorganization. A special "department of development" was created at the head office level, which then started to review the total organization. There was a need for managing and controlling the different parts of the organization. The organization became functional with separate departments for traffic, marketing, accounting, development, administration and training. This time the districts were organized into four regions. The marketing activities for both domestic and international traffics were coordinated by a marketing department at head office and at the regional level (except in Gothenburg and Jönköping). New types of personnel joined the company and the interest increased for active utilization of computers not only for accounting routines but also for administration of the operating routines.

**Summary of the period 1955-69**

Bilspedition started internationalizing in the mid 1950's through trucking services with agents to Denmark and Norway. In the early 1960's they established subsidiaries in the same countries and acquired a larger part of a company, Autotransit (ATA), specialized in trucking services to Continental Europe. ATA became fully owned in 1965/66. Then all the international activities of Bilspedition in Sweden were concentrated to ATA. In 1968 they covered 14 European countries through cooperation with agents and sister companies in Norway, in Denmark and in U.K. The U.K. company was a subsidiary to Trailer Express, which was another international company acquired during 1960's. At the end of the period the subsidiaries started their internationalization and a sales office was set up in Hamburg.

**6.1.2.2. Period 1970-79**

**Development of services and foreign representation**

Even though the international development was not as stable and intense during the 1970's as it was during the 1960's, the turnover still increased around three times and the number of employees by 2-3 times during the period.

As customer industries began to concentrate and centralize their activities in the 1960's and 1970's their interest in and demand for distribution increased. Structural changes became
necessary in transportation. Bilspedition, wanting to provide the customers with all types of transport services, reinforced its marketing activities and developed new types of services in the late 1960’s and 1970’s. The result was an increasing number of specialized services like warehousing, consulting and advisory services, hanging garment services, transports for cold or frozen goods, etc.

Bilspedition acquired a part of a large company, Cold Stores, specializing in frozen or cold goods. A new company, Coldsped AB, was constructed for transports of frozen and cold goods partly owned by Bilspedition and Cold Stores. At the end of the 1970’s Bilspedition owned most of the Cold Store warehouses as well.

Bilspedition acquired Scandinavian Garment Services (SGS), another specialized company this time in hanging garments, from Wilson &Co in 1971. Setting up small specialized joint ventures for hanging garments in Denmark and Norway, SGS developed international traffics quickly.

A diversification in transports continued as Bilspedition in 1970 created a separate department for airfreight traffic and in 1971 it obtained its IATA licence in the name of ATA/Trailer Express. It also bought 50% of Flygspedition International AB in 1971/72 and acquired the balance in 1974. Furthermore, in 1976 Bilspedition acquired Alpen Parelius, an international seafreight forwarder. All of this meant that Bilspedition had established traffics to all different parts of the world. Before that, its internationalization was basically concentrated to countries which could be reached by truck from Scandinavia. Bilspedition also created customized specialized system transports for single customers, like carrying out internal transports for SKF in Europe. Many of these new businesses were then separated into profit centers.

Apart from the diversification through acquisitions or the creation of separate profit centers there was a continuation of the international expansion through ATA/Trailer Express. The number of employees in the ATA/Trailer express increased during the period from 126 to around 330. Even then the number of employees of ATA/TrailerExpress will only show the Scandinavian side of the traffics and not the number of employees engaged in the same traffics within the agent companies. The total number of traffics were 140 Nordic and 40 to continental Europe in 1975.

Some new countries were added during the period such as Spain, Ireland, Eastern European Countries and the Middle East. At the end of the 1970’s ATA/Trailer Express had around 30-40 agents and 26 international offices in Sweden. In total for Bilspediton at least 50-60.
Much of the transports to the Middle East were connected to the development of Bilspedition International which was specialized in trade fairs and project transports. It even opened a Representation Office in Baghdad.

The subsidiaries in Denmark and Norway showed overall growth from 109 employees to 228 during the period. However the subsidiary in Norway experienced a period of downturn in the early 1970's, as the Scandinavian landtransports were taken over by an agent Transportsentralen.

The high increase in Denmark at the end of the period was partly a result of the acquisition of Eurotrans A/S (Europa Transport & Spedition) and the establishment of Flygspedition International in Denmark.

Table 6.3. Number of employees engaged in the international business of Bilspedition

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ATA / Trailer Exp(S)</td>
<td>117</td>
<td>127^3</td>
<td>148</td>
<td>192</td>
<td>239</td>
<td>301^4</td>
<td>330^5</td>
</tr>
<tr>
<td>Skandin Bilsped(N)</td>
<td>42</td>
<td>45</td>
<td>21</td>
<td>24</td>
<td>31</td>
<td>50</td>
<td>58</td>
</tr>
<tr>
<td>Nord Bilsped(Dk)</td>
<td>57</td>
<td>64</td>
<td>60</td>
<td>77</td>
<td>103</td>
<td>90</td>
<td>170^6</td>
</tr>
<tr>
<td>U.K.</td>
<td>-</td>
<td>26</td>
<td>55</td>
<td>107</td>
<td>68</td>
<td>-</td>
<td>-.7</td>
</tr>
<tr>
<td>Holland</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>18</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Total International</td>
<td>216</td>
<td>265^8</td>
<td>284</td>
<td>421</td>
<td>459^9</td>
<td>486^10</td>
<td>600^11</td>
</tr>
</tbody>
</table>

^1 Up to 1975 the number of employees is reported from 31 Aug. and from then on 31 Dec. each year.
^2 The figures are from the first year when ATA came to include not only the Continental traffics but also the Nordic traffics formerly part of the GBS offices in Sweden.
^3 Including Trailer Express in Sweden but not U.K and West-Germany.
^4 Year 1977 and 1979 include empl. of Flygspedition in Sweden around 20 empl.
^5 Estimated
^6 Including Eurotrans and the newly established Flygspedition Denmark A/S
^7 In 1980 Autotransit UK was re-established.
^8 At the West-German sales office 3 persons were employed in 1970. In 1971 the office was closed down.
^9 Flygspedition in Stockholm had 4 and Gothenburg 10 employees
^10 Flygspedition International had 20 and Autotransit Italiana (majority owned) had 7 employees
^11 Number of employed for Flygspedition in Sweden and for Autotransit Italiana have increased. The employed of the part owned SGS companies in Denmark and Norway as well as in Switzerland are not included.
During 1970’s the development internationally was intensive, the number of agents increased and many new areas in Europe were covered. Through the merger with Trailer Express in 1969 the U.K. became a very important market for ATA at least in early the 1970’s.

During the period 1969 - 1974 the subsidiary Trailer Express Ltd in the U.K. expanded quite heavily. The subsidiary established offices in other parts of England and expanded international traffics to Holland, Norway, etc. In mid-1974 Trailer Express Ltd had 107 employees but in 1975 a downturn resulted in Bilspedition selling the U.K. company to Kühne & Nagel, which then became the agent. In 1980 ATA took it back, however, and started ATA, U.K. The cooperation with Kühne & Nagel continued for a while but on different terms.

Later during the period subsidiaries were established in Holland, Italy and part of a company in Switzerland was acquired. In Italy and Switzerland ATA bought 40% of the agents. A greenfield investment was made in Holland for Scandinavian traffics as well as for other European traffics. Thus Bilspedition’s international expansion continued.

When Flygspedition International was acquired early in the 1970’s and Alpen Parelius in the late 1970’s both had agents in Europe as well as outside Europe. Flygspedition had established a small subsidiary in Denmark also. Other specialized companies belonging to the Group like SGS had their own agents in Europe (around 30 in 1980) that fitted their specialization. SGS had part-owned companies in Denmark and Norway also. In this way different agents for Bilspedition existed in many of the European countries.

**Organization and investments**

As the company specialized and diversified during the 1970’s it also became divisionalized. In 1975, the regional organization changed into two divisions and the domestic and international divisions and the four regions were changed into 19 different domestic profit centers. The international division included the international subsidiaries. Then in 1977/78 a Group management and a number of Group staffs were created and the company changed into four divisions. These were the Inland, International, Cold storage (refrigerated and frozen goods) and Finance divisions (including administration).

Further diversification in services led to the creation of a separate division for subsidiaries like Ivers Lee (packing), Ekströms Industri AB (equipment for materials handling), etc., which did not fit into these already established departments. (Appendix 4)

The international growth had large effects on the international operations in Sweden. The international offices in Sweden increased from 6 in the beginning of the 1960’s to 26 by the end of the 1970’s and in the 1980’s there were 30 international offices in Sweden. The various types of businesses also changed from the traditional trucking transport business to several
specialities like ATA Bulk, ATA seafreight, special Scandinavian distribution systems, etc. This development increased the need for education and training of personnel not only within the separate businesses but also for management due to the growth of the organization. Large investments were made during the 1970’s especially in creating a better know-how in international traffics as well as special transports.

Instead of investing mainly in terminals as during the 1960’s, a large part of the investments were made in warehouses and transport equipment such as trailers, containers and flats. This facilitated development of combined traffics like rail/road, sea/road, air/road. Further these investments, in combination with large terminal investments, also increased the risk for Bilspedition and decreased the risk for the suppliers. Additionally, Bilspedition came to take full responsibility for the total transport.

In 1975 all Bilspedition’s international activities became part of an international division of around 500 persons including the foreign subsidiaries. The former coordinator of the international activities in Bilspedition became responsible for the total international division. The need to manage not only international operations in Sweden but also abroad increased. (Appendix 4)

As the international organization grew larger and more dispersed geographically the interest for computerized communication systems increased. The development which had been going on for many years but mainly in domestic operations now focused on the international operations.

Summary of the period 1970-79

Growth was almost as much a result of acquisitions as of existing activities. The acquisitions were either in new types of services (warehousing, advisory, airfreight etc.) or in more specialized trucking services (hanging garment, bulk, frozen goods, etc). ATA-Trailer Express had a high growth. The number of employees nearly tripled. The number of agents in Europe to ATA/Trailer Express more than doubled.

In the first half of the period there was a downturn and the U.K. and Norwegian traffics were fully or partly taken over by agents and the sales office in Hamburg was closed down. At the end of the period acquisitions and greenfield investments were made in Holland, Italy, Denmark, Norway and Switzerland. In Sweden they invested in intensified training, new communication systems, more transport equipment for combintraffics and in an increasing number of international offices. The total international activities of the Group were concentrated to one division.
6.1.2.3. Period 1980-89

**Development of services and foreign representation**

During the 1980's Bilspedition had changed from being basically a trucking transport company into being a conglomerate of companies within all different types of transports, as well as all possible complementary services. The company was also one of the largest transport and forwarding companies within this area based in Europe and as a group the largest in the Nordic countries. Through the acquisitions during the 1980's Bilspedition had almost all existing types of transport companies within their Group.\(^1\)

The situation had radically changed in 1983 when the Bilspedition Group bought Wilson & Co which had a European network of representatives. This more than doubled the existing number of agents in Europe for land-transportation and even more so if airfreight, seafreight and speciality agents in Europe were to be included.

Many new international services were added to the company's international business like railway transports, more diversified shipping and airfreight services, etc.

ATA’s representation in Europe worked in competition with that of Wilson’s from early 1983 when Wilson joined the Bilspedition Group. This was especially true for trucking services even though a similar situation existed in air and seafreight.

Wilson had 46 agents and 5 small subsidiaries in Europe (see list enclosed) in 1987 and these were mostly old and established transport and forwarding companies which had cooperated with Wilson over a long time. Most of them were competing with the ATA group of companies and their agents.

However, the ATA group of companies\(^2\) changed during the 1980’s and especially so ATA Sweden which had gone through a period of concentration in the number of and types of representatives which had been reduced to 4 agents and 8 subsidiaries (excluding Flygspedition and SGS). ATA Sweden was represented in 12 countries in 1987. The 8 subsidiaries were all given the same name, ATA, a change from earlier when there were several different names. The companies were fully owned subsidiaries with the exception of the Norwegian company, since Linjegods A/S, a large domestic Norwegian transport company with some international traffics, had acquired 40% of Skandinavisk Bilspedition in 1984 and Bilspedition acquired

---

\(^1\) During 1991 they even acquired 50% of an airline.

\(^2\) ATA group of companies is the same as the group of subsidiaries and agents in Europe cooperating with ATA Sweden and belonging to the same organizational Group in Sweden, which in 1987 was Bilspedition International.
20% in Linjegods. Before the deal with Bilspedition, Linjegods was an important agent to ASG.

In Norway, Denmark, Holland, Belgium and West-Germany the number as well as the size of the companies increased. They were actually the outcome of a merger of several companies that had been acquired in those countries as part of the ATA group of companies. In Holland, Belgium and West-Germany there had been several investments in small companies in order to get a better coverage of the different countries. However, the subsidiaries all remained very small until 1986 when Bilspedition acquired West-Friesland which had companies in all three countries. At first the Dutch and Belgian parts were acquired and half a year later the company in West-Germany. West-Friesland was specialized in international trucking services. These acquired companies were all merged after some time with the existing activities of the ATA group of companies in those countries. Sometimes it could take several years before they merged, as in the case of Eurotrans and ATA in Denmark but in other cases it was much quicker. The small acquisitions made by Bilspedition in Holland and Belgium included not only trucking services but also seafreight, warehousing, etc.

When the Scansped companies had joined the Bilspedition Group in 1985/86 the situation got even more complicated since they had representatives (agents as well as some subsidiaries) in most European countries sometimes overlapping because of competition between TK and SKT/F&L.

In 1985/86, Bilspedition also bought the Scansped organization which, when the deal was finally settled, consisted of SKT/F&L and TK as well as a number of specialist organizations which worked as separate companies like Kungsholms Express (removals etc), Aug. S. Andersson (fruits, vegetables etc), Gustav Smith (e.g. chinaware), etc.

At the time of the takeover, not only did SKT/F&L have quite a considerable competition with TK within their own organization but also with the Wilson and ATA international traffics in Europe and overseas. SKT/F&L also had an airfreight company Scanflight which had its own agents in Europe. Most of the specialist companies had some agents of their own within Europe. The large European land-transport organizations were competing intensively with ATA and Wilson. This was also the case for sea and airfreight.

In Europe, SKT/F&L/TK, which was an old well-established transport and forwarding company, was represented at the end of 1987 by 49 agents and 9 subsidiaries covering all countries of importance in Europe (see list Appendix 4). At this stage TK had been merged into SKT/F&L. Through the acquisition of Scansped the number of representatives in each European country increased further through a combination of agents and subsidiaries. In many
countries like Denmark, Holland, Norway and the U.K., etc., there were three or more subsidiaries competing with each other (see lists enclosed in Appendix 4).

In West-Germany SKT/F&L had 16 agents which combined with Wilson made 30. This did not include the subsidiaries of ATA or Wilson in West-Germany and agents of specialists like airfreight. However, while many of the agents of other specialists utilizing road transports were the same as the regular agents, others were not. The situation became very complex not only for the competing Swedish parent organizations but also for the agents and the subsidiaries competing with each other.

The three large international groups of companies Wilson, Autotransit and Scansped continued as separate groups and were free to act separately. Therefore there was strong internal competition. Through the acquisition of Scansped the representation not only in Europe but also in other parts of the world was tripled or quadrupled depending on the country. The airfreight companies from Wilson and the Scansped Group, however, were almost directly merged into one of the companies, Scanflight. This did not include the small airfreight company Flygspedition International which existed (until 1991) as a separate company. The largest airfreight company before the merger was ISA, InterScandinavian Airfreight, which belonged to the Wilson Group. ISA was also part of a large international voluntary chain of airfreight forwarders WACO, World Air Cargo Organization.

In 1988, it was decided to merge the companies SKT/F&L, Wilson and ATA. Air and sea and land-transportation were included with the exception of the specialist companies. As for airfreight, Scanflight and ISA merged, with the exclusion of Flygspedition, as had been decided two years earlier. It reduced the number of representations for land-transportation from 126 to 57, increased the volume of their traffics and reduced the variety of services. The total volumes decreased by 10-15% on the whole during the first year after the merger in spite of high growth on the market. (A more detailed description is found in the Scansped Europe event)

The European land-transport subsidiaries were all renamed Scansped in 1989/90. For the remaining representatives, whether subsidiaries or agents, the utilization of transport and terminal facilities increased and as well as the frequency in the traffics.

Finally, Bilspedition still had a large number of agents in Europe after the merger if one were to include the agents for separate areas like airfreight, overseas and specialist as well as separately for the shipping lines which were acquired in 1987. This in spite of the fact that the merger of ISA and Scanflight also reduced the number of airfreight agents.
In 1990 Bilspedition acquired the Speditor group of companies, involving international representation in most countries in Europe, partly in competition with the new Scansped group.

**Organization and investments**

In the 1980's the organization was changed in a number of ways, mainly as a result of the very large acquisitions made. The number of employees was around 9500 in 1988 (from 3300 in 1980) and the net turnover was over SEK 12.5 billion.

The organizational structure first changed when Wilson & Co joined the company in 1983. Wilson continued as a separate unit but placed in the international division and until Scansped was bought. The international companies continued their activities separately.

Another reorganization in 1986/87 turned the divisions into separate companies. The new organization had five companies, out of which one was the newly acquired Scansped Group with the addition of Wilson & Co and reduction of TK. The formerly international division became a separate company, as did Bilspedition International AB, which included ATA, SGS, Flygspedition, TK, etc. Also Finance and Domestic divisions became a separate companies as well as Bilspedition Information Systems. At the same time, it was decided that operative decisions should be decentralized to the new companies. Then around a year later Bilspedition acquired the shipping lines Cool Carriers, Transatlantic and Gorthon Lines, they became a separate group of companies, Scanship and AB Scansped and Bilspedition International AB were combined and merged into Scansped Group.

In 1989, after the merger of Bilspedition International and Scansped, Bilspedition consisted of three transport sub-groups which were Domestic Group, Scansped Group (the largest), and Scanship Group. There were two separate companies for service functions, one called "Biljonen" for financing and Bilspedition Information Systems. The investments during the 1980's were made possible to a very large extent by the fact that the company became introduced on the stock exchanges in Sweden, Norway and Denmark. (Appendix 4)

In 1991 there was a new reorganization where the Domestic Group and Scansped Group became part of the same group, called Transport and Forwarding, while Shipping remained a separate group.

The rate of acquisitions intensified during the 1980's. The investments in different international companies abroad and in Sweden during 1980's involved around 80 companies compared to less than 20 before 1980. Compared to earlier decades not only had the number of companies acquired increased but so had also the size of the companies. (Appendix 4)
Summary of the period 1980-89

During this period Bilspedition became an international conglomerate through a number of acquisitions and the Group became introduced to the stock exchanges in the Scandinavian countries. In 1982/83 the first large acquisition, Wilson & Co, took place, which increased the international share in Bilspedition from 35 to 50% and more than doubled the amount of agents in Europe and overseas. The next huge acquisition was of another large Swedish competitor, Scansped, in 1985/86. The ATA group of companies and the two new groups, Wilson and Scansped, continued as separate units and international competitors. Several medium-sized acquisitions were made in West-Germany, Holland, Belgium, U.K., Finland, etc which were accrued to one or other of the three large international groups. The organization was changed several times, as a result of these acquisitions. First, in order to include the two large competitors into the Group and then after the large merger in 1988. (For a more detailed description of the merger see Scansped Europe event.)

6.1.3. Specific event - merger between Bilspedition International and Scansped 1988

6.1.3.1. Scansped Group in Europe

The merger between Bilspedition International and the Scansped Group resulted in a new and larger Scansped Group. Even though the merger concerned all different types of transports and thereby connected services, the part described here concentrates on the merger of land-transport companies and their operations within Europe. The same event which is described here in total will later be described in more detail through the event of the creation of the new Scansped Sweden, the new Scansped West-Germany and Scansped Belgium.

Before the event

Bilspedition owned two large International Groups in 1986, Bilspedition International and Scansped Group. Competition existed not only between but also within each group of companies. The competition was sometimes even stronger within than between. At the same time the profitability of the different companies was not satisfactory.

The companies in these groups also had some complementary activities in general forwarding, special transports and other activities. The companies of former Scansped were and historically had been more the type of forwarders and acted as such, selecting different means of transportation but not owning the means of transportation. ATA, being part of Bilspedition, majority owned by trucking companies for many years and founded as a complement to
forwarders, had to take a certain responsibility for the truck owners’ viability. ATA also placed more emphasis on investments in terminals, transport equipment, trucks, etc., which had to pay off. The customers of ATA were often customers of Bilspedition domestically. The demands made by these customers derived to a large extent from experience of Bilspedition’s large domestic operations while SkandiaFallenius’ average customers could not really compare performance in domestic and international traffics since they lacked these services. The ATA group of companies in Europe were to some extent expected to live up to the same demands as the large Bilspedition in Sweden, by offering warehousing, logistical problem solving, etc. This situation influenced the profiles as well as the profitability of the two different companies. Wilson, finally, was an old and well established company as a forwarder and as agent for different shipping lines. As a result of this it was strong on overseas markets.

On January 1, 1985, Skandiatransport and Fallenius & Leffler merged - in the same year as the company was acquired by Bilspedition. In 1986, the first year as part of the Bilspedition Group, SkandiaFallenius derived some positive experiences from the former merger between Skandiatransport and F&L. It was then decided that TK should be merged into SkandiaFallenius in January 1987. TK, the smallest company, was specialized on certain markets like Denmark, Italy, Austria and the Far East.

The new merged company SKT/F&L/TK made a profit in 1987 while Bilspedition International made a loss.

There was still intense rivalry between the SKT/F&L/TK, Wilson and ATA Groups of companies. Unsuccessful attempts were made to get the companies to cooperate and to divide the companies within the Group as regards company services through taking on some activities and leaving others.

The positive experiences of former mergers set against the continued internal competition and the low profitability of the international activities became incentives to consider a total merger of the international activities.

At the same time, the expected changes in the rules and regulations in the EC, which would in all likelihood increase competition within as well as between countries on the European transport market, made it of interest to have a strong position not only in Scandinavia but also in the European countries. Even though the three international Groups of transport and forwarding companies in Bilspedition were quite large, their activities were concentrated to the Scandinavian markets. Altogether, they had 71 terminals and offices for international traffics in Scandinavia and around 1,250 employees in Sweden, 400 in Norway and 350 in Denmark.
The three Groups together had a number of different subsidiaries abroad mainly in the North European countries. Outside Europe they had only three companies of which Wilson had two in the US and TK had one in Hongkong.

Of the three larger groups of companies, the ATA group had more international subsidiaries including 30 foreign offices which covered 8 foreign countries. Some of them, like West-Friesland in Holland, Belgium and West-Germany, were acquired after the Scansped acquisition. Both Wilson and SkandiaFallenius also acquired international subsidiaries after they joined the Bilspedition Group. For example, Wilson acquired their UK agent, Giltspur, in 1985 and SkandiaFallenius acquired Adams Transport in 1987. Both companies acquired were relatively large international companies with their own international network of agents.

The subsidiaries in the EC countries were mostly situated in the same countries and to a large extent competed with each other within these countries. There were 2 subsidiaries in France, 3 in Holland, 3 in Belgium, 3 in Germany, 3 in Norway, 4-5 in Denmark, 3 in the U.K. and 2 in Switzerland. If the Swedish parent companies merged, the subsidiaries would have had to be merged as well. A merger of the three separate large international groups within Bilspedition Wilson, ATA and SkandiaFallenius/TK would not only have important effects on subsidiaries but also would have meant the loss of many of the agents that the different Groups had. Many of the agents had worked with some of the companies for a long time. This was especially so in the case of Wilson in Europe. SkandiaFallenius/TK had changed agents due to earlier mergers and ATA had their own offices in most countries of importance.

This was the situation when the Board of Bilspedition Group decided to accept the suggestion of the managers within the different groups to merge. It was decided in August, 1988 based on a plan presented by the managers and was supposed to be put into effect in January, 1989.

The event
The event was discussed and planned in advance in Sweden by 75 persons working during July and August, 1988 in seven working groups for different functional areas. More detailed plans were made after the decision to merge was taken. At the same time, in project groups the subsidiaries had started to plan for a change.

The merger was facilitated by the fact that at the time of the merger the Swedish subsidiary of SkandiaFallenius had the same managing director as ATA in Sweden.

A large reorganization had to be carried out both in Sweden and abroad. The number of employees in Sweden was to be reduced from 1250 to 950. The reductions were to be even
greater in the other Scandinavian countries Norway and Denmark where the employees would be reduced by 50% or even down to a 1/3. Similar detailed plans had to be made by the managements in the subsidiaries.

Everything was to be changed and many people who had been competitors formerly and who were not in favour of the merger would find themselves having to adapt. Others would have to leave. Apart from the rationalizations, one of the main problems was choosing the design for the European traffics and its representatives. Somewhere in the region of a hundred different agents would have to leave, since there were two or sometimes three agents too many in a great number of countries and in countries like West-Germany more than 20 agents would have to leave. (see the list of the former agents).

The decision, especially for the Swedish parent companies, was to give priority to the subsidiaries and use agents for complementary coverage only.

The fact that the traffics were predominantly south-north traffics to/from Sweden in cooperation with agents or subsidiaries meant that relatively little by way of third-country traffics not involving Sweden had been developed. Where such traffics existed the partners would not necessarily be sister companies. ATA was the only group which had a larger number of subsidiaries in Europe. Giving priority to cooperation between subsidiaries necessitated a higher degree of cooperation between the newly merged sister companies in Europe which would serve to increase traffics not involving Sweden.

The sister companies in Europe would be working under the name of Scansped, with the exception of overseas transport where the name of Wilson was to be retained. The specialist companies like Anton Pettersson, Aug. Andersson, etc. would not only keep their name but also continue their operations as before. The old parent company Scansped AB was to change its name to Scansped Group AB.

All the plans had to be very secret in order to take the agents by surprise. Otherwise they might have left Scansped before the change was fully planned. In the event, however, the timing had to be changed from January, 1989 to October, 1988 due to certain rumours. A mass of information was to be distributed both internally and externally in order to let people know where they would be placed in the new organization in Sweden as well as abroad and to keep customers and suppliers informed.

The Scansped Group was divided into four different business areas, namely, Scansped Sweden, Scansped Europe, Scansped Overseas and Scansped Specialists. At the end of 1988, the Scansped Group consisted of 4,200 employees from the three different groups of companies and had subsidiaries in 12 countries.
After the event

What were the effects of this merger on Bilspedition and Scansped in Europe as a whole?

Internal effects
The creation of the new company was not easy. Almost all routines required changing not only in Sweden but also abroad. The Swedish organization, the merging subsidiaries and many agents experienced big problems in functioning in an efficient manner. Also working with larger sister companies differed from that of working with small and dependent subsidiaries or agents. Further, there were differences between companies in the type of customer and a new common profile had to be created, etc.

ATA and SKT/F&L were strong in different markets which made it somewhat easier to adapt even though their cultures were very different. Wilson on the other hand had its basic strength in dealing with typical European seafreight countries like the U.K.

The managing director of the new Group came from SkandiaFallenius. This was also the case in Holland, Belgium and Norway, where SkandiaFallenius had its own subsidiaries.

In Sweden only, 10-12 new firms were started in competition as a result of the merger. Some of them by managers who left the company. It was mainly ATA and Wilson personnel which left the merging companies, while SkandiaFallenius personnel stayed to a larger extent.

It took a longer time for things to settle than expected. However, the profitability in 1989 changed from negative to positive figures.

In 1989, the Group merged 20 smaller companies into 9 larger transport and forwarding companies in Europe. There remained 1,700 employees out of the former 2,200. Merging different traffics meant higher frequency, lower costs and improved punctuality. Some of the offices in Europe immediately received twice the volumes of goods, which most of them did not have the necessary resources to handle. Nor were they able to satisfy the demands from agents or sister companies as regards quality of services. The fact that the Scansped Group retained the existing subsidiaries and concentrated the services to them meant that an increasing number of subsidiaries were representing each other in different European countries.

Scansped Europe had employees working in 46 different locations in 9 countries in 1989. Many of the companies started building or renting new terminals in order to be able to handle the larger volumes of goods.

Most European subsidiaries cooperated with Scansped within Scandinavia but still competed in several cases in continental Europe.
External effects
In all, Scansped Europe suffered a reduction of between 10-20 % of its total volumes during the first year after the merger (1988) in spite of the fact that the market had a positive development during the same period. Many customers that formerly used Scansped stopped doing so. A large segment of these were probably customers of the former agents.

In most cases the names of the subsidiaries were changed as well as telephone numbers, locations, contact persons, etc. and this had negative effects on customer services. In Holland, Belgium and West-Germany, for example, the name of the company had been changed three or four times within five years.

The restructuring of the companies as a result of the merger also led to a deterioration in services for a short period. In the cases where the subsidiaries lacked the necessary resources to take care of the larger volumes the effects continued for a longer period. Building new terminals, creating new computer systems etc., as was sometimes necessary, took time.

Some positive effects of the merger were the increased frequency in the traffics as well as the size of the Scansped companies. Some larger international customers were able to take advantage of the new Scansped and its international size.

A number of the existing agents to the subsidiaries ended their cooperation because of the merger. Finding new agents had become increasingly difficult. As an example, when Scansped in Holland lost its large international agent, Panalpina, in West-Germany they finally solved the problem of finding a new representative by buying another international company in Stuttgart, Teka Trans. Teka Trans had the necessary resources to take care of the existing traffics between Stuttgart and Holland/Belgium. However this company also had an independent salesman in Belgium stationed at its agent who got transferred and integrated into the newly merged Scansped Belgium.

Scansped was as an unknown name in Europe before the merger since none of the subsidiaries had used the name Scansped before the merger. They had to market the new name heavily during the period of change. The merger therefore led to a large marketing campaign for the Scansped companies in Europe and the contacts with most customers were intensified.

All in all, the merger meant a restructuring of the market so that Bilspedition was seen as one of the larger transport and forwarding companies in Europe, competing with the other MNCs in transport and forwarding.

The growth in volumes for subsidiaries also resulted in positive effects for their suppliers. Only in a very few cases did the merger result in a negative reactions from the suppliers as, for
instance, in the case of the trucking company Satraco\textsuperscript{1} in Belgium being sold to Inter Forward Group.

Summary of the Scansped Europe event
The merger was made between the two groups Bilspedition International and Scansped. Bilspedition International was dominated by the ATA group of companies and Scansped by the two competing subgroups Wilson & Co and former Scansped companies. These three groups were competing not only in Sweden but also internationally through their subsidiaries and agents in Europe. In several countries there were two or three subsidiaries. The total number of agents was well over 200 if the agents of the internationalized subsidiaries were included. The event resulted in a merger not only of the companies in Sweden but also of the European subsidiaries. The number of employees was reduced in size from 2200 to 1700, most of which were made within Scandinavia. The sister companies in 12 countries in Europe all got the name Scansped and the cooperation between them increased. All subsidiaries of Scansped Europe were restructuring at the same time. This caused decreases in volumes of between 10-20\% depending on the area.

The new merged subsidiaries cooperated with sister companies and agents in many countries. In the case of Germany the strength and knowledge of the subsidiary were not enough as the Dutch company lost its agent in Stuttgart, Germany. Bilspedition had to buy a new company, Tekatrans, to solve the situation in that area. Finally an external result of the merger was that a number of new competing cooperations were established by the former agents and sometimes by former personnel.

6.1.3.2. Scansped Sweden
Scansped Sweden as a company was formed by merging the Swedish parent operations of the three separate groups of companies SkandiaFallenius/TK (SKT/F&L/TK), Wilson & Co (Wilson) and ATA. Traditionally, the Swedish side of the three companies had played a dominant role within their respective groupings, forming the base for their international development prior to the merger.

Before the event
Before the event ATA, Wilson and SKT/F&L/TK were three different competing companies, each in its own right ranking amongst the largest transport and forwarding companies in Sweden. All were old established companies with international operations and with some subsidiaries abroad. Each had developed internationally over time and together were

\textsuperscript{1}Shortly after Satraco was acquired by IF group it was sold back and the company went bankrupt
represented by more than 100 different agents in Europe (see appendix 4). ATA had been concentrating on creating a European network of subsidiaries during the last years before the merger and had ceased cooperation with many agents. On the other hand, Wilson and the old Scansped companies SKT, F&L and TK all had longer international experience than ATA. They had been competitors for decades but cooperating now and then for specific purposes.

The attempts to get the three different companies to cooperate voluntarily failed. Competition between the companies seemed to be stronger than ever and the profitability was unsatisfactory.

The experience of mergers especially within Scansped had been positive after the mergers in 1984 of Skandiatransport (SKT) and Fallenius & Leffler (F&L) and between SKT/F&L and TK in 1987. This was something, of course, that the three different competing groups were aware of.

The event
The merger of the three different competing operations into one company, Scansped Sweden, resulted in some 300 employees in Sweden leaving the Group within the first year. Quite a number left because they found some other alternative employment and some took early retirement. Only a very small percentage were finally asked to leave.

In Sweden, 71 different terminals and offices were to be reduced to 30 and 22 regions with their own management were to be reduced to 7. This greatly affected personnel as well. The decision to merge the companies also contained a decision in favour of subsidiaries, where subsidiaries existed, in preference to agents. The concentration of the goods to the existing subsidiaries meant that most of the effects of the merger would be suffered by the agents, as opposed to the subsidiaries abroad.

The excessive number of agents as well as the concentration of the traffics to/from Sweden increased the importance of taking the decision to merge the companies. The change was to be very visible in Sweden where the three companies were all quite large and well-known. Since the bulk of services for all three companies engaged Swedish resources in one way or another the effects in Sweden became very apparent.

Reactions from the personnel in Sweden were extensive. The differences in corporate cultures were more visible in Sweden. The cooperation with many of the agents was ended overnight. Others with agreements incorporating a termination clause or a guarantee continued for a while. In some of these cases, like in Finland and Holland, the agents decided to break the relations prematurely.
Large resources had to be engaged in order to handle all the changes simultaneously. The change took about a year, from the beginning of October, 1988 to the end of 1989. During 1989, most of the resources were needed to handle the effects of the merger, which caused problems through other parts of the business, like invoicing, receiving lower priority.

After the event

One of the most important outcomes was that the total international traffic system had to be changed. The number of traffics, the services that could be offered in each place, the contact persons, the agreements, etc. It was especially complicated where the international partner was a subsidiary consisting of the three merged companies, facing the same type of problems that were present in Sweden.

The result of the merger in terms of changes of representatives in the European network for the Swedish parts of the groups can be seen by comparing the three combined lists of agents and offices abroad before and after the merger (see Appendix 4) of November 1989. The number of agents decreased from 99 to 43 and the number of sister companies changed from 24 to 14. Scansped AB cooperated with all the general forwarding subsidiaries of Scansped Group in Europe but in some countries, where coverage of the sister company was insufficient as in Germany, France, UK and Switzerland, in combination with agents.

The fact that Scansped Sweden cooperated with agents where the European subsidiaries did not have sufficient resources led to conflict between Scansped Sweden and its agents and the European sister companies. For example, Hellman in Osnabrück, a very large international company, competed with Scansped in Germany, Scansped Holland, etc., as well as in airfreight and seafreight both in Europe and overseas. Hellman also had a close cooperation world-wide with Nordisk Air Cargo in Sweden and was cooperating with NTS in Denmark. At the same time Scansped had a cooperation with Hellmann using its domestic services for the whole of West-Germany. During 1990 Hellman and Scansped Sweden ceased their cooperation and Hellman switched to ERT, an ASG subsidiary.

The agents of Scansped Sweden were competing with the European sister companies in several different ways either locally in the country of concern, in traffics to/from other countries or in other services like airfreights, seafreight or special transports such as hanging garments, etc.

The competition changed as result of breaking with agents. Some of the companies newly established by Swedish personnel leaving the merging companies were cooperating with former agents. Examples of new companies that started in this manner were ABC transport in Malmö with ATA personnel, Jönköping ATA personnel went to Road Link, Stockholm Wilson personnel started a company for an agent Mahlenstein, in Borås TK personnel left and started
on their own. Danzas, the Wilson agent, bought part of an existing company, Rationell Spedition. Further some well known former agents, on losing their Swedish agents, started cooperation and thereby strengthened of existing competitors in Sweden.

Summary of the event
The effects of the acquisitions as well as later the merger were most visible in Sweden. The merger of the Swedish companies drastically changed the number of employees (a reduction of 300), of offices in Sweden (from 77 to 30) and the number of agents (from 126 to 57). Their sister companies abroad were given priority as representatives. Competition increased from former agents and through the establishment of new companies. In 1989 Scansped Sweden had high restructuring cost, which resulted in a loss. In spite of the merger, many conflicts still existed between the internationalized subsidiaries and the agents of Scansped Sweden, so further arrangements had to be made.

Scansped West-Germany

Before the event
West-Germany has always been a very important market for Bilspedition in Europe. Until the end of the 1970’s, apart from a sales office for a few years at the end of the 1960’s, it’s only representation was through a number of agents. In 1980, the first German operational subsidiary, Autotransit GmbH, was established in Hamburg. The operations of the company were limited to the northern parts of West-Germany. In the other parts ATA Sweden was represented by agents.

The company in Hamburg had around 15 employees when it started. Then it grew internationally. Important countries became not only Nordic countries but also other destinations like Italy, Switzerland, France and Holland and Belgium. They also had a small seafreight department as well as warehousing.

In 1986, Autotransit bought Spedition United, formerly West-Friesland, which was owned by United Transport Corporation. Originally West-Friesland, an old Dutch company that started in Alkmeer in 1917, had been family owned. The subsidiary in Germany started in 1951 and was sold to United Transport in 1981. It continued in the name of West-Friesland until 1984 when it changed the name to Spedition United. As Autotransit acquired the company in the beginning of 1986 it did not include the German operations. The company in West-Germany was acquired some months later and was then renamed to Autotransit GmbH and it was decided that Autotransit GmbH in Hamburg and the new international part, Spedition United, should be merged.
At the time of the takeover Spedition United had three offices in West-Germany (Köln, Wuppertal and Frankfurt) and around 120 employees. Very soon after the takeover though, in 1986, the new international part of Autotransit GmbH started three new offices (Stuttgart, Nürnberg and München).

Then in 1986/87 the ATA group of companies, became a part of the larger group of Bilsedition International. Further a new office was opened in Hannover. This new office led to certain complications with one of the most important German agents of their sister company Scansped Sweden, Gebr.Hellmann in Osnabrück. However, Autotransit GmbH agreed to leave the Osnabrück area alone and vice versa for Gebr. Hellmann and the Hannover area.

In West-Germany, most Scansped offices had only trucking traffics, subcontracting the transports out to trucking companies. Before the event, Autotransit in Hamburg and Autotransit in Köln were the only two offices which had trucking traffics as well as certain overseas activities.

The situation of SKT/F&L and Wilson& Co in West-Germany was different. SKT/F&L, as well as Wilson, used agents for all their traffics in West-Germany though Wilson did have a small office in Travemünde for the Scandinavian operations. Further, most of the agents were well-known German transport companies with which cooperation had existed long term sometimes since the second world war or even earlier. The number of agents in Germany was around 15-20 for each of them and the cooperations mainly concerned traffics to/from Sweden.

The agents of SKT/F&L, Wilson and ATA were to a large extent competing on the German market for goods to/from Scandinavia. This situation, in combination with the fact that Autotransit through ATA GmbH and the acquisition of Spedition United had a number of offices and had recently started some new offices, made this competition even harder.

Not only did they compete on the Scandinavian market but Autotransit in West-Germany also had its own traffics to/from other countries in Europe like Benelux, France and Italy in competition with the agents.

The event

The decision to merge SKT/F&L/TK, Wilson and Autotransit activities in West-Germany became rather complicated since almost all the agents of these companies had to be changed. The newly formed Scansped Germany GmbH was supposed to be the main agent for all the three former Swedish parent companies in West-Germany. The German company changed its name from Autotransit to Scansped GmbH in 1988/89. This was the third change of name for the old West-Friesland part of the company since 1984 which made it difficult both for the customers and for the personnel. This time the new name Scansped was also unknown on the
German market. The managing director of the new Scansped GmbH, with head office situated just outside Köln, was former managing director of the former Spedition United part of Autotransit.

Since neither SKT/F&L/TK or Wilson had any offices of their own in West-Germany the offices of the old ATA international were supposed to handle almost all volumes for all three companies to/from the eight areas where they existed. This became difficult since some of these offices were newly established. The former added international part Autotransit GmbH organization had grown from 120 employees to 190 within a period of less than three years. In spite of this, Scansped GmbH did not have the necessary resources to handle all the added volumes within such a short period. When the merger was accomplished the volumes of the company to/from Sweden more than doubled overnight. This was achieved in a period of extremely intense competition from the large number of former agents. As a result of this, the total loss in volumes were larger in West-Germany than in most other areas of Europe.

**After the event**

Scansped GmbH had no complementary agents in Germany, which Scansped Sweden, Belgium, Holland and many of the other European Scansped offices had. Basically they cooperated with the sister companies in the Scandinavian countries and with agents in Austria, Benelux, U.K. and Italy. In some countries the local offices of Scansped in Germany had different representatives.

In Benelux only the newly established somewhat weaker Scansped offices in the southern part of West-Germany established a cooperation with Scansped in Holland and Belgium. The offices in the Köln/Wuppertal area cooperated with Ziegler in Belgium (a large well-known company) and they even had an advanced project going on for Volvo together with Ziegler. In Italy and Holland Scansped in Köln/ Wuppertal had other agents than other Scansped companies in Europe such as Saima and van der Graf and Karl Hermann.

This made the situation in West-Germany rather complicated because of the combinations of agents as well as Scansped’s own offices in eight places.

<table>
<thead>
<tr>
<th>West-Germany</th>
<th>Before event</th>
<th>After event</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of agents -Swedish Parents</td>
<td>31</td>
<td>10</td>
</tr>
<tr>
<td>No of offices of subsidiary</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 6.4. Change in agents and number of offices of subsidiary in West-Germany

---

1 In 1987 a year before the merger
2 In spring 1986 the number of offices were only 3+1
The reduction in agents in table 6.3 only shows the changes experienced by Scansped GmbH due to the merger of the Swedish parent companies. Then there are the other sister companies in Europe which also substituted many of their agents with Scansped GmbH in several areas. The old SKT/F&L subsidiaries in particular had very little cooperation with Scansped West-Germany before the merger. These changes, which could have been almost equally large as those in Scansped Sweden added to the pressure on the new Scansped GmbH.

As a result of the merger, Scansped GmbH in West-Germany lost its agents in the U.K., Spain, Italy, Switzerland and France. Scansped GmbH in Köln and Wuppertal were in this case forced to change and find new representatives in these countries. The agents leaving the cooperation declared that they expected Scansped to increase the cooperation within the Group. Therefore they sought new agents which were not developing internationally. It did not seem to work out that way though. Three of these agents started working with subsidiaries to other international transport companies. One was acquired by Schenker.

However Scansped GmbH found new agents in these areas. Even though there were Scansped sister companies in the countries in question, when it came to the point only Scansped Switzerland came to represent Scansped Germany for the concerned traffics since the sister companies in these countries already had agents in Germany and did not want to change there. A similar situation were present for the West-German offices which caused differences in representation abroad between the different offices in West-Germany. The newly opened offices in Southern Germany seem to be more dependent on sister companies as agents while the offices in the Köln/Wuppertal area already had their own agents in other countries such as Bansard in France and Ziegler in Belgium, etc.

As a rough estimation, at the end of 1987 ATA GmbH in West-Germany had 9-14 agents covering most countries of Western Continental Europe before the merger, out of which 5 were sister companies. After the merger the number of agents would be 17 out of which the number of subsidiaries used 7. Of the agents with which ATA GmbH in West-Germany had regular traffics before the event, 5 agents switched due to the merger. In 4 of these cases the merged Scansped in West-Germany found new agents and in one case they started to cooperate with a sister company. (see Appendix 4)

Another problem has been the fact that the name Scansped in Europe was unknown and that it had to be established in Germany. Many customers have stayed over the years in spite of the changes in ownership in Germany and basically their contacts in the company have stayed the same.

After the merger, Scansped West-Germany was very strong in Scandinavian traffics but had limited capacity in traffics not involving Scandinavia. As Bilspedition acquired Tekatrans in Stuttgart (which was formerly an agent to Scansped Sweden) at the end of 1989, Scansped
Germany became stronger in the southern parts of Germany, especially in the Stuttgart area. The reason for the acquisition was that Scansped Holland BV had lost its partner Panalpina in Stuttgart when Panalpina had started its own business in Holland. This, in turn, was a result of the main Dutch agent of Panalpina, Nedlloyd, had acquired Union Transport in Germany and by doing so Nedlloyd obtained a representation of its own in Germany and left the cooperation with Panalpina. The existing Scansped Stuttgart did not at that time have the necessary resources in order to handle the goods to/from Holland and possible agents would not be prepared to invest in such a traffic since Scansped already had an office of its own in the same area.

Later in 1990 Scansped Group acquired another large domestic as well as international transport company in West-Germany Nellen & Quack. This further strengthened and complicated the situation for the existing offices of Scansped in West-Germany.

Due to all the different changes, Scansped GmbH came to cooperate to a larger extent with some of the other Scansped companies and new traffics to other places started, for instance to Poland where Scansped Group had bought 50% of a newly established Polish transport company Scanspol.

From a concentration on international road transports the acquisition of Nellen & Quack in 1990 added relatively large domestic trucking operations for Scansped in West-Germany.

**Summary of the Scansped West-Germany event**

In 1980 Bilspedition established a subsidiary, ATA GmbH, in Hamburg. In 1986, Bilspedition acquired a German international transport company, United Spedition, which was incorporated into ATA GmbH. Three new offices were also opened in West-Germany by ATA GmbH.

At the time of the total Scansped and Bilspedition International merger in 1988, ATA group was the only group having subsidiaries in Germany apart from a small Swedish support office of Wilson's in Travemünde. Wilson and SKT/F&L/TK had 31 agents representing them in West-Germany. After the merger the number of German agents of the Swedish Scansped was reduced to 10, located to areas not covered by Scansped Germany.

The merger Scansped in Germany doubled their goods volumes over night, which resulted in large temporary problems. Five of their own international agents left them. In four of the cases they found new agents in one they started to cooperate with a sister company. The competition in Germany after the event from the 21 agents that had left the cooperation with Wilson and SKT/F&L/TK was extremely strong.
6.1.3.4. The establishment of Scansped Belgium NV

Before the event

The total Bilspedition Group had three separate subsidiaries in Belgium via their subsidiaries SKT/F&L, Autotransit and Wilson. SKT/F&L was represented by Castra NV, daughter company to a fully owned forwarding company van Casteren in Holland and founded in 1960 by Mr P. van Casteren, which had all its basic activities concentrated on Waregem.

The subsidiary of Autotransit was called Autotransit NV and was to a large extent based on the acquisition of United/West-Friesland in Belgium in 1986.

The Belgian company, established in 1934, was part of the same group as West-Friesland acquired in Holland and West-Germany. At the time of the merger the company was situated in Brussels, Zaventem, Antwerp, Zeebrugge and Mechelen.

The third company was Scanroute NV, partly owned by Wilson & Co and partly by Cornel Geerts. It was situated in the Antwerp area. Before the merger, C. Geerts bought Wilson&Co's shares because he did not want to join the merger. The Scanroute company was more of a trucking company than a forwarder.

The three different companies had over time developed differently. Castra NV was basically a family business which had been sold to Skandiatransport (SKT) in 1980 before the merger with Fallenius and Leffler (F&L). Prior to that, during the 1970's, van Casteren and Castra were partly owned by Holland America Line (from 1971) and later by the Swedish Broström shipping group (1975). Castra NV cooperated very closely with the parent company van Casteren in Tilburg, Holland. They were both located in textile areas. Even though it had many customers in other industries the textile industry had always played a very important role for Castra. It was a stable and profitable company situated in a rather small town where it was possible for the people to give personal service. The company was specialized in international consolidation services. Through the international owners the company got more internationalized. The growth of the company was very high almost from the start. The number of employees had increased from 13 in 1972 to around 60 before the merger in 1988. The name Castra N.V remained the same in spite of the different owners during this period.

Autotransit, formerly West-Friesland, was a larger company with around 90 employees at the time of the merger which started as an inland navigation transporting company. As it was bought by United Transports it developed into international groupage services mainly by truck. The diversity of services (full loads, consolidation, warehousing, storage, bulk transports, customs clearance, brokerage, etc) was larger than that of Castra and the number of locations
were spread throughout Belgium. As a result of this the variation in customer industries was larger as well as the average size of the customers.

When Bilspedition was looking for a transport company to buy within Holland and Belgium they found United/West-Friesland through old contacts with ASG which had set up its own company in Belgium in 1976 since the agent AMA had been acquired by United Transport.

Bilspedition bought the United/West-Friesland company in Holland and in Belgium 1986 and early 1987 the company changed its name to Autotransit. In 1987 they bought another company in Belgium, a small customs clearance company in Brussels which also included a small airfreight office in Zaventem, the airport.

The agents of Castra and ATA were very different even though they belonged to the same Group in Sweden. In fact, they were basically competitors and so were their agents. In 1988, before the merger, Castra cooperated in Scandinavia with its parent company SKT/F&L in Sweden and its sister companies in Norway and in Denmark. Only in Finland did they cooperate with an Autotransit company. As for West-Friesland, before it was acquired by Autotransit it cooperated with Adams Transport in Denmark and with TK in Sweden. After the Bilspedition acquisition it had to change to Autotransit in Sweden and Denmark, just a few months before both Adams Transport and TK became part of the same Group. In Norway and in Finland ATA Belgium cooperated with companies other than Autotransit. The policy was, however, that ATA should cooperate with sister companies in Sweden, Norway and Denmark as well as Switzerland.

The two companies were competing in Belgium on the Scandinavian market and some other European markets like France, the U.K., etc. On the other hand they were also complementing each other. For example Castra was strong on traffics within Benelux and Germany while ATA had almost no traffics in these areas. At the same time, ATA was stronger in some traffics to other areas like Italy. Castra had developed express traffics to certain destinations in Europe at attractive prices which ATA did not have.

On the whole ATA, being more diversified in transport services, more divided in location, with an older staff, a low profitability and a tighter budget, had a very different company culture to Castra with its positive development, younger staff and higher concentration both in services, assortment and location. Finally, the board of directors in Castra reported to van Casteren in Holland while the board of directors in ATA reported directly to Sweden.

The event
When it was decided that the companies should merge in Belgium on January 1, 1989, project groups were formed (as in Sweden) in order to form the new company. As the name Scansped
was already adopted in Belgium the new company was forced to take the name Castra/Autotransit for the first year but was then able to change to Scansped NV Belgium on January 1, 1990. The new company was a sister company to van Casteren, both being a part of the European division of Scansped. Therefore Castra established dependency on van Casteren in Holland ceased. The new company came to be located in four different places Waregem, Brussels, Antwerp and Mechelen. The office in Zaventem was closed down. The managing director of Castra became the chief executive officer, the managing director of ATA the deputy managing director.

Because the new company was a much larger company with a total of 145 employees some new specialist functions such as controller were needed. The services of Castra and Autotransit were competing in some areas and were complementary in others. In some cases there were too many employees but in other cases, like for accounting and bookkeeping, which van Casteren formerly took care of, this was not so. One specific problem was how to split the traffics between the offices in order to rationalise the traffic system in the best way and at the same time satisfy the customers. Since the companies had had many competing traffics before merging there were several traffics to the same places. Now the traffics became more concentrated. For example, the traffic to/from Denmark was concentrated to Waregem (old Castra) but to/from Sweden was concentrated to Mechelen (old Autotransit). Other problems had to do with the formation and location of a new marketing department, the price structure and the sales personnel of the new company. Castra had been a more marketing oriented company than ATA before the merger.

The differences in culture between the companies made the total change rather difficult for the employees. Since also their sister companies (representatives) in Scandinavia and Switzerland were merged and restructured at the same time the situation became even more complicated. In these countries as well as partly in France (Paris) and Finland they were cooperating with their sister companies. Not only were their sisters reorganized and changed but also the relations to suppliers to these companies were changed. For instance in Sweden the domestic transports for SKT/F&L were performed by Fraktarna and not by Bilspedition domestic which was changed as a result of the merger. In most places where the new company cooperated with agents, the agents of Castra were chosen.

In some cases the Scansped sister companies were not chosen as partners since their existing services were not sufficient. This was the case in the U.K. where Thompson & Jewitt became their agent. In France the Scansped office was complemented with other agents in France as well as in West- Germany. Quite often a combination of agents and subsidiaries was used.
Customers were told that the merger had been made not just to reduce internal competition and to rationalise but perhaps more for the purpose of creating an international network before the changes in EC in 1993.

After the event
It took about 1 1/2 year for things to stabilize. In Belgium after only one year the head office was moved to Mechelen, where neither company had any office even though ATA had some warehouse facilities. As a result, employees in Brussels and some in Antwerp were moved to Mechelen. A new office and a new terminal were built in Mechelen (situated between Brussels and Antwerp). The office in Brussels were closed down. The Waregem office continued to be around the same size as before the merger but the managing director and part of the administration moved to Mechelen. In the beginning of 1990, the employees in Mechelen numbered 75, in Waregem 66 and in Antwerp 5. The sales administration was to a large extent moved to Mechelen even though 2 salesmen were still left in Waregem. In the spring of 1990, the warehousing space had increased and the company owned a fleet of trailers, distribution trucks, conventional equipment, etc., in addition to subcontractors.

Over the last years the cooperation with sister companies in other countries has increased. In all countries where Scansped has its own companies, except for a part of Germany and France and in U.K., the new Scansped in Belgium is represented by such companies.

In other countries like Austria, Greece, Italy, Luxembourg and Spain the company was represented by agents. To some limited extent these agents are the same as the parent company's in Sweden. There is a problem with agents because of the expansion of Scansped overall. This makes it necessary for Scansped to ask the agents for a guarantee clause in order to make sure that the agents will continue the cooperation. One of the more important agents to Scansped NV, Cretschmar Cargo (the agent in West-Germany as well as Spain), expressed their concern when Scansped bought Tekatrans in Stuttgart. Tekatrans, which was a competitor to Cretschmar, had rather large traffics to/from Holland and Belgium. They took the view that Scansped will leave them in the future as agent which will have effects on their interest to expand the common traffic. Another worry was the marketing plan and marketing activities and the problem of transferring information which would be necessary for a development of the traffic. In this case Tekatrans even had one sales representative in Belgium who Scansped NV took over.

1From 1990 the agent in Italy was owned to 30% by Bilspedition Group
Another type of problem with the agents existed in France with the agent Aveka, which belonged to the Nedlloyd Group. Since the Nedlloyd Group was expanding and merging companies in competition with Scansped all over Europe the guarantee clause was a necessity for both parties. A further problem was that Scansped West-Germany was still cooperating with Ziegler in Belgium, a large international transport company, in competition with Scansped Belgium and their German agents.

New services were also developed to Poland as Scansped had started three joint ventures in Poland, 1 Spedpol, 2 Scanspoland and Transmeble International. Other services had been a result of a cooperation with Patmar Wilson in HongKong.

As a result of the merger the cooperation between Castra and Satraco as a subcontractor in the Austrian traffic ceased since Satraco at that time belonged to a competitor the Inter Forward Group.

In total, the number of representatives, 8 for ATA and 15 for Castra before the merger, changed to 17 for the new merged company. The number of countries in which it cooperates with sister companies has increased from 4 to 8. (see Appendix 4) The new company had a larger number of agents than each of the former companies and the number of countries in which they have subsidiaries has been doubled. The frequency in the traffics has increased as well as the number of services for the new company.

**Summary of the Scansped in Belgium event**

Each of the three Swedish parent groups had subsidiaries in Belgium. The ATA group had recently acquired United/ West-Friesland, SKT in the former Scansped group had acquired another international transport company in early 1980 and Wilson had a joint venture. The three companies were competing.

However, only the first two companies were merged since the Wilson share in the joint venture was sold. The merger resulted in large changes. Part of the new larger company moved to new facilities and some offices were closed down, the number of competing agents had to be reduced and the cooperation with the subsidiaries increased.

---

1 Bilspedition owns 35% in Spedpol and 50% in Scanspol and Transmeble International
2 The ownership is 1991 35% but is agreed to be 50%
6.2. General case analysis

6.2.1. Period 1 1955-69 - Beginning of internationalization
When Bilspedition started internationalizing between 1950-60 the company was specialized in trucking transports.

Integration
The international growth started at the end of 1950's in the Scandinavian countries through new cooperations with agents. However, after a few years Bilspedition switched from the agents to subsidiaries in Denmark and Norway. In Denmark they started their own activities in 1959/60 and in Norway in 1962/63. In these countries there was a closer cooperation between the parent and the representative taking place not only in legal but also in executional integration. Very quickly the change also resulted in enlargement of the cooperation in Denmark and Norway through the formation of a number of new direct traffics to/from different places in Sweden as well as in Norway and Denmark. Through these cooperations a small international net was created.

The Continental traffics started through joining nets with ATA in 1964-66, when Bilspedition acquired the majority of the company and therefore gained direct access to ATA’s existing relations. Through the merger of ATA and the international activities of Bilspedition in Sweden in 1967 a closer cooperation was established not only with the Swedish international operations but also with the Scandinavian sister companies.

Based on ATA and the two Scandinavian subsidiaries, Bilspedition continued expansion from Sweden, Norway and Denmark into Europe and later on into other parts of the world opening up the net for a number of new cooperations over the period.

As the company grew internationally it obtained permission to have its own customs warehouses in Stockholm, Helsingborg, Norrköping and Örebro, which caused a closer cooperation through increased execution integration with representatives and increased efficiency in the international traffics.
Through the acquisition of Trailer Express and later the acquisition of the majority of Scandinavian Ferry Trailers, Bilspedition increased integration through better control of the trailer equipment, of the trailer traffics and the representatives taking part in those traffics.

Finally during this period, Bilspedition became a partner and minority owner of the Scanfreight Group. Through this cooperation, GBS established new cooperations in the U.S. and Canada.

**Extension**

The *extension of first degree* dominated this period, since Bilspedition established traffics to many new countries.

The first countries to which it started traffics were the Nordic countries and then a few years later new countries on the Continent were covered through acquisition of the majority ownership in Autotransit. In 1968, the company had representatives in 14 European countries and continued expansion into other Continental countries. Through internationalization of their subsidiaries in Denmark, Norway and U.K., extension of *secondary degree* was also taking place.

The speed of extension was high during the first period. Bilspedition not only managed to cover the most important parts of Europe with trucking traffics but also started some overseas traffics through partnership in Scanfreight.

**Penetration**

During this period the company increased the international penetration dramatically. First they established direct relations to the Scandinavian countries which, through changes in volumes and creation of new direct traffics to/from different places, soon caused an increase in *size of relations* especially in the Nordic countries.
Starting almost from scratch at the end of the 1950’s the company was receiving 17% of its total turnover from international traffics in 1969/70. New terminals had to be built not only in Sweden but also in Norway and Denmark, which contributed to the increase in the size of the relations as larger amounts of resources for existing relations in the same type of services were engaged in the home country as well as in the foreign country.

In some countries such as West-Germany and the U.K., the increased coverage was made by spread of relations in that country through adding more local agents.

The Danish and Norwegian companies in turn developed in continental traffics which increased the amount of resources needed in those countries, as well as resulting in increased size of relations at net level.

```
<table>
<thead>
<tr>
<th>Exist. relations</th>
<th>New relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>same type of services</td>
<td></td>
</tr>
<tr>
<td>size of relations</td>
<td>spread of relations</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>new type of services</td>
<td></td>
</tr>
</tbody>
</table>
```

Figure 6.6. Internationalization -penetration 1955-69

The overseas traffics which existed through Scanfreight required only very limited amounts of resources for the three Scandinavian companies.

**Conclusion and effects between representatives**

The integration during this period took place to begin with at system level, creating a number of transport systems within the Nordic countries. However, they continued quickly to the net level through the acquisition of ATA and even though ATA was a small company it provided a nucleus of transport systems to a number of countries. Through the legal integration with the Swedish international companies ATA, Trailer Express and Scanfreight, Bilspedition gained access to international experience.

Due to the fact that the subsidiaries of Bilspedition also began their internationalization, both first and second degree of extension took place during the period. The internationalization of Bilspedition resulted in international activities accounting for a share of 17% of turnover at the
end of the period. During this period the effects between the representatives are still relatively small. However, some negative effects were present in U.K. between the newly acquired subsidiary Trailer Express and existing ATA agents.

Effects on suppliers, owners and competitors
In the beginning, Bilspedition was only performing the domestic transports connected to the in the international traffics of the owner Fallenius & Leffler. It could be said, therefore, that they were positively connected to the development of international transports without having any international relations. Fallenius decreased its integration with GBS through selling 50% in 1942 to the Association of the Swedish Trucking Companies (SLF) and the rest of the company about ten years later. The first change in ownership was made at the same period as Swedish Railway bought the majority of ASG.

At the time that the international business started, 2/3 of Bilspedition was owned by trucking companies via SLF and 1/3 owned by Swedish industry. The increase in international business had positive effects not only for the number of trucking companies which took part in the new traffics but also for the positively connected trucking companies performing domestic transports. The truck owners working exclusively for Bilspedition BTF established a special association in 1957 which increased the possibilities for closer cooperation.

In the beginning of 1960’s Bilspedition needed more capital due to high growth and some acquisitions and the largest owners SLF and Säifa, another Swedish Truck Owners Association, wanted to sell. The BTF trucking companies that were closely tied to Bilspedition wanted to continue and managed to raise the necessary capital and to get SLF and Säifa to stay. The trucking companies increased their engagement in Bilspedition in 1965. Conflicts between the truck owners in SLF and Säifa resulted since many members were working almost exclusively for competitors such as ASG.

During this period, in 1965, the truck owners in the ASG-T association obtained the possibility of acquiring 5% of the shares in ASG from Swedish Railway. Through the acquisition of ATA, Bilspedition started to compete with the other Swedish forwarders. One of these was the former owner F&L.

The acquisition of Trailer Express and Scandinavian Ferry Trailers increased the cooperation with some of the shipping lines.

6.2.2. Period 1970-1979 - Specialization and diversification of services
The period was a period of stagnation and instability but also of growth at the beginning and at the end.

**Integration**

During the 1970’s, many new cooperations were established. The main reasons for this were specialization and diversification into new services as well as the gradual development of traditional trucking traffics into new countries. The gradual development which was a case of opening up the existing net had resulted in increasing number of traffics and agents. As for specialization and diversification they generally took place through acquisitions and joining nets. Through joining nets with Flygspedition, SGS, Alpen&Parelius, Cold Stores, etc., Bilspedition added a large number of new agents to the net. At the end of the 1970’s Bilspedition had 50-60 agents outside Sweden including overseas, out of which 5 were subsidiaries to Bilspedition. The fact that these joining nets were complementary in services resulted in a creation of part-nets within the total Bilspedition net. Moreover, the specialization and diversification was sometimes developed together with existing representatives which created a closer cooperation and enlargement.

![Integration of systems and net](image)

Generally speaking, in spite of shorter periods of stagnation and decline the cooperation became closer to most representatives during the period as a result of intensified training and education of personnel, in order to improve the know-how in existing as well as in the new specialized and diversified areas. Other actions leading to closer cooperation were the development of computerized communication systems and unit load transport systems. This also increased the possibilities for Bilspedition as well as the agents to control the transport systems. In one case a separate company BIAB was established in order to increase the control of the trailers, containers and flats that were part of the existing traffics. The diversifying into activities formerly performed by the customers such as warehousing, packing, etc., was another way of increasing control integration during the period.
The level of legal integration also generally increased during the period through acquisitions not only in Sweden but also internationally, even though there were some negative changes. In several of the Swedish acquisitions leading to joining of nets, there was a gradual development over the period as the share initially acquired increased until the company became fully owned, as in the case of Flygspedition, Cold Store, SGS, etc.

On the other hand, the legal integration with representatives abroad went through a period of instability, since it increased by five and decreased by two leading to a combination of new cooperations and closer cooperations and dissolution of cooperation. The additional foreign companies were situated in Denmark (2), Holland, Italy and Switzerland and the reductions were in West-Germany and the U.K.

During this period, the possible effects of the increases and decreases in volumes of the existing trucking traffics on integration were diminished, both by the expansion into new countries, increased specialization and diversification as well as the increased execution and legal integration.

Extension

The first degree of extension was increasing both in Europe and overseas mostly to countries in Europe, which were more on the periphery, such as Spain, Ireland, Eastern Europe and to Middle East countries such as Iraq, Iran and Saudi Arabia. Bilspedition even set up a representative office in Iraq especially for trade fair transports. The speed of extension for land-transports seems to have decreased in comparison to earlier periods. However, for overseas transports the speed of extension was faster since many overseas countries were added through the acquisition of Flygspedition and Alpen & Parelius.

By and large, the secondary degree of extension increased due to investments in new foreign subsidiaries.

Penetration

The combination of adding coverage to a number of new countries within Europe and the expansion through acquisitions of Swedish based international companies as well as some international companies all resulted in increased penetration in terms of new diversified relations and spread of relations.

In other cases the scope of the relations increased since the representatives added new types of services like tempered transports, warehousing and consultancy to their existing services. The fact that there were many acquisitions increased the resources both in Sweden and in foreign countries.

The size of relations both increased and decreased during the period. The decreases were basically taking place in the existing relations while increases were a result of the new acquisitions of international companies.
Conclusions and effects between representatives

The first period seems to have consisted of both increases and decreases. However, over the whole period, there was an increase in all three dimensions. The share of international activities had increased from around 20% 1970/71 to 24% in 1980.

The new added complementary areas such as airfreight, seafreight, hanging garments, etc., continued to have their own separate net of representatives and transport systems which created part-nets which were C/O (complementary in service and overlapping geographically) within the total Bilspedition net. As a result, the number of representatives in each country increased and so did the latent conflicts between representatives.

In specific cases the conflicts were obvious. In the UK where a large international transport company took over the operations of the subsidiary, other UK agents who were previously complementing the activities of Trailer Express in the UK had to change.

The sales office in Germany which ceased its activities early in the 1970's changed the role of the agents in West Germany leaving a large part of the marketing to them which increased the integration with them.

Finally, since many of the agents of the different part-nets, such as ATA, Coldstores, SGS, Flygspedition and Alpen Parelius, were diversified and internationalized they were competing in other areas.

Effects on suppliers, owners and competitors

During this period the cooperation with shipping lines and airlines became important since Bilspedition became involved in airfreight and seafreight transports through the acquisition of Flygspedition and Alpen & Parelius. Both the shipping lines and the airlines were positively connected to the development of Bilspedition.

The trucking companies had structural problems during these years. Bilspedition took part through the setting up of a specialized company for rationalization and development of trucking
companies. Certain larger trucking companies were even acquired by Bilspedition in combination with a company specially established for that purpose by BTFAB. In this way the integration between the trucking companies and Bilspedition increased.

During this period the forwarders, being partly competitors, especially those in Scansped as well as Wilson &Co, increased their shares of ownership in Bilspedition and the share of the truck owners decreased. As Bilspedition continued diversification the competition with the owners increased too.

6.2.3. Period 1980-89 - Acquisitions and mergers
(Since the Scansped Europe event is so important for the total European development it is part of the general case analysis, while the three other Scansped events are analyzed separately in chapter 9.)

During this period Bilspedition became registered on the stock exchange and issued new shares several times. This changed the conditions for development and possibilities to grow via acquisitions.

Integration

During the first 2-3 years of the 1980's Bilspedition developed internationally through changes within the existing international part-nets of the total international Bilspedition net. ATA, Alpen&Parelius, SGS, Flygspedition, as well as the international subsidiaries in Europe, continued their international expansion by changes at system level switching representatives and into closer cooperation.

There were several small increases in legal integration in the ATA part-net during the early years of the 1980's. In 1980, the cooperation ended between ATA and Kühne & Nagel in the UK and Bilspedition set up its own subsidiary again, now called ATA Ltd. In West-Germany, something similar happened in Hamburg since a new ATA company was set up. The new office in Hamburg was intended to cooperate with some of the other agents in West-Germany. In Italy the part owned company became fully owned in 1982. In Holland, Bilspedition acquired a small international company in 1982/83 which also added seafreight to Bilspedition’s services in Holland. These companies all became part of the ATA international organization. However, these were all basically very small changes in legal integration. Later during the period Bilspedition acquired larger companies such as West-Friesland which were added to the ATA international part-net.

On the whole, during this period there was a strong concentration on subsidiaries and on a few agents. In 1987, the ATA part-net only had as representatives in 12 countries, 4 agents, 8 subsidiaries and one joint venture. Within the ATA-net, the concentration resulted in the
existing representatives cooperating closer together and the net showed a tendency towards closing up trying to get the sister companies to cooperate.

The first really large joining of nets that took place during the period was in 1982/83 when Bilspedition acquired the transport and forwarding part of Wilson & Co. This increased the share of the international activities of Bilspedition from 30% to 50%. However the part-nets of Bilspedition and the added Wilson net were not merged but continued as separate part-nets within the total Bilspedition net.

Each of the two large groups, Wilson and Bilspedition with ATA dominant, also continued separately to move into closer cooperation within their part-nets through activities such as developing their own communication systems together with subsidiaries, etc.

In 1985/86, another large international group, the Scansped Group, was acquired leading to a joining of nets. As in the Wilson acquisition, the Scansped group of companies continued as separate part-nets being overlapping (O/O) in all parts to that of ATA and the Wilson groups in their activities. Even though there was a joining of nets through legal integration between the Scansped net and the total Bilspedition net, the integration was almost non-existent between the separate part-nets for a couple of years. There were a few exceptions, however, which concerned merging the Wilson and Scansped areas of airfreight and railway agency.

Moreover, the three large international groups of ATA, Wilson and Scansped continued to expand within the separate groups, acquiring companies and increasing the competition between their existing areas. The companies being acquired within the part-nets were either executionally integrated at system level before the acquisition or became quickly so. Examples of this were Adams in Denmark acquired by SkandiaFallénius, Giltspur in the UK (the former agent of Wilson) and the acquisition of West-Friesland in Holland, Belgium and West-Germany for the Bilspedition International group.

However, two of the former Scansped part-nets, SkandiaFallénius and TK, were merged in 1987, which resulted in closer cooperation between the nets in all aspects of integration. After the acquisition of Scansped, TK had been formally organized into the Bilspedition International group and not together with SKT/F&L.
Finally, as competition between different part-nets decreased the effectiveness of the total international net, Bilspedition decided that the large three part-nets should be merged. Therefore the joining of the nets at total level lead to closer cooperation within the total Bilspedition net. The large merger resulted in a concentration to the existing subsidiaries and a reduced number of agents on the Continent in the name of Scansped as well as overseas in the name of Wilson. However, one airfreight company, Flygspedition, being a member of the specialist division, continued a few years as a separate part-net instead of being merged with the airfreight activities of Scanflight.

During this process of concentration, many agents (probably over a hundred including all former part-nets) left or were required to leave. Many new cooperations and switchings were taking place at system level. In some cases Bilspedition had no option other than to buy or start some new companies when possibilities to find new agents were lacking. For example, the Finnish agents left and Bilspedition was forced to start a company of its own in Finland in 1988. In 1990, however, Bilspedition acquired a large international transport group in Finland, Speditor. Another relatively large international transport company acquired was TekaTrans in Stuttgart in West-Germany.

Not only were the Swedish parent companies merged but also the international subsidiaries in the same country. After the merger the international subsidiaries were supposed to give priority to other merged sister companies. This demand was strongest on the Swedish Scansped AB since they were dominating the Scansped Group. However many of the smaller Scansped subsidiaries did not feel an urge to switch or to start a new cooperation with their sister companies in countries other than Scandinavia because their concentration to Scandinavian countries often resulted in weak third country traffics or they might have had an agent of importance. In some cases, however, the lack of agents made them work with a sister company.
Thus, through the merger and the priorities given to subsidiaries, the total net was gradually **closing up** over time.

This was a period of going through waves of different types of integration. Basically, legal integration predominated. As many of the companies were not merged but continued as separate nets they were not integrated executionally at system levels nor were there any changes in control integration. Social integration seems to have increased slightly at management level as a result of the attempts to get the groups to cooperate.

On the other hand, when companies were merged there was then a high increase in social and execution integration within the total net. However, the same change also caused a certain loss in control integration since many of the agents leaving were in control of customer and supplier relations.

The period was totally dominated by net integration and the systems integration changed as a result of this. However, it seems to be important that integration takes place not only at net level but also continues to the execution and system levels for the good of the companies involved and for effectiveness.

**Extension**

During this period there was very little of first degree of extension since Bilspedition was already extended to most countries in the world. The first degree of extension might have increased marginally for some overseas countries as a result of the acquisition of the Wilson Group. On the other hand, **secondary degree** of extension increased generally during the period since a number of existing subsidiaries have been connected. However, for some specific part-nets as those of the ATA group first degree extension actually decreased during the period.

**Penetration**

In begining of the period, the **size of the relations** increased as a result of internationalization of the subsidiaries and concentration to fewer representatives. The concentration reducing the number of agents in Europe also resulted in a decrease in **spread of relations**. When Bilspedition acquired Wilson and later the Scansped Group without merging the groups the **spread of relations** more than tripled. Then the merger of the groups eventually occurred it resulted in a strong decrease in **spread of relations** as well as losses of 10-20% of total international volumes. This was combined with a decrease in **scope of relations** since many of the former agents were large companies offering many types of services while the new representatives being subsidiaries were smaller and less diversified. It seem that existing relations with the representatives increased in terms of **size of relations** but this could not
compensate for the loss in spread of relations and scope of relations during the first period after mergers.

After a year there would seem to be a change towards an increase in penetration both in size and in scope of relations again adding more volumes and developing new types of services.

<table>
<thead>
<tr>
<th>Exist.type of services</th>
<th>New type of services</th>
</tr>
</thead>
<tbody>
<tr>
<td>size of relations</td>
<td>spread of relations</td>
</tr>
</tbody>
</table>
| ○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○๐

Figure 6.10. Internationalization - penetration 1980-89

Conclusion and effects between representatives

During the period, net changes are totally dominating and systems integration develops as a result of this. The number of O/O part-nets within the total Bilspedition net increased due to acquisitions and then decreased at the end of the period as a result of the mergers. Legal integration was driving other aspects of integration after Bilspedition obtained access to new capital.

Changes of increasing integration through waves of concentration moving towards closing up were taking place in the early years of the 1980's. These were then disturbed by acquisitions leading to joining of nets as a result of the acquisitions of Wilson and later Scansped Group. Finally after a period of closer cooperation after the Scansped acquisition the merger resulted in leaving nets and new waves of concentration into closing up. Through the acquisition of Speditor in Finland the concentration there was disturbed again.

The number of changes taking place and representatives involved during this period in comparison to earlier periods would seem to be extremely high. The changes also seem to include both increases and decreases to a larger extent.

The effects between representatives of the net were very large during this period. The internal competition seems to have been very strong between the representatives of the part-nets. Many representatives in each country were cooperating with a Bilspedition company and were still competing with each other. In 11 countries there was a combination of both agents and several subsidiaries competing. The fact that Bilspedition in the end seemed to merge its companies in most cases made several agents leave the cooperation with a Bilspedition company directly after
the acquisition. In West-Germany, the new Scansped company very soon lost five international agents even though they were not supposed to be affected by the merger.

During 1980's, the reduced number of agents and the increased number of subsidiaries abroad and in Sweden caused large amounts of conflicts within the total Group as well as between agents since the best choice was not always present and the agents leaving the net became competitors. This also caused unexpected changes of representatives for Bilspedition.

Large numbers of existing agents to the competing Groups or part-nets were worried by the internal competition and the number of mergers growing over time.

The effects of the mergers on representatives, both direct and indirect, were numerous at all levels and will be discussed further in the next chapter when analyzing the specific event.

Effects 1980-89 on owners, suppliers and competitors
As Bilspedition grew and acquisitions became more frequent new capital was needed. In 1983 the company was introduced on the Swedish stockmarket which gave the company many new owners such as insurance companies, financial institutions, etc. This diluted the share of the majority owner BTF, the Bilspedition Truckers' Association even though it still dominated in voting shares.

During the period Bilspedition acquired many of the former suppliers such as shipping lines, trucking companies and part of an airline which increased integration of control of the transport systems both in relation to suppliers and towards their agents.

Through the acquisition of Wilson Group, Bilspedition acquired a large competitor which was part owner of Bilspedition at that time. This was partly also the case with the Scansped acquisition which was partly a hostile takeover of another large competitor which had formerly been a part-owner of Bilspedition. The takeover caused one of the freight forwarding companies which was part of the Group NTS (Nordisk Transport & Spedition) to break away and continue as a competitor.

The break away of NTS from the Scansped Group became possible through the investment company Ratos. Based on NTS, Ratos then formed a new group of international transport and distribution companies called Inter Forward.

Interaction between the dimensions of internationalization
The interaction between I (Integration), E (Extension) and P (Penetration) has shifted over the periods.

During the 1950's in the first period of 1955-69 internationalization was made through integration at systems level leading to extension of first degree and a certain penetration in the
Nordic countries (I→E1→P). Very quickly there were large amounts of Nordic traffics with the same representatives which caused (I→P).

Later as Bilspedition and ATA were joining nets this resulted in a continued first degree extension and increased penetration (I→E1→P).

During the period there was also a further increase in integration (P →I) due to the large growth of volumes. New more efficient terminals and offices were constructed in order to cope with the traffics and changes in the organization were made. International know-how increased as traffics grew, leading to closer cooperation with many agents. As the Scandinavian subsidiaries started to internationalize secondary degree of extension was involved which also increased penetration in both countries involved. On the whole the period was dominated by the chain of integration leading to extension and penetration (I→E→P).

During the second period of the 1970's the interaction was different. Even though the chain of changes (I→E1→P) still existed the dominating changes were I→P. Integration increased in certain systems and decreased in others due to a combination of stagnation in growth, specialization and diversification. Further this caused penetration to decrease in size of and increased scope and diversification. However over the total period penetration increased.

Due to the clustering of the total net into part-nets through specialization and diversification it is more difficult to discern and summarize the total change in integration. The fact that much of the diversification was made through joining of nets, specialization causing closer cooperation as did the new communication systems, it seems that the integration increased in the total net as well.

During this period both secondary and first degree of extension were involved. While first degree only increased, secondary degree both increased and decreased during the period leading to similar changes in penetration (I→E2→P).

The last period 1980-89 the changes seem to be faster and larger. On integration the changes were basically taking place at net level and the changes in extension basically concerned secondary degree of extension. First degree of extension was hardly involved for the total net. Joining nets and leaving nets were common which led both to increases and decreases in second degree of extension and penetration (I→E2→P). Basically the increase in integration through joining nets would lead to high increase in penetration while leaving a net led to high decrease in penetration. As in the Scansped case, joining the Bilspedition net increased penetration while merging decreased penetration. Merging overlapping nets seems to involve joining part of nets and leaving part of nets. Therefore increases and decreases in integration and penetration takes place at the same time. However, in the end, these parallel processes seem to have led to an increase in integration of the residual net and a decrease in penetration.
compared to the former situation for the focal company and the focal net. This was what was taking place during the 1980's several times as a result of the mergers going on. Even though penetration fluctuated during the period, at the end of the period there had been an enormous increase.
7. Inter Forward

7.1. IF Group - Case description

The history of Inter Forward (IF) is necessarily very short as the company was only founded on January 1, 1988. The case consists of the international development of the IF Group during the first three years of its existence. The development of the company as a whole is described first and then the international development over time of two of the largest companies acquired by IF during this period, both before and after acquisition.

7.1.1. General development

IF was essentially established to act as a form of holding company for the transport sector interests of the Ratos investment group in Jan 1988. Two years earlier, Ratos made its first major investment in the transport, forwarding and distribution sector by acquiring NTS, Nordisk Transport & Spedition AB. IF, the outcome of a restructuring and renaming of the NTS parent company, was formally created thereafter with a new group management team. NTS then became the cornerstone of IF's transportation and distribution activities.

As Ratos divested its interest in its traditional areas such as steel manufacturing, distribution of steel and became more of an investment company, it decided to invest in international services instead. Ratos experiences in distribution as well as the expected changes in the rules and regulations on the Common Market led Ratos to focus on transport companies. The restructuring of the transportation industry also increased the likelihood of finding interesting companies willing to sell, according to the management of IF.

When the Scansped Group, of which NTS was a part, was sold to Bilspedition against the will of NTS, the former owners, then part owners of Scansped, and the NTS management looked for a way of getting out of the deal by finding an alternative buy. Personal acquaintance with persons in the Ratos Group led to a contact with Ratos which culminated in Ratos buying NTS from Bilspedition. At that time, NTS was the single largest transport company in the Scansped Group and accounted for a large part of the profit in the Group. After the split-up of the Scansped Group in 1985/86, some parts of NTS had to be restructured and investments made which caused a downturn in the company’s profitability in 1986. Further in 1987, acquired two transport and forwarding companies in Denmark, G. Hansen Spedition A/S, which had been its agent since 1966 and Erritzoe A/S. These companies were merged into one company named NTS Denmark at the same time as IF group was established on January 1, 1988.

The Group level IF consisted of seven persons, increasing to ten in 1990, with the requisite experience in distribution and management. The IF Group set out with the ambition to create
one of the larger transport and forwarding groups in Europe by the time the expected EC harmonization and deregulation became accomplished in 1993.

The first year became very intensive. Business ideas, objectives and strategies for the IF Group were created. NTS was divided into one service company, IF Service, and three operating companies, NTS Sweden, NTS Rail and Nordic Air Cargo (NAC). At the same time four new companies were acquired and negotiations were going on towards even more acquisitions. Three Swedish companies were acquired, Jerre AB (mainly railway and airfreight), J.A.Larsson (transport specialist for plants and bulbs) and Allservice AB (warehousing and distribution) and one West-German company, Schier & Otten (sea and airfreight).

In the beginning of 1989, two larger European companies, Amas in Holland and Züst & Bachmeier (Z&B) in Switzerland and Germany and one smaller U.K. company, Norfreight Ltd, were acquired. These companies were also agents to NTS although on a limited scale. The combined size of the companies acquired in 1988 and 1989 was larger than the whole of the existing NTS group of companies.

Further acquisitions were made in West-Germany, Belgium, Denmark and in Sweden later during 1989. In West-Germany the companies acquired were Fenthol & Sandtmann and a rather small company, DMP. Fenthol & Sandtmann was mainly a domestic trucking company with some international seafreight and DMP was specialized in warehousing and contracted distribution as well as having suitable terminals and office buildings. The company acquired in Belgium, Sartraco, was a transport and forwarding company specialized in trucking traffics to Nordic destinations. However the company was sold back to the former owner in 1990. From early 1990, the Swedish company Air Cargo Express (ACE), one of the larger Swedish airfreight companies, became part of a common airfreight group specifically created for that purpose within the IF Group which included Nordisk Air Cargo (NAC) as well as ACE. The manager of ACE became the managing director of the airfreight group. The two companies continued as separate subsidiaries within the airfreight group.

Another company acquired during this period was ITM, a Danish company specialized in furniture transports and cooperating with Amas in Holland. Amas also acquired a company in Belgium named Sasse & Co, which was an old established general forwarder in air, sea and roadtransports.

A further four international transport and forwarding companies were acquired in France during 1990. These were Beyer, SMTS, Rambaud, and Alltransports. Basically they were all general forwarders together representing all types of transports. Two more companies were acquired in the U.K., namely, London Carriers International (LCI) and Bondelivery. Both of these were engaged in third party logistics, working very closely with specific customers.
At the Group level, IF formed a new company, International Cash Management & Administration AB (ICMA AB), offering cash management and other financial services the Swedish export industry.

Table 7.1. IF acquisitions

<table>
<thead>
<tr>
<th>Time</th>
<th>Name</th>
<th>Turnover 1</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSEK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Jan 1988</td>
<td>NTS Group</td>
<td>2300</td>
<td>1180</td>
</tr>
<tr>
<td>1988</td>
<td>J.A.Larsson</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>1988</td>
<td>Sped.AB Jerre</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>1988/89</td>
<td>Schier.Otten &amp; Co</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>1988/89</td>
<td>Allservice AB/WMS</td>
<td>36</td>
<td>70</td>
</tr>
<tr>
<td>1989</td>
<td>Züst&amp;Bachmeier</td>
<td>750</td>
<td>400</td>
</tr>
<tr>
<td>1989</td>
<td>Amas</td>
<td>360</td>
<td>500</td>
</tr>
<tr>
<td>1989</td>
<td>Sasse&amp;Co</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>1989/90</td>
<td>Norfreight</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>1989/90</td>
<td>Satraco</td>
<td>54</td>
<td>100</td>
</tr>
<tr>
<td>1990</td>
<td>ACE</td>
<td>315</td>
<td>120</td>
</tr>
<tr>
<td>1990</td>
<td>Fenthol&amp;Sandtmann</td>
<td>185</td>
<td>220</td>
</tr>
<tr>
<td>1990</td>
<td>ITM</td>
<td>90</td>
<td>70</td>
</tr>
<tr>
<td>1990</td>
<td>DMP</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>1990</td>
<td>LCI</td>
<td>400</td>
<td>900</td>
</tr>
<tr>
<td>1990</td>
<td>Beyer</td>
<td>220</td>
<td>405</td>
</tr>
<tr>
<td>1990</td>
<td>Raimbaud</td>
<td>80</td>
<td>65</td>
</tr>
<tr>
<td>1990</td>
<td>SMTS</td>
<td>105</td>
<td>118</td>
</tr>
<tr>
<td>1990</td>
<td>Alltransports</td>
<td>45</td>
<td>37</td>
</tr>
<tr>
<td>1990</td>
<td>Forsblad &amp;Son</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>1990</td>
<td>Bondelivery</td>
<td>170</td>
<td>500</td>
</tr>
</tbody>
</table>

The companies bought were all small to medium sized, with between 10 to 500 employees. An exception was LCI who could be compared with NTS which had around 1,000 employees at the time of takeover.

After a period of three years, the number of companies within the IF Group had increased to around 20 larger operating companies. (see above) These companies, in turn, were often divided into smaller groups of companies. Some of them were already divided into smaller companies at the time of takeover as was the case with Amas, which consisted of 21 different companies. All in all, there were around 70 different companies.

As a result of this, the work load at the Group level on the seven persons involved had changed radically. One way of handling the workload of having so many companies in the Group was to create holding companies. IF therefore established a holding company in Germany in the beginning of 1989 and other IF holding companies in Belgium, France and U.K. in 1990. A

---

1 Estimated
holding company already existed in Holland through Amas and a Danish holding company had been established through previous acquisitions in Denmark.

As a result of all these acquisitions, the turnover of IF doubled over the first two years 1988, 1989 and almost tripled during the third year. Profits doubled during the first two years but changed to a loss in 1990 as a result of increasing costs of the acquisitions.

Table 7.2. Some facts of the IF Group

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover (msek)</td>
<td>1.997</td>
<td>2.232</td>
<td>3.990</td>
<td>5.659</td>
</tr>
<tr>
<td>Profit</td>
<td>23</td>
<td>33</td>
<td>52</td>
<td>-6</td>
</tr>
<tr>
<td>Employees (Sweden)</td>
<td>914</td>
<td>954</td>
<td>1.144</td>
<td>1.325</td>
</tr>
<tr>
<td>Employees (Abroad)</td>
<td>273</td>
<td>323</td>
<td>1.365</td>
<td>2.714</td>
</tr>
</tbody>
</table>

Expansion through acquisitions has been restricted therefore after 1990. During 1990, however, the intention still remained to acquire new companies in order to achieve the objective of being one of the larger transporting and forwarding companies in Europe.

Policies, services and business concepts

Once established, the first task of IF was not only to create a business concept, objectives and strategies for the IF Group but also to create the necessary systems for their implementation.

The business concept and the strategies were the outcome of discussions which included over a hundred persons involved in the business, basically the NTS organization.

The business concept of the Group was to become a large multinational forwarder offering services to industry in the fields of international delivery and distribution. A common feature of the companies acquired was that they had their base in Europe. Up to 1989, the companies acquired were all situated in northern parts of Europe and with services complementary to those of NTS. During 1990, however, a number of French companies were added.

The services within IF covered a wide spectrum of activities within transporting, forwarding and distribution. The first company in the Group, NTS, an old established international forwarder, was founded in 1919 and was establishing their first three international subsidiaries in 1920’s. Over time NTS had developed general transport and forwarding activities encompassing rail, truck, air and sea transports in combination with some specialized activities.

---

2 Turnover excl. Vat and customs duty
3 Profit after net financial income and expenses
In Norway, West-Germany, France and Denmark, it had its own subsidiaries which became sister companies in due course, being part of the holding companies in these countries instead.

On the whole, the IF Group focused on Europe as its market which, on the face of it, meant that airfreight and seafreight would play a less important role in acquisitions. However, airfreight and seafreight activities have, in fact, increased through the acquisitions. Some of the companies like Schier, Otten & Co, acquired by NTS Germany, and more recently ACE were specialists in sea and airfreight. In late 1990, IF has a number of companies working with sea and airfreight. In the beginning of 1989, the goals were still not settled for these areas. For airfreight, its only policy was that it should use agencies instead of investing in airfreight companies. Through acquisitions IF within a short space of time became able to offer almost all types of transportation, forwarding and distribution services within large parts of Europe. Most of the companies acquired had intercontinental traffics and some of them even had subsidiaries on other Continents. Therefore, through these acquisitions IF achieved a coverage of large segments of other Continents as well.

Since many of the companies were new to the Group they knew very little about the other companies within the Group. This meant that almost no one in the Group had a complete knowledge of all the services and the different types of know-how that were available within the total Group.

To begin with, the intention was to own neither the means of transportation nor the buildings used for same but to procure such services when needed. Over time, however, large numbers of trucks and substantial transport equipment and terminal facilities have come into ownership through some of the companies acquired in Europe.

Companies acquired did not have to be integrated with the other subsidiaries of the IF Group if they did not want to. They had the freedom to keep their agents and their own culture. It was stated that all cooperation should be voluntary and on a strictly business basis. It was not supposed to be dictated by the Group management. To an extent, the same policy applied in respect of the communications and informations systems. The different companies were given advice and support to develop a suitable system. These policies seem to have changed to some extent over time as the financial situation deteriorated. Consolidation would seem to have come more into focus which partly included internal restructuring within the different countries as well as between countries.

**Organization and investments**
The organization of IF is functional at the Group level. It is made up of a President of the Group and persons responsible for operations development, financing, human resource
management and Info/PR, control, accounting and administration. People from the Group management are also members of the boards of directors of the companies.

During the first year NTS was reorganized into four separate companies, NTS Rail, NTS Transport Sverige AB for general forwarding, Nordisk Air Cargo and Inter Forward Service AB. The other NTS companies, NTS SA France, NTS A/S Denmark, NTS A/S Norway, NTS GmbH West-Germany, became organized directly under the Group management. The reorganization would seem to have made the IF Group more of a holding company for the total Group.

NTS subsidiaries continued with their own international activities and the cooperation with NTS Sweden constituted only a minority of the total business activities.

All acquired companies had to start by going through a process of strategic planning and budgeting together with people from the IF Group. The intentions were to give the acquired companies a high degree of latitude within the frame of agreed strategies, budgets, demands on ROI and reporting of different kinds.

Most companies acquired during these years although unchanged to begin with went later through a process of restructuring and reorganizing. A new overall organizational structure was decided upon at the end of 1990. In practice, the total activities within IF were to be divided into six different fields of services. These were General Forwarding (including special transports), Airfreight, Rail, Third Party logistics, Projects and Consulting.

Basically, in all the changes in organization made for Europe hardly any cognisance seems to have been taken of the intercontinental traffics, even though many of the companies had extensive oversea activities.

Although large investments were made in order to acquire suitable transport companies, other important investments were also made during this period, such as investments in communication and information systems as well as planning and budgeting systems for the companies in the IF Group. In Germany, France, U.K. and Benelux where IF had holding companies in 1990, the separate companies in that specific country were formally part of that company.
7.1.2. Europe

General development

Within a period shorter than three years IF had managed to acquire international transport and forwarding companies based not only in Sweden but also in West-Germany, France, Holland, Belgium, the UK and Denmark. These acquisitions have gradually increased IF’s coverage of Europe. NTS was the first company in the Group and also the largest. Next largest in turnover was Z&B which was less than one third the size of the NTS group of companies. The IF Group covered traffics to/from Sweden through NTS to all important parts of Europe either via agents or subsidiaries. They also had third country services through NTS subsidiaries in Norway, France, Denmark and West-Germany. The acquisitions of Jerre and J.A. Larsson early in 1988 were small and rather specialized. Both cooperated with NTS and gave a certain increase in the number of services being offered, partly parallel and partly complementary to NTS. NTS Rail and Jerre AB together owned Railcarriers Oy in Finland and Woodtrans in France. Since Jerre and J.A. Larsson had only a limited international representation in Europe, they were mainly complementary to IF’s existing activities in their services. Jerre had on the other hand an airfreight department which had a certain international coverage even though there had been some drastic changes due to the loss of a very important international agent. Jerre’s airfreight was merged into NAC after the takeover.

Another early acquisition was a rather small company Allservice/WMS, specialized in warehousing and distribution in the Stockholm area, which did not add to the international coverage of the Group.

Until the end of the first year IF was basically a company very much concentrated on Scandinavia and traffics to/from that area. A European customer could not use IF to transport goods east-westbound other than in parts of France and in a limited part of Germany. The acquisitions of Amas and Z&B with their bases in Germany and Holland respectively provided IF with a change in their coverage not only in Europe but also overseas. These companies or rather groups of companies also added new types of services to the Group. Some of their services were in competition with parts of IF at that time, like NTS Germany, but mostly they were complementary so that they increased the degree of internationalization.

The next company was Norfreight which did not add much to the coverage since it was specialized in traffics to/from the Scandinavian countries.

On the other hand buying Fenthol & Sandtman GmbH, Sasse&Co, Beyer, SMTS, LCI and Bondelivery in 1990 introduced something new since these companies were to a large extent companies with both domestic and international services. DMP, ITM and ACE, out of which
ACE was by far the largest, were each specialists in their own areas. As far as the change in coverage in Europe was concerned, DMP and ITM were concentrated on Europe while ACE, being an airfreight company, added more to the Group on overseas markets.

By the end of the second year the IF Group had changed from being basically a Swedish international company to being a European company. Sweden was from the beginning the country of predominant importance in the Group with a large slice of the activities. In 1987 around 80% of the total number of employees were working in Sweden. By late 1990 the share had switched to 1/3 in Sweden and 2/3 abroad.

**Services and representation**

As companies were acquired, the number of services as well as the coverage offered by the Group increased, as did the volumes. Many of these services might already have been obtainable from parts of the Group through existing companies, but not with the necessary coverage.

Even if NTS had subsidiaries in France, West-Germany, Norway, Denmark and Finland, Europe was predominantly serviced via cooperations with agents. Some of those agents, like Z&B, Amas and Schier&Otten were then acquired by IF and brought into the Group. In their respective roles as agents, the resources of these companies had been available for the Group before the acquisitions but had been utilised only to a very limited degree. Scandinavia was only of marginal interest to European companies like Z&B and Amas. Scandinavia was more important for other companies like Satraco and Norfreight. Therefore Z&B and Amas meant very much for increase in coverage as well as service differentiation due to their size and variety in their activities. Amas, apart from being a traditional forwarder, was a specialist in transporting plants, bulbs, furniture, removals, etc. Z&B also had certain specialities like undertaking project transportation contracts world-wide, solving difficult dismantling, packing, moving and mounting problems, etc. The French companies acquired were also both general forwarders and specialists in certain business fields, such as the transport of furniture, works of art, etc.

Some of the other small companies acquired were specialized in warehousing/distribution such as Allservice/WMS, DMP and LCI. Another group of companies were specialized in furniture transports such as ITM, Beyer and some of Amas companies. Further NAC, ACE and Rambaud and some of the companies in the Amas Group were specialists in airfreight. The larger companies in the Group like NTS, Amas and Z&B all provided airfreight, seafreight, rail, trucking as well as warehousing and logistical services which seemed to be either complementary to or competing against the services offered by the specialists and to each other.
They were large enough to specialize in certain areas and at the same time offer general services.

Table 7.3. IF Group (facts at the time of the takeover)

<table>
<thead>
<tr>
<th>Company</th>
<th>Services 4</th>
<th>Offices in HC 5</th>
<th>Subsid./SO abroad 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTS Group</td>
<td>Gen forw./Specialist</td>
<td>34</td>
<td>F, W-G, N, Dk, SF, I, E.</td>
</tr>
<tr>
<td></td>
<td>(air/sea/truck/rail)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J.A. Larsson</td>
<td>Specialist</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(plants and bulbs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sped. AB Jerre</td>
<td>Gen forw/specialist</td>
<td>6+2</td>
<td>F, S-F</td>
</tr>
<tr>
<td></td>
<td>(Rail/air)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allservice/WMS</td>
<td>Wareh/distrib.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ACE</td>
<td>Gen forw. (air)</td>
<td>4</td>
<td>Dk, N, S-F</td>
</tr>
<tr>
<td>Forsblad &amp; Son</td>
<td>Specialist</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schier &amp; Otten</td>
<td>Gen forw/Specialist</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(sea/air)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z&amp;B</td>
<td>Gen.forw/Specialist</td>
<td>12</td>
<td>I, UK, A, Saudi, Africa</td>
</tr>
<tr>
<td></td>
<td>(air/sea/truck/project)</td>
<td>1 subs.</td>
<td>Head Office (Switzerland)</td>
</tr>
<tr>
<td>Fenthol &amp; S.</td>
<td>Gen. Forw (truck)</td>
<td>5</td>
<td>East-Germany</td>
</tr>
<tr>
<td>DMP</td>
<td>Wareh/distrib.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Benelux</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amas (NL)</td>
<td>Gen.forw/Specialist</td>
<td>1+20 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(air/sea/truck)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sasse &amp; Co (B)</td>
<td>Gen.forw/specialist</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(air/sea/truck)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norfreight</td>
<td>Gen.forw/specialist</td>
<td>4</td>
<td>Eire</td>
</tr>
<tr>
<td></td>
<td>(sea/truck)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bondelivery</td>
<td>Wareh/ distr.</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>LCI(UK)</td>
<td>Wareh/distr.</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

4 Dominating activities of the company
5 In home country
6 Subs.= subsidiaries, SO= sales offices, Abroad i.e. outside homecountry
7 Amas had a number of subsidiaries in Belgium
214

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>Service Type</th>
<th>Number of Offices</th>
<th>Subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Beyer</td>
<td>Gen forw/Specialist (truck, air, sea)</td>
<td>40</td>
<td>3 subs</td>
</tr>
<tr>
<td></td>
<td>Rambaud</td>
<td>Gen forw(air/sea/truck)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SMTS</td>
<td>Gen forw(air/sea/truck)</td>
<td>7</td>
<td>Algeria, Maroc</td>
</tr>
<tr>
<td></td>
<td>All transports</td>
<td>Gen forw/distribution</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>ITM(^8)</td>
<td>Specialist (furniture)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The list above covers the number of offices that each of the acquired companies had in their respective home countries including airfreight offices and in addition the number of subsidiaries in home country and abroad (listed separately. As can be appreciated, many of these companies covered large parts of their home countries while others were concentrated to a single place. Many of the companies had separate subsidiaries in the home country apart from a net of offices also. Almost half of the companies presented above had foreign subsidiaries and there were probably some representative offices abroad not included. In total these foreign subsidiaries covered 18 countries of which 14 were European at the time of the takeover.

This meant that in some countries IF was represented by many different companies. First, the country might be a home country for acquired companies. Second, there could have been a number of foreign subsidiaries to other IF companies situated in the same country. Third, other companies could cover the country via direct traffics from their home country. Finally, the company could be represented by an agent. Therefore in different areas in several countries IF was represented several times. Many of the companies acquired thus had parallel traffics West-Germany-Holland or Belgium-Holland or UK-West-Germany or France-Belgium, etc. It also extended to overseas traffics since most of the companies concerned had international traffics which included airfreight and seafreight. It led IF to have a number of different agents representing it in the same country.

The total number of agents in Europe for one of the transport companies might easily have been anywhere between 15-40. For instance, in 1989, NTS Sweden had 40 agents, and NTS Denmark had 31, including sister companies (see lists in appendix 5). Other examples are NTS France and Z&B which had agents in 13 countries and some 21 countries respectively (see lists in appendix 5). Most of these companies, as well as others like Sasse, Amas, Beyer and SMTS.

\(^8\) Acquired by Amas in 1990
had more than one agent for general forwarding in many countries. Then, of course, airfreight and niche specialities, etc. would have added some extra agents to the picture.

As a result of the acquisitions made during these first 3 years the number of agents and the number of offices increased immensely. When IF started in January 1988 it only had 22 offices in 7 foreign countries including the offices of the recently acquired Danish companies. A year or so later, the number of places where IF had its own offices outside Sweden via subsidiaries had increased to somewhere between 150-200.

In the same way the number of agents had increased. Due to this, the number of companies that IF Group companies were working with in each country could be very high. For example, NTS Sweden, Denmark and Norway alone had more than 20 agents, excluding cooperation with some offices of sister companies, in West-Germany in 1989 (see list in Appendix 5). To a large extent these agents were competing with some of the IF companies in West-Germany. For instance if a Z&B office, not having any regular services to/from Scandinavia, had wished to establish a traffic on Scandinavia, it might have found it impossible to use NTS, NTS already being tied up to some other agents. This sort of situation was not helped by the fact that IF had declared that each subsidiary should be free to act as it wished concerning agents.

In a country as big as West-Germany, where the number of acquisitions was high, the number of offices belonging to subsidiaries increased from 4 to around 25 in the second year. Cities such as Hamburg, Bremen and Berlin each had at least 3 such offices, for example belonging to Z&B, Schier&Otten and NTS. The number of agents in Germany increased since most of the companies acquired, Beyer, SMTS, Sasse&Co, Forsblad & Son, Amas quite apart from the 20-30 agents for the NTS companies, had traffics to/from West-Germany.

When a new company joined the Group the fact that IF already had a number of subsidiaries and offices in the different countries raised the suspicions of many of the existing agents for the company acquired. Some of the agents having an alternative available immediately left their cooperation with the company in question. This happened for instance to Z&B which lost an agent in the US and one in the UK. Both agents were themselves part of other international groups, in this case ASG and Rhenus. This also demonstrates that it was not only European agents but agents in other parts of the world who could become involved, as was the case for a company like Z&B who had their own representation on other continents.

Further it became difficult to be an agent for an IF Group company in Holland, for example, due to Amas' 20 or so offices in the country covering almost all types of services possible. In spite of this, NTS in Sweden retained its existing agent in Holland for general forwarding and continued to cooperate with Copex for special transports of plants, bulbs, etc. Companies like Z&B and ACE (airfreight), etc had other agents.
NTS Sweden had almost the same representation in 1989 as it had when it joined the IF Group in the beginning of 1986 (see lists of NTS Sweden in Appendix 5). Some countries in the Near and Middle East had been added. In total, the changes were a small reduction in the total number of agents and very few new agents. However NTS changed their important agent in Finland to the old Bilspedition agent. Further a few of the former agents, Z&B in West-Germany and Copex in Holland, became part of the Group. In both cases there were other agents in the same country as well. NTS also changed for a while from Ziegler in Belgium to Satraco.

As far as airfreight was concerned, the acquired companies had their own agents in the countries in Europe. These parts of the companies had an international net of agents. Some of them were merged like NAC and Jerre airfreight and others started to cooperate like ACE and the aircargo operations of Amas and Sasse & Co. On the other hand, Z&B aircargo (ZAC) was sold during 1990 to another airfreight company in Germany, Senator. IF then acquired 45% of the shares in Senator.

Changes developed over time when it came to subsidiary-to-subsidiary cooperation due to the fact that some of the existing agents left the cooperation with the acquired companies when they joined the IF group. Other reasons for an increase in the cooperation within the Group were the Group meetings and the will for the companies to increase their business activities together.

**Organization and investments**

The organization was in a constant state of change during the first two years of IF’s existence since the Group was growing at a very rapid pace.

Buying the new companies in Germany, Benelux, France U.K. and in Sweden meant, of course, a lot of organizational changes for the IF Group. The formation of a holding companies for handling the management problems of those companies acquired in those countries was one such example. Many new tasks - board meetings, group meetings, strategic planning meetings, etc., for the many companies acquired - devolved upon the individual members of the IF management. Constructing a basic organization embracing all the new companies and linking in decision routes, etc., imposed a heavy strain on management capacity during the first two years. Investment in management systems was also quite high at many other organizational levels in the newly acquired companies, due to the need to adapt to the demands imposed by IF. Z&B had to change its organizational structure in 1990 into three different companies, for example, and convert to working in a different manner, in order to so conform. The airfreight
part was separated from the project company and the general forwarding company was sold. The accounting systems had to changed and the personnel reorganized as a result.

Management education within the Group was another area in which IF invested. Apart from the huge investments made in acquiring companies during the first two years, the largest investment would seem to have been in communication and information systems for the Group. All the investments made were concentrated to European countries.

(During 1991, IF made strenuous efforts to consolidate existing activities, to search for synergies in order to broaden the cooperation between the group companies and to restructure where necessary. Most of the European companies were probably affected in one way or another, especially in countries with a heavy concentration of subsidiaries.)

**Summary of period 1988-90**

During the first years of IF’s existence they acquired more than 20 international, transport and distribution companies. Several of them were former agents or partners to NTS and their subsidiaries.

Most of the acquired companies had their own subsidiaries and/or agents in other European countries. One company, Amas, had 21 international subsidiaries in Benelux region. As a result of the development IF group covered the countries in Northern and Middle part of Europe by a combination of home-based companies, foreign subsidiaries and agents. In some countries like Germany, Benelux, France and U.K. the numbers became very large. IF had holding companies in these countries.

During the first years the cooperation between the acquired companies did not seem to increase. There were changes going on within the acquired companies such as reorganization and new design of communication systems. Only in a few special cases, as in airfreight, did new cooperations between the acquisitions take place.

Finally, after a short time some of the newly acquired companies also got activated and started to search for new acquisitions in foreign countries.

### 7.1.3. Specific event 1 - Züst & Bachmeier A.G.(Z&B)

**Before the event**

Z&B, an old Swiss forwarding company, was established in Chiasso in 1911 by Mr Züst, who worked as a broker at the Swiss-Italian border. His business idea was to derive advantage from the large differences existing between customs tariffs for finished and semi-finished goods by adapting the goods to the most favourable situation. He was able to offer customers lower car prices, for example, merely by taking the wheels off a car before transporting it over the border and putting them back on once on the other side.
During the first world war trade between countries diminished and trade between Switzerland and Italy became too limited for Z&B to exist profitably so other services had to be developed. Mr Züst decided to start railway traffics via Chiasso to/from Italy, Switzerland and Germany. In order to guarantee an equally good service at both ends a number of small offices in Düsseldorf, Leipzig, Chemnitz and Berlin were established in Germany. This was mainly achieved through buying small German transport and forwarding companies of good reputation and merging them into Z&B. During the period of the 1920's and the beginning of the 1930's it was relatively cheap to buy small companies in Germany with Swiss capital because of the war debts and the high inflation in the country. It was cheaper to buy than to start from scratch. Later in the 1930's, when the offices in Stuttgart and Hamburg were to be established the situation in Germany had changed and these offices were therefore directly established by Z&B.

Mr Züst established also a few affiliates in Italy between the two world wars. It was not possible to find any transport or forwarding companies to buy in Italy having the right know-how during this period so there had to be greenfield investments.

All Z&B offices, whether in Germany, Italy or Switzerland, were totally concentrated on international services mainly in a south-north direction in Europe and had no interest in domestic traffics.

During the 1930's Z&B initiated overseas traffics as an increasing number of customers were developing in overseas markets. An example was Krupp which produced the bulk of the rails for the American railways at that time requiring to be transported to the United States. The overseas goods were transported via several Italian, German or Dutch/Belgian harbours utilizing the offices of Z&B where available or agents, as in Rotterdam and Antwerp.

Z&B opened its first airfreight offices in the interwar period. Project transports had their beginnings in the transportation of materials and tools to the oil industry in the Middle East (mostly Iran).

At the end of the 1930's and before the second world war, Hitler decreed that foreign capital should be removed from Germany. The Z&B offices in Germany had to continue on their own and generate their own capital through profits. In 1940, the offices in Berlin and Leipzig were closed down. The others continued for as long as possible.

After the war, the offices in West-Germany came to life again as some of the employees returned from the war. Since Z&B was a Swiss company with Swiss capital it was easier to find suitable facilities, permission to continue as a transporting and forwarding company, etc.
This created an advantage for the firm during this period. The capital that Mr Züst had to withdraw from Germany before the war could now be invested in West-Germany.

During this period, new traffics were developed utilizing new means of transportation. Almost all long distance transports were by rail to begin with. Then Z&B in Germany gradually started to use also trucks as a means of transportation for some longer distances. For the Head Office in Chiasso rail remained the most important means of transportation. This change gradually created a difference in development and a gap in understanding between the German offices and the Head Office in Chiasso. Most offices in Germany had not had railway traffics for years by the end of the 1980's.

During the immediate postwar period most of the transports were for aid organizations and other aid programmes. The more traditional aid transports in combination with the Marshall Aid and the reconstruction of the German industry created a very high growth in international transports and especially so for overseas transports. Returning refugees helped with contacts. Z&B, which had some overseas traffics even before the war, continued its development in overseas markets. At the same time, some Z&B employees who had left the country during the war and settled overseas became Z&B contacts in some of its overseas markets like in the U.S. and in South America. Other countries like Japan and Egypt came to be markets of interest for Z&B in the immediate post-war years.

It was not until the 1970's though that Z&B started to look beyond the borders of Switzerland, Italy and Germany to establish offices of its own.

As the market grew in West-Germany, new offices were opened in several different places like Nuremberg (1950), Frankfurt (1951), Wuppertal (1952), Mannheim (1953) and Munich (1957). These offices all started on a small scale and were not small acquisitions like some offices were before the war. In Italy, on the other hand, Mr Züst acquired an old established company Ambrossetti in 1948/49. The firm Ambrossetti, founded the same year as Fiat, had a good reputation and very good relations to the Fiat Group as well as to the family Agnelli. The Z&B offices already established in Italy were merged with Ambrossetti and the company was renamed Züst & Ambrossetti. This way Z&A became a sister company to Z&B in West-Germany and Switzerland.

In 1959, Mr Züst decided to retire. He gave 5% of the total shares to the managers. The managers could then buy the shares in the respective companies. The outcome was that each company found itself with a large number of owners, who at the same time worked in the company. The companies in Italy and Germany were no longer sister companies. After a period, this finally led to the end of the cooperation between Z&B and Z&A and Z&B started a new office of its own in Milan.
After the transfer of ownership, the total company was divided in two, each part being much smaller than the original both in coverage and resources, which over a period had many important implications for the development of Z&B.

The overseas traffics continued to increase during the 1960’s and 1970’s as a result of the internationalization of German industry. As an international forwarder, Z&B’s overseas transports came to be the predominant part of the business. Project transports developed further during this period as well logistical consulting and service systems.

In 1963, Z&B bought a packing company in Witten " Korrosion Schutz und Verpackung" which gave Z&B a vital complementary service. This company has played an important role for overseas and project business in Z&B over time.

Many German projects were going on during the 1960’s and 1970’s in the Near and the Middle East. During this period contracts were signed covering transports and international trade with all the East European States except for East Germany. This also led to increased transports to/from the Middle East and overseas countries. Negotiations had been going on for a long time out of the Nuremberg office. This situation gave Z&B the opportunity to organize transports and arrange many different types of business for these States. These contacts with the Eastern European States have been very positive for the growth of Z&B. The Z&B offices in Iran and Iraq were established partly as a result of this trade. Nuremberg developed over time to be the main center for project business in Z&B.

Striving to be very close to customers, Z&B tried to fulfil the demands of customers even though such demands might seem unachievable. The example of how the company built a separate railway siding (on its own initiative) in order to store a number of waggons during the war for the Chilean government, and then transporting them over to Chile directly after the war, is part of company history. This effort by Z&B was recognized with a decoration awarded by the Chilean Government. This deep-rooted company policy also meant that out of necessity it must be a full service company. Z&B therefore started early with airfreight as a complementary service. It even handled goods for customers with European transports to countries and places to which it had no traffics. In these cases, co-loading with some other transport company was the method generally used. This was more often the case in east-west directions since the company was based on south-north transports.

Basically all services before the second world war were in the south-north direction in order to serve the trade between Italy, Switzerland and Germany. As the development of overseas and airfreight intensified the east-west destinations increased, not only to/from other continents but also within Europe.
Airfreight started in the beginning of the 1950's as a complementary service in the company mainly for overseas transports for goods like spare parts, etc., and a number of airfreight offices were opened during the 1950's.

During the 1970's and the beginning of the 1980's a number of offices were established in the overseas markets like Lebanon(1974), Iran(1976), Iraq(1982), Saudi Arabia (1977), the U.S. (1979), South Africa (1985) but also in the U.K.(1974) for overseas purposes. Two more offices were established in Europe, in Vienna and in Zurich. The office in Zurich, which specialized partly in East African traffics, was closed down in 1985 after 7 years’ of existence. Z&B also set up a representative office in Beijing in the late 1980's.

Even though Z&B might have offices in a country it often had agents as well, as in the northern parts of Switzerland, in the U.K. and the U.S.. By setting up an office of its own in a country such as the U.K. where it still had agents for its transports between the U.K. and Germany, a loss of confidence was experienced between the existing agents and Z&B.

Over time, the different Z&B offices had developed traffics to different international destinations but since they had no domestic traffics they all focused on their own business to/from Germany. In this way the different offices had little business in common. As separate profit centers, the offices had also become independently self sufficient and, as a result, the company had no common strategy.

The individual offices knew very little about the activities of the other offices. On the other hand, the individual offices maintained a very close connection with their customers and commonly held on to their customers even if they moved away to some other part of Germany. This complicated the situation further.

However, when overseas activities increased for business areas, such as airfreight, the demands from agents overseas emphasised the importance to have a common agent for the whole of Germany. This would seem to have forced Z&B to create a common coordinator for all six Z&B airfreight offices in Germany.

In other service areas, the problem was partly solved by letting those offices specialized in a specific area act as main coordinator in that respect for the whole of Germany for certain destinations. However, there was still insufficient coordination between offices.

During the early 1970's, the Head Office in Chiasso appointed a managing director for Germany, Mr Scherer, to be located in Stuttgart, and two regional managers, one for the southern region of Germany and one for the northern region. The southern region included Munich, Nuremberg, Stuttgart, and Mannheim but the region was also responsible for
managing the former offices in Saudi-Arabia (Jeddah), East Africa, and Iran (Teheran). In the northern region, the offices of Hamburg, Bremen, Düsseldorf, Wuppertal and Frankfurt were included as well as the management of the offices in the U.K. (London), South Africa (Johannesburg) and indirect via the London office, the former office Iraq (Bagdad). Vienna and New York were both independent companies under the name of Z&B, owned by the managing director in West-Germany.

The owners of the companies taken over from Mr Züst in the late 1950's were already getting elderly in the 1960's. When taking over the shares at the end of the 1950's, a special clause in the contract stated that the owners were supposed to be active in the company. Naturally this could no longer be the case in 1970's and 1980's once they had retired. The company, therefore, found itself very restricted in its possibilities to expand since part of the profits had to go towards dividends and because none of the owners were willing to put any more money into the company for investment in communication systems, etc. Another problem was the fact that the shares in the company were evenly spread so that decisions had to meet with general approval.

As the company grew and the need of capital increased these problems became a severe drawback and Z&B’s ambitions to be a full service forwarder could not fulfilled. The internationalization of the customers demanded that Z&B set up some international offices of its own in areas like South America, where the companies seemed to lack the necessary know-how and/or where they were unable to find satisfactory agents. Limited resources created problems for Z&B in finding the partners it wanted. Large competitors like Schenker, Kühne & Nagel and Danzas, invested heavily during the 1960's and 70's and increased their growth.

The practice of working close to the customer out of individual offices hindered overall marketing coordination which added to the limitations of the middle-sized company that Z&B undoubtedly was.

The Z&B agents in Europe were usually strong locally and largely privately owned and during the 1980's these agents faced the risk of being bought by other, larger companies.

In the last years before the acquisition the problems were enhanced. There were discussions of a management buy-out but there was a problem in raising the capital needed.

The effects of the financial constraints under which the company was labouring grew worse over time. It needed larger resources to be able to compete on certain projects but there was no possibility of growth through investments. The old policy of not owning any equipment, building or terminal became a disadvantage at this stage since the fixed assets to borrow against were limited.
In earlier years, when Mr Züst managed the company, many investments and many new services were started. After that period, when the owners grew in number and in age, only limited investments were made which made it difficult for the company to fully capitalize on the growth in trade between Germany and the rest of the world.

The Event

IF acquired 100% of Z&B early in 1989 as a continuation of its international expansion on the European Market in transport, forwarding and distribution.

At that time the Z&B company had existed for more than 77 years and many of the existing shareholders were over 80 years of age.

The acquisition included all offices in Germany as well as the Z&B packing company in Witten, the office in the U.K., an office in South Africa, a small representation in East Africa and the Head Office in Chiasso as well as 54% of the Vienna office. (The rest of the Vienna office as well as 100% of the New York office continued to belong to Mr Scherer personally.) The Milan office remained an independent company with the name of Z&B.

The total number of employees was around 400 and the Group had a turnover of around SEK 750 million.

At this time, the distribution of Z&B services was around 35-40% in seafreight, 35-40% in airfreight and 20-30% in international inland transportation in Europe.

The company could offer all different types of services internationally, anything from specialized export packing and heavy transport to airfreight and airmail.

The contact with Z&B were made via an independent consulting firm which made a search of the German market to find suitable companies for IF. NTS had, however, a twenty year old cooperation with Z&B in Nuremberg.

The construction of the company being Swiss but having the main part of its business spread over many different profit centers in Germany made it unusually difficult to obtain an accurate overview of the development of the company.

Since the greater majority of the managers of Z&B in Germany had no shareholding in the company and lacked the capital to mount a management buy-out, the development of the company remained in the hands of the old retired managers. The younger managers had a distinct interested in changing the situation so that the company would be able to invest in order to survive.
Shortly after the company was sold Mr Scherer, the managing director of the company for 15 years (1974-89) and a shareholder, decided to relinquish his position in Z&B and concentrate on Italy as well as the U.S. and the Vienna office in Austria.

Z&B was a very old company compared with the IF Group starting in 1988 and had a tradition of involvement in Germany and Switzerland extending over many years. Although Nuremberg had trucking traffic together with NTS, most of the largest offices had no regular traffics to/from Sweden which remained relatively unknown to Z&B. The focus for Z&B were the overseas traffics, sea or airfreight which also left it less well equipped to manage the Common Market development on its own.

After the event

Since these acquisitions were made in the beginning of 1989 the intervening time span had been short (at the time this was written in 1990). During the period, the changes for the Group as a whole were large, notwithstanding the fact that the individual companies continued to be free to act without any demands being placed on working with the other companies in the Group. The effects were reflected at many levels in the Group. Some took the form of different kinds of cooperations started within the Group. In other cases a cooperation was not wanted or was not possible. In certain areas problems were foreseen since the sister companies already had agents that represented them in a specific part of the German market.

Internally

As intended the IF Group started the takeover by going through a strategic planning process with Z&B. This made it possible to create common goals and objectives for the company. The planning process involved all the managers of the company and this was a radical change, as such, since the company had not had any common planning previously. A new managing director of Z&B Germany had to be appointed. A manager from the IF Group was appointed for a period of 6 months.

After the first year the company was reorganized into two separate companies, one for general forwarding and one for airfreight. It was also the intention that project forwarding should become a separate company in the following year. To begin with the managers of the Düsseldorf office for general forwarding, the Stuttgart manager for airfreight and the Nuremberg manager for project business became the new managing directors of these various companies. This was because of their special know-how in the different offices. Each of the companies was to have a separate board of directors consisting of some Swedish directors from the IF Group and from the general forwarding company and the manager of NTS Germany.
also. Together they would function more like a working team. The offices that had shown a loss for a period were to be reduced in size. One of these offices reduced its number of employees by 75 per cent.

The reorganization of the company was implemented during 1990 and partly during 1991. There was also a reconstruction of the reporting, budgeting, planning and informations systems during 1989. The creation of an EDP system for general forwarding had its beginnings.

All these activities have had deep effects on the company. The intention was to make the personnel more inter-changeable between the separate offices through better coordination and better distribution of knowhow according to the different activities of the various Z&B companies.

Airfreight would find this less of a problem since a certain level of coordination already existed between the different offices in Germany as a result of the demands from the overseas agents. However, different offices were coordinating different traffics. It was the original intention to coordinate airfreight with the Nordisk Air Cargo organization but, in the event, Z&B airfreight was formed into a separate company merging in 1990 with Senator Airfreight GmbH in Germany. In 1991, IF bought 45% of Senator Airfreight GmbH.

*Externally*
Z&B had to change its agents in the U.K., the USA and Holland. The two agents in the UK and USA were both associated with other Groups (the Rhenus Group and the ASG Group). The agent in Holland left because Amas became part of the IF Group. IF has found new agents in the UK and the USA. Even though Z&B had an office of its own in the U.K. the office was specialized in overseas traffics and did not have the resources or knowledge to handle land-transports to/from Germany. Many of the existing agents stayed however. (See list of countries covered at the time of the takeover)

Neither the customers or the competitors reacted very much on the event, no doubt due to the frequency with which similar events have been happening in Europe during the last decade. Many of the privately owned forwarding companies have been acquired by larger companies which, in turn, has resulted in a concentration within the industry in Europe.

Z&B expected a closer contact with the other companies in the Group and wanted to start several new types of business with the contribution of know-how from other specialists in the Group.

IF's purchase during 1990 of two companies in Germany with domestic traffics and terminals and almost as many employees together as Z&B in Germany will, of course, effect Z&B either directly or indirectly via customers and competitors.
The formation of a German holding company containing all the different German IF Group companies will have its effect on all the companies involved.

Summary of the Z&B event
Züst & Bachmeier (Z&B) was a privately owned Swiss forwarder, which had been developing through establishment and acquisitions of companies in Germany and Italy as well as through many agent cooperations before and after the second world war. As the founder of the company retired, the managers took over and the company was divided into Z&B, the Swiss-German part, and Z&A, the Italian part.

In the beginning of 1989 IF acquired Z&B. The Z&B office in Nürnberg had been an agent to NTS in Sweden for more than 20 years. The first year after the takeover the company was reorganized into two separate units i.e. general transports and airfreight. Another unit for international projects was to be constructed the year after. The takeover caused some of the agents left the cooperation with Z&B. In these cases Z&B found new agents. Cooperation with other companies in the group did not change during these first years, except in airfreight.

7.1.4. Specific event - The acquisition of Amas

Before the event
Amas is the holding company for a small group of companies in The Netherlands and Belgium. Amas Holding b.v. was founded in 1972 and its business area has mainly been trading and forwarding.

The privately owned Amas was sold in 1981 to the British Bowater Group, primarily active in paper production and trading. Bowater had created a separate freight services division which included companies like Rhenania (with large boats and vessels for canals and rivers, etc), Mondia (a large removal firm based in Strasbourg) and Amas. Together these companies formed a group of around 3,000 employees out of which Rhenania had the major share (around 2,000).

Companies within the Amas Group had been confined to The Netherlands and Belgium but, on the other hand, there were many different companies. At the border between The Netherlands and Belgium there were a number (11) of import brokerage offices under the names of van Huls and Belcomex belonging to the Amas group and together they had a high market share of customs clearance (around 30%). The other companies represented different types of transports such as Internationaal Expeditiebedrijf Copex b.v. (Copex) in Hillegom (roadtransports), Copex Air (airfreight), Copex IGS (sea-transports) and Schut Copex (industrial packaging and removals) Apart from these different Copex companies there were
other companies within the same type of business or in closely related businesses. In total the Group had 21 companies before the take over by IF. Many of these companies had originated with or had been initiated by the existing companies while other companies were added through acquisition. Many activities between the companies became overlapping as they developed over time and competition increased within the Group. For example, three companies had IATA licences in airfreight, i.e Copex Air, Mondia Europe and Copex in Hillegom. There were many other areas of competition in road transport, ocean freight, special transports, etc. The Group profile, as such, was very low during these years, each company had its own profile.

Examples of complementary activities developing over time were a number of airfreight services closely related to Copex Air, like Skylink (airport handling services), Speed (a broker in airfreight space), Air Agencies Holland (airline representative), etc. These companies were initiated by Copex Air which, in turn, evolved out of Copex in Hillegom.

Closely related companies to Copex IGS (Rotterdam), having competing as well as complementary business, were Terwee Okker, Amsterdam (ocean forwarding), Neptune, Antwerp (bulk shipments), Cobimar, Antwerp (ship’s agent) and finally Schut-Copex and Hofsteange b.v. (project removals and furniture transports) and Meubeldistributie- en Service Centrum b.v. (furniture distributions).

There were some trading companies over and above this which were separate from the others. The trading side of Amas, for paper as well as for packaging machinery and materials to supermarkets and industrial clients, had gradually reduced in importance within the Group and only two trading companies were left at the time of the take over.

The Copex Group, engaged in different areas like airfreight, seafreight and road-transports, formed an important part of the Amas group of companies.

The cornerstone of the Copex group of companies was Copex in Hillegom, which started in 1921 as a cooperative for flower bulb exporters in Hillegom. The flower bulb exporters wanted to control the documentation as well as the transportation of the flower bulbs.

The exports of flower bulbs expanded to many different countries during the 1920’s. The most important countries for export have been not only the European countries but over time also the U.S. and Japan. However, there were several other overseas destinations of lesser importance.

Copex in Hillegom expanded and established its first subsidiary in 1947 at Almeer. The exports from Holland at that time included not only flower bulbs but many other different products like tree cuttings, plants, flowers, etc.
Further subsidiaries, specializing in seafreight, were then set up in Rotterdam and Amsterdam in order to handle the expansion of overseas exports.

Copex in Hillegom has always been a company specializing in perishables or agricultural products, even if the Copex companies have slowly started taking on more general cargo and spare parts for the automotive industry.

For a specialist in perishables the time aspect of the transport and the handling of the goods were extremely vital. This made the choice of agents very important and most agents to Copex Hillegom were specialists in perishables and green products.

As Holland gradually changed from being an exporter to more of being an importer of plants and flowers and other agricultural products, the quality of agents became even more essential for Copex. Holland developed into being an important trading country in agricultural products for large parts of Europe.

Before the war, most transports by Copex in Hillegom were by rail or by sea but after the war there was a development into transports by air and truck.

Over time as the share of general cargo handled by Intern.Exp.Copex increased, some of the existing specialist agents proved to be inadequate. Therefore separate agents were sometimes appointed for general cargo parallel to the existing specialist agents.

In 1988, before the take over, Intern.Exp.Copex had agents in large parts of the world. In Europe, there was a combination of direct transports to other countries and representation by agents. Copex had their own direct services (round trips) for agricultural products within a radius of 500-600 km. This meant that they had direct door-door transports to parts of Germany, France, Belgium and the U.K. using termo and refrigerated vehicles. In more distant markets like Italy, Spain, Portugal, Austria, Sweden, Norway, and Finland they had to rely on agents. They had two agents in Sweden, J.A. Larsson in Malmö (later part of the IF group) and Anton Pettersson (Scansped Group) in Stockholm, both specialists in agricultural products (see appendix 5). In many countries they were represented by several agents, for instance a combination of direct transports and agents.

Copex started airfreight services in Hillegom as a complementary service directly after the war in 1945. In 1953 a special office was established at Alsnmeer (the location of the flower market) to handle airfreight, which had gained very much in importance, and this became the beginning of Copex Air. Three years later the office in Alsnmeer was closed due to intense competition and the airfreight department concentrated on general aircargo instead. The growth of aircargo continued but it was still considered as a complementary service and therefore the agents used
were mainly sea and trucking forwarders. Airfreight to start with was almost exclusively export consignment handed over to the airlines and this continued until the beginning of the 1960's when Copex decided to appoint specialized aircargo companies as agents more systematically. During the 1950's and 1960's Copex, as well as its agents, was very dependent on the airlines for the handling of the goods, documentation, rates, etc., but for as long as imports continued to constitute only a limited part of the total business the customs clearance was handled by the Dutch airline K.L.M. on the instructions of Copex. Then imports started to grow and a few years later Copex opened a separate office at Schiphol airport largely for handling imports.

As the development continued Copex came to realize the need to have not only loosely connected agents on bilateral agreements but a network of cooperating specialized agents. This made Copex take the initiative to form IASA, International Air Shipping Association. IASA was founded by 12 European air cargo agents in 1971. The idea was that these agents should form a network representing each other instead of having only bilateral agreements. This network should be world wide, so agents from different parts of the world could become members. Many of the companies joining IASA had no appointed agents in Europe before. As a result of this, the growth of Copex accelerated.

The formation of IASA gave rise not only to very high growth but also to new services and the formation of Speed. Speed is a small company specialized in buying space from airlines and selling it to forwarders. Speed started as a result of a cooperation between the French agent and Copex and for the specific purpose of operating regular charter transports to Nigeria in 1976. The company then developed into being neutral broker of aircraft space for forwarders and became well established on this market.

Other services developed as a result of the specialization of the total Copex company in agricultural products, which made it necessary in 1986 to have Amas represented at the flower market in Alsmeer once again. Accordingly Mondia Europe b.v. was created to specialize in handling the export and import of flowers. Copex Air and Mondia decided jointly about agents, sales abroad, etc. In 1988 Mondia had become one of the leading air cargo companies in the flower market.

The growth of Copex Air continued and in 1986 Copex had become one of the three largest airfreight forwarders in The Netherlands. The size of Copex made it necessary to find new facilities. Amas then decided to build its own facilities at the airport. This building was ready in 1988 and as the area exceeded the needs of Copex Air, another company Skylink, offering a complementary service, was created in 1988. This company also offered warehousing and handling services to airlines and to some off-line trucking companies, brokers and forwarders, on a neutral basis.
Amas had always preferred to start new companies when creating new business ideas. The basic reasons for this (according to top management) were to keep flexibility as well as retaining the good managers.

**The event**
The former owner Bowater, which had been buying several companies world-wide, ran into economic problems. Many of the companies were in bad condition. They wanted therefore to sell their freight service companies Rhenania, Mondia and Amas.

When the story as to how NTS broke away from Scansped became public knowledge some top level people in Amas contacted people in NTS whom they knew to ask about IF policies and whether there might be a possible interest. It was only after discussions between Amas and the management of IF, that Bowater became involved and the outcome was that the company was sold to IF at year-end 1988/89.

Mr Leibbrand, the president of the Amas Group, was one of the persons that wanted the Group to be sold to IF rather than to any of the other large companies, like Nedlloyd, Franz Maas, etc., which had policies of merging acquired companies. Amas saw a risk in this, both for themselves and for their agents. If taken over by a large multinational they expected it would lead to changes of agents for them as well as for the agents. IF on the other hand had the reputation of allowing acquisitions to keep their own name and culture. IF was also only interested in companies not owning the means of transportation. Accordingly Amas was sold to IF. Mondia and Rhenania were sold to other companies.

The Amas Group had started to work more as a group in the last years before the takeover and therefore Amas held out for a guarantee that they would be granted a special status and allowed to continue working as a group within the IF Group.
The company had 5-600 employees at the time of the takeover.

**After the event**
After the takeover Amas companies continued as before. The main difference arising out of the acquisition was a closer coordination within the Amas group. The common profile for the group became enhanced and the group was divided into a number of internally more closely cooperating divisions. New investments in computerized communication systems were made and a number of companies were acquired and added to the group.

Many of the existing agents were afraid to start with that Amas would be forced to switch to Group members as its agents in other European countries. Amas explained about its guarantee and most agents seemed to be satisfied. However, as a result of the takeover, Copex in Hillegom changed to the IF Group company in Denmark, NTS Denmark.
During the period that Amas has been owned by IF, several new companies have been added on the initiative of Amas. Amas has not founded new companies on its own but has acquired established companies like Sasse & Co, Satraco and ITM in Denmark. The one exception was Rocotrans, a neutral railway-trucking/container broker, which was a company founded by Amas and starting its business on January 1, 1989.

ITM in Kolding, Denmark, acquired during 1990, was a specialized company within furniture forwarding. This company had in turn to invest in a small Swedish service company in Varberg since they lost their Swedish agent Tibro Lastbilcentral as a result of the takeover by an IF company. (Tibro Lastbilcentral was cooperating very closely with ASG in Sweden.) Acquiring ITM was in line with Amas specialization in furniture forwarding and means that Amas has ambitions to internationalize itself within this field within the IF Group.

Another company acquired was Sasse & Co, a 150 years old Belgian international general forwarder of sea, air and roadtransports with offices in Zavantem, in Antwerp and in Brussels. The number of employees was around 150. Sasse & Co contributed to a better coverage of the Benelux market for Amas. In airfreight Copex Air has introduced Sasse to IASA Group and therefore Sasse has become an observer company within the IASA. Before the Sasse acquisition, the representation of Amas in Belgium was limited to specialized customs clearance offices at the Dutch border, to Cobimar, a small ship’s agent and to Neptune specializing in bulk shipments. These companies are now part of the Sasse organisation. As for road transports they were performed via direct traffics from Holland.

Another change has been that Amas has sold off one of the trading companies for exporting paper in order to concentrate to a greater extent on forwarding and transportation.

The airfreight division has developed into the services of being General Sales Agencies i.e. representing airlines without offices in Holland. For this purpose Air Agencies of Holland (AAH) was bought. However the AAH situated in Rotterdam had restricted its services to passengers while Amas wanted to expand into serving airlines for cargo as well. Therefore the airfreight division set up a branch office of AAH at Amsterdam airport.

Basically being a member of IASA meant that Copex Air could not cooperate with the other airfreight companies within the IF Group. However IASA agreed in 1990 to cooperate with ACE in Sweden, where they lacked a member at that time.

ITM in Denmark became a part of the Amas International furniture transport and distribution division and not of NTS Denmark. Though Amas did discuss a cooperation with NTS in Sweden. This did not happen because of the differences in culture and type of goods and customers.
Furthermore the acquisitions made by Amas other countries has increased the number of subsidiaries in many European countries. Through the acquired companies new agents will also be tied to the IF group via Amas even though some of these have already reacted and left their existing partner like Tibro Lastbilcentraler.

Neither the customers of Amas nor the competitors seem to have reacted, since most of the transport companies in Holland were part of one group or other. At the same time Amas remains as separate Group within the IF Group continuing on its own, as before.

Summary of the Amas event
Amas was a group of around 20 companies situated in Holland and Belgium. The base of the group, Copex in Hillegom, had been established in 1921 in Holland. Over time new international activities were developed by Copex both in Europe and overseas and new companies were spun off and acquired in Holland and Belgium. When IF acquired Amas in early 1989, Copex was an agent to NTS in Sweden.
After the event the Amas group has continued as a separate holding company for Benelux within the IF group. The main changes during the two first years were investments in new communication systems and an increased coordination of the activities within the Amas group. Further, Amas acquired two companies, one in Denmark specialized in furniture transports and another one, a general forwarder, in Belgium. Both have been incorporated into the Amas group.

7.2 General case analysis

7.2.1 Period 1988-90 - Acquisitions

Integration
IF, being part of the Ratos Group and the parent company for a planned group of companies in transports and distribution, started its activities by legally integrating NTS through a takeover from the Ratos Group.
The expansion of IF was totally dominated by acquisitions. During these first years IF has made many acquisitions, large and small, but all in distribution and transports. After two years, IF consisted of around 20 larger companies. IF was joining nets each time a new larger acquisition was made. Some of the smaller companies acquired, which basically only concerned a single transport system or a local complementary service, should be seen as the net opening up.
The joining nets all continued during the period as separate part-nets within the total IF net. Very few exceptions existed. However, one exception was airfreight. The airfreight companies were mostly either merged or cooperating very closely after a very short time period. A large number of the joining nets were foreign based international companies with the same type of services as the first NTS net which meant that they were O/C (overlapping in services and complementary geographically).

Most of the companies acquired were, however, in one way or another marginally connected to existing earlier acquired companies at the system level. This was the case for Z&B, Amas, J.A. Larsson and Sasse &Co. The initial acquisition of NTS was made through existing contacts between the Ratos Group and NTS. In the total net level there existed not only legal but also social and control integration of the separate nets. Control integration increased very quickly through introduction of a specified common planning system and decisions on recruiting and training of management in the dominating companies within the separate part-nets. The social integration increased through new board members from the Group, meetings within the total group, etc. Through such increased integration some of the agents’ nets were drifting closer. In general during this period there was very little integration going on directly between the acquired part-nets. However, the creation of holding companies within countries with several subsidiaries increased legal, control and social integration between part-nets.

Several changes were instead taking place within the part-nets, both through reorganization and through new acquisitions to these part-nets. Reorganization was made of the NTS group of companies, of Amas, of Z&B, etc., within a relatively short period of time from the acquisition. A higher execution integration followed within the part-nets. As for the acquisition of companies, they were increasing their execution integration very strongly with the rest of the companies within the part-net.

NTS, as most of the other acquired nets, cooperated basically with agents but had a few subsidiaries in other countries. Since the integration was very low between the part-nets the cooperation between the agents at system level continued almost unchanged during these first years. In spite of the increased integration with the IF Group at net level and NTS and Copex did not enlarge their existing cooperation at net level. NTS kept their other existing agent in spite of the conflicts. This would seem to have been true also in other cases like for Z&B and other companies in Amas. The larger changes in the net of representatives were taking place through the internal part-net reorganization.
Even though IF was a very young group of companies in terms of internationalization, the companies acquired were not young. Several of the international companies acquired had existed since the beginning of the century and had been developing internationally over the years through a combination of cooperation with agents, small acquisitions and greenfield investments. The international development of Z&B showed a pattern of making use of different types of cooperations and aspects of integration over time. Not only Z&B but also Amas, Norfreight Ltd, Sasse & Co, Fenthal & Sandmann, Schier & Otten, ACE, etc., had their international nets of representatives in Europe and had gone through a long period of internationalization.

Finally, as can be seen from all the acquisitions made, the legal and control aspects seem to be very important. To a large extent, the social and execution aspects will have to be developed in the next step.

**Extension**

Through the NTS takeover, IF became extended to all important countries in Europe directly from the start, either through agents or subsidiaries. Through NTS, IF also became extended to many overseas markets via shipping or airfreight.

Therefore the acquisitions of a series of international companies did not change first degree of extension but well the secondary degree of extension. This was especially the case for the first foreign acquisitions but since many of the acquisitions had traffics tol from the same countries the secondary degree of extension was also soon at a maximum.

The speed of extension could not possibly have been much higher.
**Penetration**

During the first two years of IF's existence the turnover more than doubled for the Group through the acquisitions. The amount of resources and relationships increased at a very high speed.

Through the takeover of NTS IF gained access to established relations in most European countries as well as many countries overseas which did not change size of the relations very much. Then the acquisitions increased the spread of the relations both directly through being established in the foreign country and indirectly through having cooperation with agents in those European countries.

The result was that IF covered many countries via a combination of subsidiaries to Swedish companies, home-country companies and agents to a large number of foreign companies. For example, in Holland Amas had around 20 different companies NTS had three agents, Z&B had its own agent, Jerre Rail its own agent, NTS France its own agent etc. The situation in West-Germany, Belgium, the UK, etc., showed similar complexities because of the acquisitions.

![Figure 7.5. Internationalization - penetration 1988-90](image)

Through this wide representation within many of the largest European countries the penetration seems to be very high in some countries.

As a result of these acquisitions of companies mostly working internationally the penetration seems to increase also in other countries outside Europe. Many of these international companies had agents or representative offices or even subsidiaries in some of the most important areas outside Europe like North America, Far East, Middle East, etc.

**Conclusions and effects on representatives**

Through the takeover of NTS, IF achieved a high degree of internationalization from the start. The internationalization process was totally dominated by joining nets through legal integration. However the acquisitions in general continued as separate part-nets being O/C and integration did not increase directly between them but via group management.
Through these acquisitions involving some other nets were drifting closer. Penetration increased enormously over the period through the fact that countries were covered not only by many subsidiaries but also by agents and former subsidiaries to the larger operating companies.

Effects on representatives grew more complicated with each international acquisition since the degree to which the net included negatively connected systems increased over time. Since many of the joining nets continued as separate part-nets within the total net the changes were small in the beginning with the exception of a few cases seeing their present cooperation without future as being part of O/O (overlapping both in services and geographically) nets. Due to this, some agents decided to leave almost directly after the IF takeover. For Z&B one agent in US (an ASG subsidiary) and one in the UK (subsidiary to Rhenus Group) left very quickly. Z&B had to find some other agent since they were not prepared to take over themselves even though they had a company in UK. Others were worried because they were competing with other IF companies in their international traffics. The fact that the companies were only legally integrated in the total net and only loosely integrated between part-nets made fewer agents leave than would otherwise have been the case. On the other hand, IF companies that wanted to add complementary services very often could not do so since the sister companies were already tied up with existing agents.

Not only were different agents negatively connected but also so were the different subsidiaries within countries working within separate sub-nets within IF group.

Also, the fact that so many companies have been acquired during such a short time has made many of the IF companies unaware of activities going on in the Group - as the picture became clearer the effects increased. As the acquired groups started to reorganize and restructure within their part-nets larger effects on the representatives became more obvious.

Effects 1988-89 on suppliers, owners and competitors

The effects on the suppliers were limited since IF had declared its intention not to own the means of transportation. However, some of the companies acquired during 1989 have not only been forwarders but to an even larger extent trucking companies, having terminals like Fenthal & Sandtmann. Also DMP has terminals and warehouses in Germany as well as contracted distribution. This change means that integration has increased with the trucking companies in the countries involved.

Z&B has also been highly integrated for a long time, both legally and executionally, with a small specialized packing company in Witten in Germany which had a specific importance for the project business.

As for the specialized railway companies, Jerre Rail and NTS Rail both have a close cooperation to the railway as well as different companies having wagons for rent like VTG. This has been changing over the years as the companies started to charter full train sets which
meant taking over activities that the railway company normally performs. This will change the asymmetry between the railway and the rail transport agencies in the Group.
The increased complexity of the total IF net caused a higher amount of internal conflicts within the net not only in Europe but also overseas.
An important effect of all these acquisitions taken together is the increased turbulence on the transport and forwarding industry within Europe as well as the rise in prices for acquisitions within the industry. The need of coverage within Europe in order to adapt to the deregulation of the Common Market obviously made many other companies in the industry more aware of the time pressure. In both cases the competitors were affected.

Interaction between the dimensions of internationalization
For IF, integration through joining of nets was totally dominating both for extension and penetration I-->E-->P. After the first acquisition most extension basically only changed in secondary degree I-->E2-->P and after that only penetration increased as a result of joining new nets I--->P.
8. Conclusions of general case analysis and comparison of the cases

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
</table>

**ASG**

- Start through rail expansion
- Single systems integration - New coop. -> closer coop.
- No legal integration
- Extension to 11-12 European countries of first degree
- Increase in volumes and increase in spread relations
- A net is gradually created

**Period 2**

- Trucking takes over
- Single system integration new and cessation of rail cooperations
- Net is opening up
- Penetration through new diversified and scope of relations
- Continued first degree extension to Europe and start oversea

**Bilspedition**

- Starting through trucking expansion
- System as well as net integration
- New coop -> closer coop
- Opening up and joining nets
- Certain legal integration
- Extension of first degree to around 14 European countries.
  Secondary degree of extension through subsid. in Dk and N
- Penetration through size of relations changing towards an increase in spread of relations

**Period 3**

- Specialization and diversification of services. Changes at systems and net levels positive and negative
- Creation of separate part-nets
- Extension first degree continued Europe and oversea. Secondary degree starting
- Penetration via spread, scope of and new diversified rel.

**Bilspedition**

- Specialization and diversification of services
- Creation of part-nets
- System integration
  New coop. -> closer coop -> enlargement
- Net integration
  Joining net and open up
- Increased legal integr. especially Sweden
- Extension first degree European countries and oversea and secondary degree
- Investment abroad increases and decreases
  - Penetration via scope of and new diversified relations

**Period 4**

- Part-nets develop differentiated.
- Opening up and closer coop. through greenfield inv and small acquisitions
- Moving towards closing up in airfreight part-net
- Changes in secondary degree of extension
- Penetration increase and decrease via spread, size of and scope of relations

**Bilspedition**

- Joining nets through acquisitions of large O/O nets
  - Leaving nets and closer cooperation within net through merging of the overlapping nets.
  - Extension secondary degree changes
  - Increases and decreases in scope of and spread of relations and increase in size of relations due concentration

**IF**

- Start by "joining nets" through acquisitions of around 20 larger internat. transp. comp
  - Extension into European region and oversea
  - Penetration through a change from size of into a spread of relations via nets acquired
Start of the internationalization in the three cases

**Year 1953**

- **ASG** - 1945-54
  - = agents (ca 15-20)
  - = No subsidiaries
  - = ASG

**Year 1967**

- **Bilspedition** - 1955-67
  - = agents (ca 30)*
  - = Foreign subsidiaries (2)
  - = Bilspedition

**Year 1988**

- **IF** - 1988
  - = agents (ca 100)*
  - = Foreign subsidiaries (8)
  - = IF

* = Including the agents of the foreign subsidiaries
Internationalization at the end of 1980s in the three cases

**Europe - land transport**

- **ASG**
  - Year 1989
  - Simplified
  - = Agents (est. 75-100) incl. agents to subsid
  - = Foreign subs. (5)
  - = ASG

- **Bilspedition**
  - Year 1989
  - (after the merger)
  - Simplified
  - = Agents (30-50) incl. agents of subs
  - = Foreign subsidiaries (18)
  - = Bilspedition

- **IF**
  - Year 1989/90
  - Simplified
  - = Agents incl agents of subs (200-250)
  - = Foreign subsid. (35-40)
  - = IF
Comparison between case patterns

Comparison of the start of internationalization
(See the first map)

ASG started internationalizing during the 1940’s, some 10-15 years earlier than Bilspedition and about 45 years before IF was created, and carried on during and after the war. When discussing the earliest stages of the internationalization process in the respective companies, the first decade after the war for ASG is compared with the period 1955-67 for Bilspedition and with IF’s first year of existence.

ASG’s internationalization process was predominantly a process of integrating single system relations based on informal bilateral agreements with local agents, through which a net was created. In the case of Bilspedition, a combination of single systems integration and net integration was used, involving legal integration to a certain extent. Finally, in IF’s case, net integration was based on the legal aspect almost totally. IF’s first acquisition was the net of NTS. This was a C/C net while the other smaller Swedish companies added during the first year were basically C/O and O/O.

Looking at the initial stage, only the first degree of extension took place in ASG while in Bilspedition not only first degree but also, to a limited extent, the secondary degree of extension took place, due to the internationalization of its Scandinavian subsidiaries. In the IF case, the acquisition of NTS and the other smaller Swedish international companies added both the first and secondary degrees of extension almost from the outset to most European and many overseas countries through their subsidiaries.

The level of penetration also differed very much between the three focal companies. After the first year, IF had many more relations and resources in most European countries, either directly or indirectly engaged, than ASG and Bilspedition ever had at their respective beginnings. ASG had 12-15 agents, Bilspedition had 2 foreign subsidiaries and an estimated 30 agents as compared to IF’s 8 foreign subsidiaries and about 100 agents including those of the subsidiaries. Further, as ASG was first in the field, its penetration was very limited since only one type of service was involved initially and the only local agents used were relatively small. Bilspedition would seem to have achieved a somewhat greater degree of penetration by acquiring ATA and later Trailer Express but these companies were still small at that stage and their resources limited. In IF’s case almost all types of services were covered right from the start and the subsidiaries were internationalized to a larger extent.
Patterns of internationalization over time

ASG pattern

Basically ASG's development over time was a process of gradual internal growth achieved through integration of single systems leading to opening up and closer cooperation at the net level. During the 1970's, after almost 20 years of continued growth, ASG created C/O part-nets through reorganizing its existing activities. Legal integration was very limited until the 1980's when ASG made a few greenfield investments and a couple of acquisitions which were merged into existing part-nets.

Extension of first degree was the dominant feature during the first periods while during the 1970's and 1980's second degree developed as the important feature. Penetration became more important for the total net than extension during the 1970's. Although integration was important at the single system level for the first three periods, interest for integration at net level was increasing over the periods and took first place in importance during the 1980's. Several changes in integration were made during the 1980's at the expense of penetration.

Bilspedition pattern

The internationalization of Bilspedition has been based on a combination of single system and net integration through joining of nets but with the proportion of net changes increasing over time. Therefore its growth has stemmed partly from internal development and partly from acquired external development. During the 1970's C/O part-nets were created out of the different acquisitions.

The nets of those companies acquired were primarily other Swedish international transport companies. These companies were mainly O/C in the 1960's, C/C combined with C/O in the 1970's and finally O/O during the 1980's. However, during the 1980's the number of instances of joining O/C nets with foreign acquisitions increased slightly.

Bilspedition would seem to have given priority to extension during the 1960's while during the 1970's a combination of extension and penetration was important through C/C and C/O nets adding new services. Initially in the 1980's penetration remained as a very important dimension since the O/O nets acquired were not merged. However, from the mid-1980's onwards integration at net level would seem to have been given highest priority, partly at the cost of a period of decreased scope and spread of relations in the dimension of penetration.

IF pattern

IF achieved growth solely through acquisitions and legal integration. The nets joined during the first year were Swedish following which a large number of foreign companies with O/C nets were joined. At this stage, there was a change towards the creation of separate C/O part-nets within the nets joined. The foreign companies were not merged but continued as separate part-
nets. Since most acquired nets were international, they were increasingly becoming O/O as the number of joined nets grew. Merging into specific part-nets was only done in exceptional instances as when smaller companies, such as airfreight, were involved.

IF would seem to have given high priority to extension and penetration for the established total net and to have given integration lower priority. In this IF differed from both Bilspedition and ASG as we can see from figure 8.1.

![Diagram of ASG 1945-90 integration patterns](image)

![Diagram of Bilspedition 1955-1990 integration patterns](image)

![Diagram of IF 1988-90 integration patterns](image)

Figure 8.1. Internationalization patterns over time -net integration

Finally there are large differences between the three cases, both in the total size of the nets domestically and internationally and in the number of subsidiaries and foreign agents (see the second map). In total, Bilspedition was double the size of ASG and triple the size of IF.

**Effects - owners, suppliers, representatives and competitors**

*Owners*

--The original owners of ASG and Bilspedition were international transport companies, a fact which played an important role, in terms of opportunities and restrictions, in determining how ASG and Bilspedition developed. SJ and Svea shipping line, ASG’s original owners, were not only positively connected to the international development but by recommending ASG to their international contacts they also took an active part. On the other hand Svea did not want ASG to
develop sea-transports and Fallénius & Leffler put restrictions on GBS developing into forwarding.

-- Before Bilspedition internationalized, the owner-structure had been changed to 2/3 the trucking companies' associations in Sweden and 1/3 customer industries.

-- The advantages and disadvantages of having owners positively connected in the transport systems were that the reported profitability of ASG and Bilspedition was not the prime mover. Instead they seem to have had a more direct influence, both positive and negative, on the fields for expansion. On the negative side, SJ delayed ASG developing trucking services for several years through their ability to influence the issue of international trucking permits. On the positive side, the trucking companies positively connected to GBS transport systems made an intensive drive among trucking companies in 1964 to provide GBS with the necessary capital for expansion.

-- When Bilspedition and ASG became registered on the stock exchange the dominant positions of the trucking companies in Bilspedition and of the Swedish Railway in ASG were reduced. As a result, the demands on profitability increased and restrictions on fields for expansion were reduced.

-- In the IF case, the explicit intention of the Ratos Group in creating IF was to develop into the field of transport and distribution, Ratos having other international investment activities. Since they were not positively connected to IF's transport systems, the requirements for return on investments focused on profitability.

-- Finally through the acquisition of the Scansped Group in 1985/86 Bilspedition acquired Fallénius & Leffler, their original owners.

**Suppliers**

Since one of ASG's most important suppliers was SJ, who were also the owners, the international development in railway traffics had positive effects on SJ and so their reactions were positive.

Further, for as long as ASG and Bilspedition were small internationally, the suppliers to a large extent set the rules, being the owners of the means of transportation. The roles changed when ASG and Bilspedition increased in size because then they became more important to the suppliers. This was enhanced by the fact that the railways, the shipping lines and the airlines, after a period of growth, ran into capacity problems which they had difficulty in handling. These seem to have come in waves if taken over a period, capacity becoming a problem for the railways in Europe in the early 1950's and for shipping lines and airlines during the late 1960's and early 1970's. For the shipping and airlines the lack of capacity turned into over-capacity during the latter parts of the 1970's as they had invested in new ships and aeroplanes. The fierce competition which resulted, however, continued to give the control to those forwarders having large volumes of goods.
- The containerization and use of unit loads as from the late 1960's further enhanced the importance of ASG and Bilspedition at the cost of the shipping and airlines specifically. As a result, the two companies gave priority to just a few suppliers which then cooperated more closely with ASG and Bilspedition. ASG and Bilspedition increased their control of the total transport system. During the 1970's the forwarder's legal responsibility changed so that they had to bear full responsibility towards the customer and this contributed to their change.

- During 1970's, the trucking companies were also suffering from a large over-capacity and both Bilspedition and ASG had to assume more responsibility towards the trucking companies in order to rationalize within the transport systems.

- During the 1980's, Bilspedition even acquired some of the suppliers, such as the shipping lines Transatlantic, Cool Carriers, etc., as well as part of the domestic airline Linjeflyg. The incidence of trucking companies being directly acquired also increased over time.

- In the case of IF, the suppliers comprised a large number of companies from different areas and there is not much evidence to show that any reactions took place from the suppliers' side since the companies taken over continued as separate entities.

**Representatives**

- The representatives have been affected differently depending on how the focal companies and the agents have developed over time. The direction of that development both in services and geographically has been of importance for positive and negative connectedness towards the focal companies and between representatives again over time. Conflicts between different agents as well as between agent and focal company seem to arise from a change in priorities between type of services and specific traffics.

- As many agents have internationalized over a period of time their interest and resources diverged into other areas. ASG had some problems during the 1970's as agents seemed to be less interested in their traffics-in-common due not only to their but also to ASG's development in other areas.

- Profitability and control of the transport systems as between the focal companies and the representatives seems to have been another problem leading to conflicts. A local sales office belonging to the focal company would basically mean a lower degree of control for the agent since the customers are contacted directly by the focal company thereby exacerbating the conflicts of interests with the agents. It is worth noting that ASG and Bilspedition closed down all of their European sales offices after just a couple of years.

- Having a local subsidiary with the same name as the focal company even though it operates in quite another field of services or geographical area than the representation, means a restriction
placed on the agent’s expansion and a risk of future negative connectedness. However, the possibilities to expand into new fields services are facilitated.

-When international nets are created and integration increased within them then the continued development of O/C and C/O nets can easily change into O/O nets over time through internationalization and diversification. This was the case between ASG and Schenker and between Bilspedition and ASG and their agents. As a matter of fact, most of their largest competitors with O/O nets have been or still are agents in some place or other in the world. This goes for Schenker, Panalpina, Kühne&Nagel, Nedlloyd, Emery, Danzas, etc.

In the IF case, the fact that a company was acquired by IF led to the fact that some agents belonging to O/O nets left the cooperations with the acquired companies. Both ASG and Bilspedition nets had been or were cooperating with some of the acquired companies such as Z&B, Sasse & Co, Satraco, etc.

Competitors - (ASG-Bilspedition -IF and other competitors)

-Over time ASG and Bilspedition seem to have kept a close watch over the development of each other closely.

-- When SJ became engaged in ASG by acquiring 50% the shares in 1941 Falléniius & Leffler sold 50% of the shares in Bilspedition to the Swedish trucking companies association the year after. Bilspedition had decided to be the private alternative to ASG.

-- When the Rego shipping lines acquired 25% of ASG in 1967, Bilspedition then joined the newly established constellation of important shipping forwarders, which was a strong competitor to ASG and an important contributor of freight to Rego shipping lines.

-- As the Bilspedition Truckers Association (BTF) became part-owner of Bilspedition in 1965 the corresponding organization in ASG acquired 5% of ASG from the 100% of the Swedish Railway the same year.

-- During 1970’s the specialization and diversification of ASG and Bilspedition was very similar. However, ASG was still somewhat larger than Bilspedition internationally.

-- As ASG started a number of subsidiary companies in 1980 and 1981 for air and seafreight after leaving WACO, Bilspedition acquired Wilson & Co, one of the largest sea and airfreight forwarders in Sweden, in 1982/83. Later when Bilspedition became registered on the stock exchange they acquired Scansped, one of the largest international transport and forwarding groups in Sweden at the time, and at the same time Falléniius & Leffler, their original owner.

-NTS, leaving the Scansped group at the time of the takeover, then became the base for the creation of IF group. The establishment of IF created a strong Swedish alternative to ASG and Bilspedition. On two occasions during the wave of acquisitions in the 1980’s Bilspedition acquired some part of ASG’s important representatives in the Nordic countries, thereby leaving ASG with no alternative but to change representatives at short notice and with great difficulties.
When ASG and Bilspedition started their international activities, their former customers, the Swedish forwarders, became their competitors. In the case of ASG, they even went to the lengths of forming a constellation to try to force ASG out of international activities by bringing their influence to bear on the Swedish Railways.

As ASG, Bilspedition and IF grew into larger international nets, many of these competitors were acquired by them and some of their former agents, like Schenker, Kühne & Nagel, Nedlloyd, became their new competitors, growing into large international nets.
9. Event analysis - Dynamics and context

Up to now, we have analyzed internationalization concentrating on dominating changes for the focal companies over time. Even though the general case analysis shows that there exists an interaction between the development of the focal companies and the context, the 'multiplexity' of the focal companies makes it difficult to follow in greater detail how the interaction takes place. However, the event analysis will make it possible to depict the underlying sequences of changes that were taking place between the focal company and a specific part of the context by following, instead of the focal company, the development of each event over time.

Further, in the changes of the relations studied in the event, the focal company is just one of several transport companies in focus. Therefore, the specific events will not only contribute to a deeper understanding of but also facilitate a generalization of the sequences of changes going on during the internationalization process.

The changes in the events will be analyzed with reference to the integration dimension since this dimension best reflects the changes in interaction with other transport organizations. It is also this dimension which initiates the process of internationalization, which leads to changes in extension and penetration.

The event analysis will be concluded in two steps which, taken together, suggest a more general pattern of changes in systems and nets when transport companies internationalize. The first of these steps abstracts integration changes in the direct relations to the companies in focus into typical sequences. These typical sequences experienced through the events at system and net level will then be compared with similar changes in the general analysis.

The second step the conclusion involves the effects of these typical sequences on the structure of the net and network. These effects concern the indirect relations and include typical changes taking place due to actions and reactions to the event. Here we shall see that the patterns of sequences of changes and effects might give rise to an international domino game in the total network.

We end the event analysis by discussing how these more general patterns of integration changes, developed in the two concluding steps, will influence extension and penetration and based on this, a typical pattern for internationalization will be discussed, taking context into account.

Finally, there is a summary of the important empirical results from the the general as well as the event analysis in section 9.5.
9.1. Event analysis

The specific events are very different in terms of size, point in time for the event and time span. The first event goes back to 1946, when ASG signed an agreement with one of its first agents and the last events studied are from 1989. The majority of events, however, take place during the end of the 1980's when the variety seems at its largest.

While the ASG events are of different types, such as establishing an agent relation, acquiring a company, making greenfield investments and leaving/joining an international net, the Bilspedition events are concentrated to one major merger between three large international company groups. Since the total merger, described in the Scansped Europe event, involves such a large part of the international changes of the Bilspedition Group, it is already discussed in the general case analysis. Therefore the events concerning the merger, analyzed here, are only parts of the total event and concern the mergers in Sweden, Belgium and the changes in West-Germany. The IF events study two companies acquired by IF during 1989. The companies which are middle-sized international companies have a long international history. Finally, there will be a certain interaction between ASG, Bilspedition and IF companies in the events.

Specific events time span

<table>
<thead>
<tr>
<th>Year</th>
<th>ASG-Switzerland</th>
<th>ASG Belgium</th>
<th>ASG West-Germany</th>
<th>WACO</th>
<th>Scansped- Sweden</th>
<th>Scansped-Belgium</th>
<th>Scansped-West-Germany</th>
<th>IF-Züst &amp; Bachmeier</th>
<th>IF-Amas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 9.1. The events

When discussing each event and within the context, the discussion will be divided into three phases - before the event, the event and after the event. Before the event involves the relations of importance that existed before the event while after the event concerns the relations changed
as a result of the event. The changes will be described, if possible, in terms of short and long run changes. The event will describe the important actions taken by the organizations involved.

9.1.1. ASG events

ASG-Switzerland- start of cooperation with an agent

Before the event: ASG was a large domestic transport company, whose transport systems were connected to those of SJ (Swedish Railway) and Svea Shipping Line. Natural was an established international transport company which via its earlier contacts with Svea was seeking a new agent in Sweden.

The event: The event was the development of a new (system)cooperation with Natural after half a year of negotiations. The alternative for Natural in Sweden was Wilson. Wilson cooperated at that time with Danzas in Switzerland but wanted to change to Natural. (See figure 9.2).

![Diagram of ASG-Switzerland event](image)

*Figure 9.2. ASG-Switzerland event (simplified description of network effect)*

After the event: ASG and Natural cooperated closer in order to increase efficiency and meet the new situation. Natural and ASG had one of the largest traffics between Sweden and Switzerland. New direct traffics were then added as well as road transports and new functions some years later. This led to enlargement of the cooperation. Railway transports gradually decreased in importance until other types of traffics (combi-traffics or trucking traffics) had totally dominated. During these almost 50 years both Natural and ASG have continued their internationalization to and from other countries, with other agents and into other fields of services. During the 1980's airfreight was also added into the relationship but then s ASG acquired part of a Swiss airfreight forwarder
the cooperation for airfreight ceased. Therefore first a **increase** and then a **decrease in the field of cooperation** took place. In this aspect ASG airfreight was negatively connected to Natural airfreight. During 1980's the cooperation came to include not only ASG Sweden but also ASG Norway as well as Finland and ASG started to cooperate with a sister company of Natural's in Portugal. During 1970's and early 1980's ASG and Natural were **drifting closer** on net level while there were tendencies of **drifting away** during the end of the 1980's.

**Effects:** Effects at net level were that a group of Swedish forwarders, in their services formerly complementary to ASG, formed a new anti-constellation. The part-ownership of ASG by the Swedish Railway (SJ) and Svea Shipping Line seems to have had an important bearing on the reactions of the other international transport and forwarding companies. They were cooperating with Svea as well as SJ in their international traffics. A result of this was that the other nets tried to convince SJ that ASG should refrain from internationalizing and remain domestic. The fact that ASG and Natural succeeded in the creation of a new concept, the door-to-door sales concept, affected the other transport companies in their marketing as well.

**System level changes:** New cooperation --> closer cooperation --> enlargement --> closer cooperation --> enlargement --> decrease in field of cooperation --> closer cooperation --> enlargement --> decrease in field of cooperation

**Net level changes:** Drifting closer --> .... and later .... --> drifting away

**ASG Belgium - a greenfield investment**

**Before the event:** ASG started a **new (system) cooperation** early 1950's with an agent, Ama, and had continued for more than twenty years. Ama had grown over a period and developed many new traffics to Sweden together with ASG leading to **closer cooperation** and **enlargement**. Then in the mid-1970's Ama was sold to the owner of West-Friesland, a competitor to ASG-Ama traffic. The takeover created problems in the ASG-Ama cooperation. The development of the cooperation ceased, leading to a **decrease in field of cooperation and looser cooperation**. A few years before the event, ASG had set up a European Representative Office in Brussels which came to be important as a contact for planning the event.

**The event:** ASG Belgium was established with the help of key personnel from Ama. Two other transport companies joined as minority owners, E. Depaire (partly owned by Belgian Railways) and Gyssens & Co, through which ASG obtained contacts and physical facilities. This was necessary for a quick switch. Temporary sales personnel were sent down from Sweden for the purpose of retaining the customers. The result for ASG in Sweden was a **switch of representative** in Belgium. The former agent Ama, which became a competitor, successfully sued ASG for damages.
After the event: ASG continued to send resources of all types to ASG Belgium for a rather long period in order to increase efficiency of the traffics and the office, which led to a closer cooperation. The minority owners left within a few years and the European Representative Office was closed down. Within a short time ASG Belgium also started traffics to Norway and Denmark. In the Norwegian traffic ASG Belgium cooperated with the ASG Sweden agent. Nevertheless, the office in Belgium has stayed a rather small company with basically Scandinavian traffics. Some other international traffics have been added and from discontinued from time to time.

Effects: The effects at the net level were limited. At the system level some new companies became positively connected to ASG Belgium through establishment of new traffics. On the other hand, some important representatives of the parent company in Sweden, such as the agent in Denmark and the subsidiary in Hamburg, became negatively connected to ASG Belgium in their international traffics.

System level changes: New (system) cooperation--> closer cooperation--> enlargement--> decrease in field of coop.--->looser cooperation--> Switch of representative--> closer cooperation--> enlargement

ASG in West-Germany (Hamburg and Stuttgart)

Establishment of ASG Hamburg

Before the event: ASG had started several international railway traffics to/from West-Germany. The agent in Hamburg area was Wendschlag & Pohl. Then, as trucking traffics were developing, ASG started a new (system)
cooperation with another agent who was not only a regular agent but also a support office for the total international traffics. The trucking traffics started through co-loading with the traffics from Holland and grew into traffics of their own.

**The event:** Within a couple of years, ASG took over by letting the owner and manager of the existing trucking agent start ASG Hamburg, which caused a switch of representative. The old trucking agent company ceased to exist some years later.

**After the event:** ASG Hamburg's, Scandinavian traffics grew during the 1960's, both in number of traffics, in size as well as in added new functions like warehousing, special transports, etc., which led to a closer cooperation and enlargement. During the 1970's, they started new traffics to other European countries and in some of them they had the same agents as ASG Sweden. This was a form of opening up on net level.

---

**The ASG Deutschland Net**

Before the event  

The event 1959/60  

After one year

- = Relationships  
- = Direction of change

Figure 9.4.1. Part event 1- in ASG Deutschland event (simplified description of network effects)

**Effects:** ASG and the railway agent in Hamburg ceased their cooperation shortly after. Other agents in adjacent areas also perceived a certain negative connectedness to ASG Hamburg due to the risk of ASG collecting/distributing directly via Hamburg and later due to competition in international traffics. Another cause for conflicts were the German sales offices which could take over the customer contacts from the agents. During this period, Atege Stuttgart was one of the more important of the around 20 West-German agents. This was the situation before the Stuttgart event.

**System level changes Hamburg:** Switch of representative---> closer cooperation---> enlargement  

**Net level changes (as ASG Hamburg internationalizes):** Opening up---> closer cooperation
Acquisition of Atege Stuttgart

The event: In 1976 ASG acquired the existing agent in Stuttgart. This legal integration implied a closer cooperation between ASG and Atege on system level. On net level Atege's agents came to be included in the net of ASG. ASG Hamburg was changed to ASG (Deutschland) GmbH which became the formal owner of Atege Stuttgart. However both continued as separate companies and ASG (Deutschland) was seen as a holding company.

The ASG Deutschland Net

Before the event

The event 1976

After one year

Figure 9.4.2. Part event 2 - in ASG Deutschland event (simplified description of network effects)

After the event: Through this acquisition ASG increased their resources in and coverage of West-Germany. Over time the two German companies have slowly started to cooperate. As ASG acquired the resources of another company in Bielefeld in 1988, the number of offices of ASG (Deutschland) had increased to nine.

Effects: As ASG continued to grow in West-Germany, the ASG agents in the country became worried. Many of them were also negatively connected to Atege in other international traffics. Further when ASG acquired ERT in 1979 the negative connectedness increased within the ASG net, since the ERT and their agents and ASG and their representatives were competitors in West-Germany.

System level changes Stuttgart: Closer cooperation
Net level changes (Stuttgart acquisition) --->Drifting closer (to a number of agents in other countries).
Waco (World Air Cargo Organization) - ASG/ISA

The specific event studied concerns when ASG was leaving the airfreight net of WACO based on exclusive cooperation between large airfreight agents world-wide.

WACO and ASG

Before the event: ASG net had grown in the number of different services as well as the number of countries covered in Europe as well as overseas. A separate net (part-net) for airfreight within ASG was created through opening up, letting many of the gradually increasing number of WACO agents complement the existing agents in airfreight. As ASG started to cooperate more closely with these WACO agents, through creating a new common communication system, etc. and adding more exclusive WACO agents. The net was changing towards closing up. As a result of this ASG was also drifting away from some of its existing partners like Schenker, Emery, etc. since the cooperation decreased with their subsidiaries in other parts of the world. Finally U.S agent Emery departed from their cooperation with ASG. A new Waco agent, IFI, was identified and ASG switched to that agent. After a while IFI offered ASG the opportunity of acquiring 50% of the company. This changed the situation in Waco since ASG not only represented the Nordic countries in the Group but such an important country as the U.S as well.

The event: ASG had to leave the WACO group, involving a large number of agents world-wide which at that stage had a close cooperation. Around 20 agents had to be switched as ASG was leaving the WACO net. The net was opened up. New representatives had to be found to ASG Sweden’s existing traffics and also for the airfreight subsidiaries in Denmark, Norway and the U.S. ASG set up a company in the U.K. taking over part of the

![Diagram of the ASG Net](image-url)

Figure 9.5. Waco - ASG/ISA event (simplified description of network effects)
personnel from the former agent. A similar thing happened in Australia where ASG made a greenfield investment but added two acquired small companies.

**After the event:** The ASG airfreight subsidiaries cooperated to a large extent with each other which *increased the degree of cooperation* within the airfreight net and the net was moving towards *closing up*. In some cases, where the established sister companies lacked the know-how or were tied up with some other agent or were not themselves established, they had agents of their own. As Schenker-ASG in Hong Kong split up, ASG set up its own office there. ASG also established a representative office in Singapore moving the salesman from Schenker Bangkok to Singapore. Later ASG acquired 100% of its U.S. joint venture and part of a company in Taiwan, which was reached formerly via Schenker in Hong Kong, and acquired a seafreight company in the U.S.

**Effects:** The whole Waco organization had to change agents in Sweden, Denmark, Norway and in the US as a result of ASG leaving the organization and new competitors to WACO were set up by ASG in Australia and the U.K. All the former WACO agents became negatively connected to ASG and its subsidiaries. As the new subsidiaries internationalized this situation was enhanced. On the other hand a row of new agents, became positively connected. Some of the existing landtransport agents enlarged their cooperation with ASG into airfreight.

Having its own offices affected ASG's relations to the seafreight agents situated in the same country. In some cases the seafreight agents became airfreight agents as well.

As the negative connectedness to Schenker increased and it became a necessity to split up Schenker-ASG, the Schenker and ASG nets became negatively connected world-wide (O/O).

**Net level changes:** Opening up--> closer cooperation--->closing up-->drifting away -->looser cooperation--->Leaving the WACO net---> Opening up--> closer cooperation--->closing up

**System level:** Switch-->closer cooperation-->looser cooperation-->switch -->closer cooperation

**WACO and ISA event**

**Before the event:** ISA, the airfreight company owned by Wilson &Co, had had problems with their international net of representatives. They had their own office in Denmark and had had joint ventures in Brazil and Singapore which had not worked out. ISA was offered to join the WACO group after ASG either as an associate or full member.

**The event and after the event:** ISA decided to *join* the WACO net as a full member. The Waco group changed to ISA, as their Scandinavian agent. Joining the WACO net meant switching around 25 agents. On the other hand, the quality and size of agents increased for ISA through the WACO net. This cooperation lead to a *closer cooperation* in many aspects and then moving over to *closing up* of the net.
Effects: All the former agents became competitors. Competition on the Swedish market increased with ISA selling the WACO concept.

Net level changes: Joining a net --> closer cooperation --> closing up
System level changes: switch --> closer cooperation --> enlargement

ASG events

The ASG events are all very typical for ASG over time. ASG started cooperating with agents as in the Natural case, later they made some acquisitions or greenfield investments which were all basically tied to existing agents. Finally during the 1980’s net changes were dominating.

9.1.2. Bilspedition events

The events which are studied in the Bilspedition case are part of the same basic process of change i.e. the merger with Scansped, Wilson and ATA international groups. The total Scansped Europe merger has already been discussed and as a part of the general case analysis due to its importance for Bilspedition changes in general. The events presented here concern changes in specific countries, which are part of the total merger.

Scansped Sweden merger

Before the event: Bilspedition had through acquisitions joined the nets of the large Swedish international transports groups Wilson and Scansped, both overlapping in their activities to ATA as well as to each other. The three different groups continued as separate part-nets within the total Bilspedition net to compete internally. The groups suffered economic problems.

The event: As the three groups were merged, they had to leave 56 agents in their existing nets. The priority was set for the use of existing international subsidiaries as representatives. Subsidiaries existed in 11 countries in Europe and in most countries there were several of them which were also merged. Leaving existing agents and switching to subsidiaries increased the level of integration leading to closer cooperation. The parts of the net that remained were closing up. The total number of relations had decreased because of the event.
After the event: There was a reorganization within the Group and it took at least a year before that was settled. The total volumes decreased since many customers stayed with the former agents. This was the outcome in spite of market growth in terms of volumes. The existing representatives had to take care of the volumes of at least three companies in the area which caused capacity problems but also increased the frequency of the traffics.

Effects: The very large number of former agents to Scansped and Wilson leaving the net became negatively connected to the new merged Scansped in Europe. In very few cases, only, did the remaining agents of the former groups chose to leave the new larger Scansped, as in Finland where Scansped had to find a new agent. Moreover the agents staying on were often negatively connected to the traffics of the Scansped subsidiaries.

At the network level, the merger of the three Swedish parts of Wilson, ATA and the existing Group of SKT/F&L/TK (three already merged companies) had a very large effect on the Swedish part of the network. The agents leaving had to find another alternative practically over night. As mentioned earlier, the result was the establishment of around 10 new transport companies since there were not many agents left in Sweden who were not already tied up to someone else. Many of the new companies, which included former Scansped personnel, became the Swedish representative to the former Scansped agents. Some of the former agents acquired part of Swedish transport companies, like Danzas which acquired 50% of Rationell Transport. In other cases the existing international Swedish transport companies got many possibilities to change or complement their existing net of agents. The effects on the network were not as large abroad since the agents were spread out over so many areas in Europe.

In some cases it seemed possible for some large and locally very strong companies to continue cooperation and to accept a higher degree of negative connectedness between the nets.
Other already negatively connected transport systems like that of ASG and Natural reacted because of the increase in competition both in Sweden and in Switzerland.

In many cases the Group was forced to make further investments in terminals and new agents as well as in buying new companies. The new net of representatives was not really settled at the end of 1989. Yet further changes were taking place, especially since Bilspedition bought another large international transport group in Finland named Speditor.

Net level changes: Leaving (part of the) net-->closer cooperation (remaining part)--->closing up

System level changes: Switch--> closer cooperation-->enlargement

Scansped Belgium merger

Before the event: In Belgium the Bilspedition Group had three separate international transport companies that were competing. They were representatives of the different groups i.e. Castra of Skt/F&L/TK, Scanroute J/V of Wilson and ATA of ATA group. Castra was a subsidiary of van Casteren in Holland owned by the Bilspedition group and ATA was a former West-Friesland company in Belgium acquired by Bilspedition in 1986. The competition on the Nordic countries was especially fierce. The merger of Scansped Sweden necessitated the merger of the companies abroad.

The event: The three companies were supposed to merge but the other part owner of Scanroute J/V C.Geerts acquired the other 50% of the company so the merger eventually involved only ATA and Castra. Castra, formerly a subsidiary to van Casteren, was now separated from Holland. When merging they had to leave a number of their existing agents and stayed on cooperating with the subsidiaries as well as some of the agents. The changes were not so large since they were slightly different in their profiles. There merger led to an increase in closeness of cooperation between the two former companies. Since the new merged subsidiary was larger than any of the former subsidiaries, the representatives remaining form earlier had to adapt much the larger volumes. This resulted in closer cooperation with them.
After the event: The agents staying on met a larger company with more problems. The fact that some agents left, forced the company to find new alternatives. However, since Scansped had subsidiaries of its own in many countries and finding an agent became increasingly difficult, it would try to use the subsidiaries as representatives. This caused a change towards closing up.

Effects: Many agents left or had to leave as the new merged Scansped in many cases chose to cooperate with its sister companies instead of the existing agents to the former companies.

In some areas where Scansped continued cooperation with the agent even though a sister company existed, as in the UK, a negative connectedness between the sister company and the agent was created. In other cases, the existing agents became indirectly negatively connected because they were part of other groups, like a Nedlloyd subsidiary in France being agent to Scansped Belgium. The fact that the subsidiary in Belgium took the name of the Scansped (as the other subsidiaries also did) increased the connectedness effects in that they demonstrated their Group loyalty.

Effects on the network as a result of the event in Belgium only seem to be significant for the Belgian companies having traffics to/from Scandinavia.

Net level changes: Leaving the net --> closer cooperation --> closing up

System level changes: Switch --> closer cooperation --> enlargement
Scansped Germany

Before the event: In West-Germany there was only one German subsidiary and a small office in Travemünde. ATA in Hamburg, established in 1980, had earlier joined the net of former West-Friesland, an international transport company which Bilspedition acquired from United Transport Corp. in 1976. Basically ATA in Sweden cooperated with ATA GmbH while Wilson and SKT/F&L/TK together had around 31 different agents in West-Germany.

The event: ATA GmbH changed its name to Scansped Germany and became a representative of the new Scansped Sweden together with 10 out of the former 31 agents. Therefore the cooperation ceased with several agents of Wilson and SKT/F&L/TK in the Scandinavian traffics. Instead the cooperation became closer with the sister companies. The size of the Scansped Germany increased and the volumes more than doubled overnight.

The Scansped Germany Net

![Diagram of Scansped event in West-Germany](image)

After the event: The size and number of offices in West-Germany was not enough for the sister companies so a new relatively large international transport company was acquired leading to another joining of nets and later in 1990 another transport company was acquired. The reason for the first of these acquisitions was that Scansped Holland lost their agent Panalpina in the Stuttgart area. Since Scansped in Stuttgart did not possess the right know-how and as it was impossible to find a suitable agent that was not negatively connected, Scansped had to invest in acquired a company in the area, Tekatrans, an international company with strong traffics to/from Holland and Belgium.

Effects: As for Scansped Germany five of their existing agents in other European countries left the cooperation as a result of the change and became negatively connected to the Scansped Group. Four of these agents found
another agent and one was acquired by a large international Group. Therefore new representatives had to be chosen for Scansped Germany. It is interesting to note that the Scansped Germany changed to agents and not sister companies in each of the countries, in spite of the fact that there was a Scansped sister in the country. Both the fact that these agents looked for new agents and that Scansped changed had an impact on the structure of the network. Traffics by sister companies to/from Germany were often negatively connected to the traffics of Scansped Germany and its agents.

As a result of the merger many former agents in Germany had to find new agents in Sweden and some of Scansped Germany agents in West-Germany.

**System level changes**: Switch --> closer cooperation

**Net level changes**: Closer cooperation--> ...moving towards closing up

**The Bilspedition merger events** are all connected to the development of Scansped Europe and merging the three groups of companies Wilson, SKT/F&L/TK and ATA. The three different events, analyzed here, show similarities in that a number of agents had to leave or left and that Scansped concentrated on much fewer representatives in Europe including a larger number of subsidiaries. In all three case there were new investments involved in the different countries for Scansped but also for the departing agents and their new partners. The total effects of the events, merging in nine countries at the same time, affected many other international transport companies in the network in one way or another. Including effects on subsidiaries, around 100 agents in Europe were involved and when they all started to look for new agents many changes must have taken place, that have not been recorded in this study. Since most of these new partners to the former agents were probably also tied up to some other agent.

**Net level changes**: Leaving (part of) net---> closer cooperation (remaining part)---> closing up

### 9.1.3. IF events

The IF events each concern the acquisition of an international transport company. IF was established less than a year before these events were taking place.

**Züist & Bachmeier acquisition**

**Before the event**: Z&B was an old international transport company with head office in Switzerland but with its main activities in Germany. The company had grown through a series of smaller acquisitions and greenfield investments in Italy and Germany. Then from these countries they internationalized. The total Group was split
into two companies i.e. the Swiss-German(Z&B) and the Italian part(Z&A). However after that split Z&B continued to expand internationally by opening up their net establishing many new (system) cooperations. As the company needed more capital for their expansion, they were looking for new owners. At the same time IF, recently established as a Group, was searching for potential acquisitions in Europe. Z&B in Nuremberg had been an agent of an IF group company, NTS in Sweden, for 20 years.

The event: Z&B was joining nets with IF. The IF acquisition included a small packing company in Witten, offices in the UK, in Africa and part of the Vienna office.

The IF Net

Before the event

The event 1988/89

After one year

Figure 9.9. IF - the Z&B acquisition (simplified description of network effects)

After the event: A holding company was created in West-Germany which came to include all the German companies of the IF group. NTS also had a company and had also recently acquired a small seafreight company, Schier & Otten. These companies continued as separate entities. The net of Z&B and NTS and Schier & Otten in Germany were to a large extent complementary but had some overlapping activities.

In practice Z&B did not change very much as a company during the first year. The company continued as before and except for a very small number of new cooperations within the Group. After two years, the company in Germany was reorganized and divided into three separate companies being part-nets with their own international representation. One of these companies, Z&B airfreight joined another net, Senator, and together they created a joint venture in Germany for airfreight.

Effects: The main difference was that the agents of Z&B came to be included in the IF net. As a reaction to the acquisition three of their former agents left the cooperation, as their nets were drifting closer to the IF net and therefore got negatively connected, and three new agents took their place. Two of the agents leaving were
IFI, ASG's subsidiary in the US, and a British subsidiary to the Rhenus Group. The third was the agent in Holland, an effect of Z&B now belonging to the same Group as Amas. Some of the agents to Z&B also became negatively connected to other traffics and activities within the Group.

**Net level changes**: Joining nets

**System level**: Switch

---

**The Amas event**

**Before the event**: Before the acquisition the Amas group was part of a freight services division of a large international paper production and trading company. Amas around 20 companies were concentrated in Holland and Belgium. Copex in Hillegom was one of the most important companies in the Group from which many of the other companies have spun off such as Copex Air, Copex IGS, etc. It had expanded in Europe and Overseas over the years through establishment of many new (system) cooperations. Since IF wanted to get a better coverage of Europe and the owner of Amas had economical problems, both were interested in future cooperation.

**The event**: IF acquired Amas including all the small companies in Holland and Belgium. Therefore Amas and IF were *joining nets* and many agents were added into the net

---

![The IF - Amas Net](image)

**Figure 9.10. IF - Amas acquisition (simplified description of network effects)**
After the event: The changes of arising out of the acquisition mostly came after more than one year when Amas started to restructure the companies and their activities leading to a closer cooperation within the Amas group. They also acquired new companies like an international transport company Sasse&Co in Belgium and ITM in Denmark. Then there were mergers of part of Amas’ existing activities and Sasse’s activities. Increased cooperation between Amas group and other IF group companies were very limited. However one example of closer cooperation followed in 1990 as a result of IF acquiring ACE, a Swedish international airfreight forwarder. An Amas airfreight company of Amas recommended ACE as well as Sasse as new members to an international airfreight agent organization IASA. And so the closer cooperation developed in the area of airfreight.

Effects: The effects were not very large to begin with since most agents continued cooperating with Amas in the same way. Rather the problem was that there was some overlapping between Amas and other parts of the IF net as well as within Amas part-net. As Amas started restructuring and acquiring other companies the effects increased since some of the agents’ nets were drifting closer as the agent entered and cooperation increased and other nets were drifting away as the agent left the IF net. This will have effects basically on the transport companies established in the Dutch and the Belgian transport network.

Net level changes: Joining nets--> closer cooperation-->drifting closer
System level changes: Switch

The IF events mainly seem to have had effects on the network and the net and less at system level since the acquired companies continued as before but through their joining of a net their agents and subsidiaries are included. Any system effects were the result of these net changes. As time passed new net effects showed through the addition of new acquisitions to the Group. A net effect that occurred in both events when the IF group was drifting closer to some nets of the Amas’ and Z&B’s agents and drifting away from those leaving.

9.2.Patterns of changes
The analysis of the events above seems to confirm that there is an interaction between changes and effects which will lead to further changes in the degree of internationalization in both the short and the long run for the companies involved in the event. The focal companies are subject to sequences of changes over time which seem to be repeated. These changes seem to apply not only to the three different focal nets under study but also to other transport companies. The intention in this section is to examine the direct relations in the event analysis in pursuit of typical sequences of changes.
The different events described and analysed cover the basic types of integration and form sequences of changes. Since these events are commonly seen in the general case analysis, the sequences of changes shown in the events are assumed to be similar. Therefore, these events would reflect the way the focal companies internationalized.

We can notice that the three early events were dominated by changes at system level while in the events of 1980's net level changes dominated. This is in line with what we found in the general case analysis in chapter 8.

Further, it can be understood that net level changes cause effects at the single system level which was the case with Waco, Scansped, Z&B and Amas. On the other hand some single system integrations involve net aspects like the acquisition of Atege Stuttgart. Others did not involve any net aspects at the time of the event, as in the case of ASG Hamburg but did so later on.

The changes will be analyzed first at the system level and then at the net level and will be divided into a typical growth sequence and typical change sequence. However, being typical implies that these sequences of changes are the most common but they do not always have to take place in this way. Further, the typical sequences of changes do not say anything about the time length of each change. As the growth sequences seem to be more frequent and more detailed in the descriptions it seems easier to interprete in terms of typical changes while the change sequences are more imprecise.

9.2.1 System level sequences

The growth sequence at system level, which seems to take place in all the events of new relationships whether they are based on a switch of representatives or a (new) system cooperation, leads to increasing integration of the relationship as well as the transport system. The change sequence is seen in many of the events before the switch of relationships takes place. It leads to a decrease in integration.

Growth sequence- at system level

The first four of the ASG events (ASG-Natural, ASG Hamburg, ASG Belgium, Atege Stuttgart) all started with new relationships. The development included either a new (system) cooperation or a switch to a new relationship. Then there was a change to closer cooperation and further to an increase in the field of cooperation (enlargement). The ASG-Natural cooperation and the ASG cooperations with the first agents in Belgium and Hamburg are
typical examples of 1a sequence while the event changes of ASG Hamburg and ASG Belgium are typical of 1b sequence.

**Sequence 1 - growth sequence at system level**

a) New (system) cooperation--> closer cooperation--> enlargement
b) Switch (new relationship)-- > closer cooperation -- > enlargement
c) Closer cooperation -- > enlargement

Switch of representatives as in 1b also took place in large numbers during the Scansped and Waco events leading to closer cooperation with the new agent. Some of the agents that ASG changed to in the WACO event were already existing agents in land-transportation which made them move directly into enlargement.

All new cooperations of the focal companies seem to develop according to either of the alternatives (1a-c) in sequence 1. In some cases, by stopping at closer cooperation and not going into enlargement they might not complete the sequence.

The 1c alternative would be normal in a situation when a closer and/or enlarged cooperation already exists and it increases further through an acquisition of an agent like when ASG acquired Nordex in Norway, shares in the Danish agent, etc. Another situation which makes 1c important when many of the traffics are moving towards a higher degree of integration over time due to technical development or increase in customer demands.

**Change sequence-at system level**

Another typical sequence complementing sequence 1 over time is sequence 2. This sequence is seen in the ASG Belgium event, the Waco event and many other similar events over time for ASG, Bilspedition and IF. Sequence 2 can be seen as a movement backwards of sequence 1 leading to decreasing integration. However, the whole sequence is not shown in the events. In most events it is only registered at the stage of looser cooperation. Therefore decrease in field of cooperation might actually take place almost at the same time or in some cases show a movement back and forth before leading to switch or cessation of (system) cooperation.

Further, in the general case analysis it never dominates a whole period since new growth sequences have taken over rather quickly. With very few exceptions the change sequence is directly followed by the growth sequence after leaving the existing systems and/or the relationships. Rather than changing the total system the normal situation seems to be, that the companies are switching to another representative, as in the WACO and Scansped events. Therefore the basic sequence leads here to a switch to another representative while 2b is cessation of (system) cooperation. Alternative 2b was frequently used as the cooperation with
the railway agents ceased and trucking agents and systems increased which happened in the ASG Hamburg event.

**Sequence 2- change sequence at system level**

a) Decrease in field of cooperation<-->looser cooperation--->switch (leave relationship)
b) decrease in field of cooperation<-->looser cooperation--->cessation of (system) cooperation
c) decrease in field of cooperation<--->looser cooperation

Sequence 2c on the other hand shows the case of a decrease in the degree of integration without leading to a switch or a cessation of (system) cooperation. This happened in the ASG case during the 1970’s when they reactivated some of the existing agents of the European land transportation. Some of these relations continued into a new more intensified level after a period of dissatisfaction with the cooperation.

![Figure 9.11. Growth and change sequences at system level](image)

These two sequences 1 and 2 seem to be a basic pattern for development at system level since it is repeated in most of the events taken place. The very fact that these sequences are repeated leads to the creation of a net and is the base for net effects. The design of the net will be decided by how these sequences are combined and repeated. Normally, as new services are added a combination of new representatives and existing representatives will take on the new services. Further, over time switches of representatives take place, as well as closer cooperation and enlargement into the new service with the existing representation. This continues over time as a company adds new types of services (figure 9.12.).
As is shown above is the possibility of repeating these sequences over time lead to an increasing number of representatives and probably also an increasing awareness of an interdependence between them leading first to the creation of a net and then to opening it up.

The changes at net level will be discussed next.

9.2.2 Net sequences

The net changes are more controversial than those at system level since they often involve sequential as well as parallel changes occurring in the net. As discussed earlier the sequences shown are typical sequences, which means that only the most common types of sequences of changes are presented.

Growth and expansion sequence at net level

There are two ways that lead to growth and expansion of a net and these are based on what happened in the IF and ASG events and the ISA event in the WACO case. The basic sequences of changes taking place in the general case analysis at net level (ch.8) for the three cases include the same sequences, only that there are parallel changes taking place as well and some are not fulfilled as in the IF case.
The first case 3a is when a net is opening up adding new single relations from outside the focal net. Over time this leads to a gradual expansion in the number of representatives which changes into closer cooperation. This increased closeness might either lead to drifting closer to some companies which then might be included through another opening up or it might lead to a closing up of the existing net. This sequence took place twice in the Waco event. The first time when being an associate member in WACO and the next time when leaving and creating a new net. ASG opened its existing international net in order to add new representatives which led to closer cooperation and closing up (3a). In the general cases analysis showing the total net of ASG, this sequence normally ended by drifting closer (3b) rather than closing up. In spite of the fact that opening up is often accompanied by dissolution of some of the existing relationships a sequence starting by opening up would seem to be a typical way to grow over time adding new services and representatives (see figure 9.12).

Over time these changes mean gradually adding a number of new representatives whether agents, small local acquisitions or greenfield investments. During part of the 1960's and 70's ASG as well as Bilspedition used this way to develop, adding many single new transport systems.

The second way to expand begins by joining nets. This is shown in 3c. ISA joining WACO net and IF acquisitions where they joined nets with Amas and Z&B. Joining of nets mostly leads to closer cooperation between several companies within the focal net and finally, as in the case of ISA and WACO, Scansped event, the existing net were closing up. The joining of nets has not arrived at the closing up stage yet in the IF case.

**Sequence 3- growth sequence at net level**

- a) opening up --> closer coop --> drifting closer
- b) opening up --> closer coop. --> closing up
- c) joining net --> closer coop. --> closing up

In the Scansped event expansion was taking place before the merger when there were several instances of joining of nets and the closer cooperation only took place within the part-nets. As the merger started the net was contracting rather than expanding which takes us over to the change sequence at net level.

**Change sequence - at net level**

Sequence 4 is a sequence of changes used in many cases by the focal companies in order to switch from one situation to another. The sequence involves a negative development in terms of integration for certain organizations and for certain systems. This happened to ASG in the Waco event as well as in the Scansped events.
In other cases when the net is not so highly exclusive and integrated as in the WACO case 4a seems to be more the norm. The cooperations between ASG and Schenker as well as between ASG and Emery show these changes over time. Very often the sequence starts from a closing up of a net. The same sequence can be applied to the Scansped event where so many companies ceased cooperation. Most of these agents must have gone through a similar process seeing the Bilspedition net closing up through the earlier mergers and then the cooperation becoming less motivated and looser and then the break coming with the result of leaving the net. In other cases the parent company left but the subsidiaries still cooperated however with changed priorities. Since the order of the stages of drifting away and looser cooperation is not always clear, these two stages are shown with arrows in both directions. Sometimes the stages take place almost at the same time or there is a movement back and forth before the looser cooperation finally leads to leaving the net.

Sequence 4 - change sequences at net level

a) drifting away <->looser cooperation-->opening up (dissolving/ widening)
b) drifting away<-->looser cooperation --> leaving the net.

The sequences shown above are mostly over time combined into patterns of development for the different companies. For instance sequence 4 is mostly combined with sequence 3 depending on the situation for the specific company.

![Figure 9.13. Net integration sequences](image)

The Scansped event is an example which combines the two net sequences, starting with sequence 3 as they joined the net then sequence 4b and then changing over to sequence 3 again. In the case of merger the sequences are both parallel and sequential processes.
In conclusion there are typical sequences both at system and at net level which seem to be combined into patterns of changes. These patterns form a combination of sequence growth-change-growth at system level and growth-change-growth at net level. However during the first period of internationalization only growth sequences are present.

Furthermore these patterns lead to structural effects on indirectly related organizations and on the total performance. The typical effects of these sequences will be discussed in the next section.

9.3. Sequences of effects - contextual changes

In this section, the patterns developed as a first conclusion of the event analysis will be applied to a wider perspective involving not only the direct relations but also the indirect relations to companies in focus in the net and network.

Through studying the structural effects involving the indirect relations we will find that the same patterns apply to indirect relations influencing or being influenced by the event. Finally performance effects are briefly discussed at network level.

In this section, the companies discussed include only the representatives and therefore owners and suppliers are not involved in this concluding analysis.

We start by looking at the effects on the companies either getting indirectly related through the change or being directly influenced from the change. It relates to a kind of first and second level of indirect relations seen from the established direct relations. This takes place within or very close to the focal nets. Then we study indirect relations further away from the focal event which lead to special network effects like the domino effects. This is illustrated both by the WACO and Scansped events but also from a combination of the events seen in the general case analysis.

Systems and nets

Following the typical patterns of growth and change at system and net level, the companies becoming or being indirectly related seem to follow the same sequences leading to the same patterns as the direct relations, such as the former agent of ASG Belgium at system level and the former agents to ASG and ISA in the WACO event and former Scansped agents at net level.

First they get positively connected, and then changing into negative connectedness and finally becoming positively connected to a new system or net.

These conclusions also seem to apply to the effects arrived at in the events. If ASG is switching representative so does the representative, since they both must find a new representative taking care of the goods at the other end. Typical changes at net level as in the WACO event are that both the ASG companies and the companies staying in WACO had to find new representatives.
Therefore all of them moved into sequence 3 but with other partners. Further, the changes will probably be almost simultaneous in time.

In some events, such as the Scansped event, there will be many companies searching among existing transport companies for new partners suitable as representatives. Since there was a lack of suitable alternatives, new representatives were created through establishment of 10 new transport companies in Sweden, some of which being greenfield investments based on personnel from the merging Scansped companies.

The companies becoming, as well as being, indirectly related will show the same pattern, combining the growth and change sequences both at system level and net level.

These sequences demonstrate that there are some typical effects at system and net level in terms of the same sequences for these indirectly related transport companies.

Network level and domino effects
Over time more companies will be interconnected since companies follow these growth sequences of integration and since nets of companies are created within the total network through this process. The general analysis of the focal cases shows the same. Basically this would also lead to a higher integration of the total network. Due to this inter-connectedness the influences of events will be stronger and spread faster. Therefore also indirect relations relatively far away from the companies in focus for an event will be affected also and "domino effects" start to show.

In the Waco and Scansped events, both taking place during the 1980's, the effects involved a large number of the indirect relations. In the WACO event, after ASG bought part of the American WACO agent both ASG and WACO passed through the change sequences leaving their existing agents. Then they both went into a new growth sequences with new agents. The new agent of WACO, which was ISA, had in turn just passed through a change sequence leaving 25 of their former agents in order to join WACO. Further, many of ISA's former agents would probably be try to find new representatives with whom they develop new growth sequences. In this way the effects continue and domino effects arise. The patterns of growth-change-growth sequences at system (1-2-1) and at net level (3-4-3) are repeated for both ASG, other WACO agents and ISA and their former agents.

The number of events that followed the Scansped merger were numerous. The same thing applies for all the IF acquisitions, counting all the representatives leaving and joining. However, no event has really followed what happened over several nets. The Waco event description followed two nets, ASG and ISA, but that was all.
However, in the Scansped event and general case analysis there would seem to be one incident that came back several times which showed how these domino effects continue across several different international nets. This incident was the Nedlloyd group’s acquisition of a large international transport company Uniontransport in West-Germany which had effects on the Scansped acquisition of Tekatrans in Stuttgart.

There was a whole chain of events related to the Scansped acquisition of Tekatrans. In that particular case both ASG, Bilspedition and many other companies were involved (see figure 9.14.). To begin with, Nedlloyd, a large Dutch international transport Group, was cooperating with several agents in Germany. In 1988 they acquired Uniontransport in Germany, a large German company with good coverage of the country. Nedlloyd therefore ceased their cooperation with their German representative Panalpina (another large international Group) in Stuttgart. As a result, Panalpina, which in turn was agent to Scansped Holland in the Stuttgart area, started its own activities in Holland and in doing so ceased its cooperation with Scansped Holland.

Scansped Holland had to find another suitable representative in the Stuttgart area. Scansped’s own subsidiary in Stuttgart lacked the necessary resources, however, and none of the existing Scansped agents in Germany were willing to solve the problem. Scansped’s international expansion caused large parts of the nets of the international agents and Scansped to be increasingly overlapping. Scansped solved the situation by acquiring Tekatrans, an international transport company with strong traffics to/from Holland and Belgium. In turn, Tekatrans had to break with its agents both in Holland and in Belgium and their salesman moved into the office of Scansped in Belgium. From there the chain probably continues on.

The Nedlloyd acquisition of Uniontransport also had effects on ASG since ASG was cooperating with another company acquired by Nedlloyd, van Gend & Loos (vGL). vGL was an old agent of ASG’s from the 1950’s and cooperated also with ASG Hamburg. Due to the same acquisition of Uniontransport, ASG Hamburg lost its Dutch agent vGL but found a new agent called Bayer which was part of the Belgian Ziegler Group.

Patterns of growth sequences at system and net level interrupted by change sequences which continue into new growth sequences (1-2-1 or 3-4-3) lead to domino effects in the total network showing the same typical sequences as those of the direct relations.
Speed is vital for the companies affected by these domino effects. The time it takes to find a new representative and the time that is available for the change seem to be critical. The need for speed increase with the number of representatives simultaneously looking for alternatives. Since there is so little time and the problems of finding a suitable representative not already part of an international overlapping net are large, more costly alternatives are often chosen in order to get out of a precarious situation. Both Scansped and Panalpina, having their own companies in the specific area, had to acquire a company or add the necessary resources to their existing subsidiary in the area to solve the situation they found themselves in. Therefore, as the speed of changing from growth to change sequence are becoming more crucial when a large number of representatives are involved, finding new representatives can be more costly.

Furthermore, it seems that the expectations of the sequences of changes fuse the speed of events so that either some sequences are not followed through or are speeded up.

When many companies are going through change patterns, the effects on performance of the domino effect will therefore be quite marked, not only for the acquisitions and green field investments but also for the high costs of establishing new relations to representatives, suppliers and customers.

Finally, in looking at the chain of the domino effects as regards the Nedlloyd Group, the Scansped Group and the Panalpina Group, all three increased their degree of internationalization in the sense that they increased the degree of integration within their nets and at the same time increased their degree of overlapping between the nets. The domino effects fused both Nedlloyd, Scansped and Panalpina into a movement towards closing up.
9.4. Patterns and internationalization

In the model of analysis we developed we assumed that the process is initiated through coordination to foreign resources and activities. From this has followed that integration started the process of internationalization. Further, as has been shown from the general case analysis, changes in extension and penetration then follow from integration. Thus the patterns of integration will have important implications for the extension and penetration of the companies over time. However, even though integration initiates the process of internationalization, changes in penetration might lead to continuation of the process through influencing integration to increase.

In the pattern of changes at system level (1-2-1) the first growth sequence (1) seems to be of basic importance for increase of extension at system level and at net level. Extending through the first growth sequence at system level seems to have been the normal situation in Europe for ASG and to a large extent for Bilspedition until the early 1970's. Since extension will only increase for the focal company or the focal net if there is no earlier extension between a specific pair of countries then the second growth sequence in the above pattern, involving switching to another representative will not further increase extension.

As regards to the typical net level pattern, when both first and secondary degree of extension are involved, the question is rather whether the new systems and nets in the second growth sequence are C/C or O/C. If they are, then there might be increased degree of extension otherwise only integration and penetration will be involved.

The very existence of these patterns shows that the companies are very reluctant to decrease extension and specifically so the first degree of extension. Even though they change, their intent rather seems to be to secure the extension involved. There are very few examples in the cases of decrease in the first degree of extension. As for the secondary degree of extension, the importance of securing this degree, increase with the number of subsidiaries in the net.

Unlike extension, penetration will continue to change as a result of a growth sequence. However, there is a difference between the first and second growth sequence since the first sequence sets the stage in terms of the degree of penetration, while the second resets the penetration, with the level of the first in mind. Moreover, since the changes in the sequences are speeded up and especially so the change sequences (2 and 4), it seems to be more relevant to compare the end product of the two growth sequences than to follow each stage in the sequences for direct changes over time. Further, the intention of the companies, when switching at system level or leaving and joining nets at net level, seems to be to secure a certain
level of penetration through the new alternative and then continue in the second growth sequence.

In the cases of ASG Belgium and WACO the interpretation is that the degree of penetration for the focal companies would be the engaged resources before the event compared to those after the event. The strength of the former agent in Belgium and former agents of the WACO net compared to the new greenfield investment and the new net, will then decide how penetration has changed.

Under certain circumstances, as in the case of WACO, when comparing before and after the change sequences (2 and 4) penetration even decreased. Similarly, as Scansped merged its three international groups this also caused decrease in penetration since the number of agents decreased in the country and the reorganized subsidiaries often could not cover the country in the same way. As the internal competition between the overlapping part-nets within Bilspedition had created such large inefficiencies in the total net, the cost of a decrease in penetration seemed perhaps necessary to bear. However, as penetration would normally follow on to integration it would catch up again, over time. In these two cases it was not possible to secure the degree of penetration directly after the event. However, one could expect that, after the second growth sequence was fulfilled, penetration might have returned to a similar level as before the event.

The domino effects in the total network imply that penetration change in one country will lead to changes in penetration in other countries and that the companies sometimes have to change at such short notice that an alternative securing existing extension and penetration is not available. Therefore they have to settle for alternatives that lead to decreases in the short run and/or pay a high cost in the form of investments.

9.5. Conclusions of empirical results

9.5.1. General case analysis - conclusions

1. The patterns of the three different cases differed
- ASG, the earliest of the three to start internationalizing, had gradual development of system integration over time. Net changes increased during the 1980's.
- Bilspedition - starting in the mid 1950's had a combination of gradual systems integration and net changes. From the 1980's it was mainly net changes that took place.
- For IF starting in 1988, net changes dominated entirely.

2. Internationalization was initiated by increased integration leading to increased extension leading to penetration. Over time, extension became less of an issue. Penetration became more
important. Increased penetration also increased possibilities for increased integration. Finally in the 1980's integration within and between nets dominated in importance over extension and penetration. Integration seems to have caused further integration without any related changes in to extension and penetration.

3. As a net was created and developed in services over time the negative connectedness increased between representatives. Development of part-nets (parts of higher interdependence within the total nets of ASG, IF and Bilspedition) in the 1970's decreased the conflict between the representatives.

4. The separate part-nets increased the number of parallel processes going on within the net. In the 1980's the some of part-nets were changing towards closing up for ASG and Bilspedition.

5. The owners, being positively connected transport companies were taking an active part in the internationalization of ASG and Bilspedition. Moreover, being owners and suppliers in combination made them place restrictions on suitable areas of development rather than on declared profitability.

6. The establishment of sales offices or subsidiaries via either greenfield investments or acquisitions differed in importance over time. The sales offices and greenfield investments were more important during the 1960's and 70's. During the 1980's acquisitions predominated.

7. As the representatives grew domestically and internationally the negative connectedness increased between local representatives and international representatives. Conflicts between representatives and between focal companies and representatives appeared because of negative connectedness between their traffics.

8. The role of the focal transport companies towards many of their suppliers increased in importance over time. Suppliers' capacity problems seem to have had a large impact on this. Further Bilspedition acquired several important large suppliers and its former owners as well in the 1980's.

9. As the focal companies and the agents diversified and developed internationally their nets became increasingly overlapping. This caused many cooperations to cease over time.

10. Competitors such as ASG and Bilspedition have acted and reacted continuously on the changes taking place in the other over time and especially so to changes in ownership.

9.5.2. Event conclusions

11. There are some typical growth and change sequences of integration forming the base of international change, which were repeated over time.
12. These sequences exist at system and net level and seem to form patterns consisting of combinations of growth-change-growth sequences. These sequences at system level lead to the creation and then development of a net.

13. As companies become increasingly connected through these sequences, new changes may develop into domino effects on the total network.

14. International interconnectedness causes interaction between changes in different countries which leads to further changes in the internationalization of the involved companies.

15. Changes in indirect relations in network might have large effects on the focal company through domino effects.

16. As interconnectedness increased, agents not being part of international overlapping nets become increasingly difficult to find and acquisitions become more common. Moreover the existence of a subsidiary often increases conflicts with internationalized agents and therefore forces further investments.

17. Expectation of the changes in the sequences combined with the domino effects speed up the change sequences.

18. Joining of nets increased in importance as a way to internationalize as the number of international nets and interconnectedness spread within the total network. Creating a net through gradual single system integration disappeared since the agents were already tied up internationally.

19. Different types of joining of nets lead to different effects on the extension and penetration. Adding an O/C net would increase extension while adding a C/O net of complementary services would increase penetration. Finally as the internationalization continues the nets become increasingly O/O over time. The O/O nets if not merged would add much to penetration while merged nets add integration and partly decrease in penetration.

20. The pattern of integration sequences very seldom implies a decrease in first degree of extension while both integration and penetration might decrease. As for changes in secondary degree of extension these have been subject to decreases in change sequences.
Part IV Theoretical results

10. Theoretical discussions

Up to now the study of the case companies has consisted of empirical observations on behaviour within the theoretical framework of the model of analysis. The aim of this chapter is to apply the existing research to the empirical results and discuss how it supports and explains the findings of the general and event analyses. Indirectly, the extent to which the findings are coherent with existing network-, distribution- and internationalization research would also be a test of the usefulness of the model. Further it seems important to point out to what extent there might be limitations in existing research as to its ability to explain the same findings.

The chapter will start by discussing the basic empirical results on patterns of internationalization found in the study and then examine more in detail each of three dimensions of integration, extension and penetration. In each of the dimensions the explanations for changes taking place between the different aspects of the concept will be discussed as well as research that is specifically tied to that dimension of internationalization.

10.1. The basic patterns of internationalization - support, explanations and limitations of existing research

There are four basic findings of the study concerning patterns of internationalization which will be discussed from the perspectives of internationalization, network and distribution research.

First, there was a gradual expansion of companies dominating for earlier periods while changes in leaps and radical net changes were dominating during 1980’s.

Second, the dimensions of internationalization were interacting and the process was initiated by integration of relationships at network level leading to integration of systems or nets. Integration then caused extension and penetration. During the first period extension seemed to be more important than penetration. Over time as extension of first degree became less of an issue penetration increased in importance. Further during the 1980's integration at net level became dominating in importance.

Third, there were sequences of changes of integration which were typical in the international development. These could be seen as growth and change sequences and they seemed to be combined into patterns of growth-change-growth sequences of integration. These were depicted not only for the focal companies but also for other transport companies in the network.
Finally, as companies were becoming more interconnected and more strongly tied to different nets, domino effects will developed in the international network involving a large number of companies.

As we shall see, theories and models from the three research areas support and explain part of the results in different ways. We start by looking at the traditional Uppsala School research from the 1970's and continue to the research on MNE and internalisation of intangible assets. Second, we discuss the network approach and add the developments from the Uppsala model by Johanson & Mattsson (1988) and Forsgren (1991). The network part will also include a discussion concerning closure of a community (Astley, 1985). Finally we are discussing some of the underlying reasons for the patterns from distribution research involving economies of scale and scope (Dixon & Wilkinson, 1986).

**Internationalization theories**

**Uppsala School internationalization model**

The Uppsala School internationalization model (Johanson & Wiederheim-Paul, 1974; Johanson & Vahlne, 1975), based on a sequential experiential learning process, supports the early gradual development in the patterns of internationalization and specifically the growth sequence at system level. The assumption of increased degree of commitment over time would also support and explain the change from extension to penetration dimension. As companies learn and do more in a specific country the resources and the relations will increase. Further, the continuation of the process when increased commitments lead to increased knowledge of the company would give an understanding of how penetration might lead to increased integration over time, if we assume that the knowledge created is included in its relationships.

The model also implies an increase in the directly controlled resources over time which is in line with the development of an increasing number of subsidiaries in foreign countries for the focal companies. However, as we can see from the cases the same gradual development and increasing commitment seemed to be equally important in their application to the cooperation with the agents over time. The limitation of the model seems to be its lack of ability to explain the new patterns of internationalization during 1980's, which is less gradual and more radical than in earlier years.

**Internalisation of intangible assets**

Another important explanation for the patterns of sequences might be found in the discussions on transactional market imperfections which imply that internalisation is necessary in order to protect the intangible assets of the firm (Buckley & Casson, 1976; Caves, 1976; Magee, 1976). Magee (1976) takes this reasoning a little bit further through discussion of appropriability of
knowledge and information for individual companies, which can be seen as investments being subject to depreciations in value over time.

Applying the theory of internalisation of intangible assets to a net of company relations and its different aspects of integration rather than to a single company and only legal integration, it would be a plausible explanation for the increasing number of net changes and to the domino effects. A net would then be assumed to be protecting the common intangible assets of the net from being dispersed through company relations to other nets. The probability of leakage and possibilities to prevent leakage would be a base for a decision to leave or to join a net or to break a single relation due to its connectedness to other nets.

Moreover, in the network perspective companies develop knowhow in their relationships over time, which can be assumed to spread between relationships in the net. The knowhow developed this way about marketing, transport system design, communication systems, etc would be intangible net assets which will be protected by the organizations benefiting from this asset. This would explain not only the leaving of relationships or part of nets but also why nets are moving towards closing up.

In some cases, the reason for starting a relation or joining a net might be that of assumed spillover from one relation to another. This seemed to be an important reason in many relationships where one company is more advanced in some aspects than the other one.

In the 1960's and 70's, using the terms of Dunning (1989), the increasing investments in terminals, technical facilities, etc. of the focal companies and their agents seem to have given rise to ownership advantages due to structural imperfections based on size, technology, etc. while during the 1980's the advantages can be seen as being based more on transactional imperfections. Therefore the importance of intangible assets has increased. One such evolving ownership advantage has been the global network and the coordination advantages that come out of that.

The internalisation theory thus seems to be relevant for explanation of changes both of nets and of relationships.

Network approach

Network and internationalization

Johanson & Mattsson (1984) have argued that the Uppsala model does not seem to take the internationalization of context into account. They claim that the internationalization of the network or the "market" plays a vital role for the way a company internationalizes and therefore the Uppsala model seems to be more valid for companies establishing internationally in the early stages of "market" internationalization. The model would explain why net changes came to dominate over time as well as the difference between the gradual development of ASG and
net changes of IF. In the case of companies starting or continuing their internationalization process in an international context the authors state that other factors would have to be taken into consideration such as suitable agents already being tied to competitors, a higher need for coordination etc. These factors increase the interest for joint ventures or acquisitions. This situation seems to fit both IF being a 'late starter' and the situation of ASG and Bilspedition being 'internationals among others'.

Further, Johanson & Mattsson comment upon the fact, that "integration not only in a vertical sense but also in a lateral, decentralized sense " seems to be very important for such companies. In line with this reasoning they argue that extension and penetration are more important during the earlier gradual development while integration increases over time. Similar reasoning can be found in Bartlett (1986) and Martinez & Jarillo (1987) concerning the increasing importance of coordination and integration in MNEs.

This approach taking both the internationalization of the company and of its context into account seems to be far better when it comes to explaining the changes in the patterns over time than if only the internationalization of the company is focused.

A limitation of the model is that it shows different alternative situations for companies as the context internationalizes but not how companies over time might move between them.

**Secondary degree of internationalization**

Secondary degree of internationalization is applied to the phenomenon of internationalization of subsidiaries (Forsgren, 1991; Forsgren & Holm, 1991). As the subsidiaries of an MNE internationalizes the company grows into a multi-center firm in terms of decision location. Acquisitions will contribute to this development. A similar development is shown in this study, only that these subsidiaries also seem to follow a gradual or radical development pattern depending on the degree of internationalization of the context. The early subsidiaries developed gradually internationally through cooperation with agents while for those companies starting later the acquisition of a company already having established relations internationally was more likely. Internationalization of subsidiaries facilitates the understanding of the increasing interconnectedness of the network and the increasing complexities over time leading to repeated integration patterns of growth and change sequences.

However in this study secondary degree of internationalization is not only applicable to subsidiaries of the focal companies but also to agents and suppliers. The complications for the focal companies to handle internationalization of subsidiaries in a situation where most other companies are also internationalizing seem sometimes to be so large that radical solutions have to be chosen. A typical radical solution would be to buy another international company. However, this will change the negative and/or positive connectedness between relationships and give rise to new restrictions and opportunities which might lead to domino effects as a
result of increasing degree of overlapping of nets. The domino effects are initiated by pre­empted reactions to expected changes of the involved companies. Therefore the secondary degree of internationalization will precipitate the net level changes.

Community ecology
Similar sequences of changes as in this study are assumed to exist within the community or human ecology as typical changes when a community is changing over time. Even domino effects are mentioned as a possibility when a community is disturbed (Astley, 1985). Astley argues that closing up towards a higher degree of integration and exclusiveness within a net will increase the risk of a radical change. Change towards closure of a community unfolds through succession which means simultaneous changes in structure within and between populations. These changes involve development along two axes, the competitive and the symbiotic. He further says "if complex communities experience disturbance beyond a certain threshold level, they may disintegrate because of a domino effect" (Ibid p. 237). It seems as if it is important to know to what extent the community has reached a closure. Once closure is reached the change will be more extensive. Astley also comments upon what will happen after such a change which in turn gives support to the combination of growth and change sequences at net level. "A severe disturbance upsets the equilibrium and destroys the community and recovery of an equilibrium condition eventually occurs through ecological succession" (Ibid p. 237). The last sentence would indicate that moving into new growth sequences would be a normal development before as well as after a community had been fully or partly destroyed. These comments will also take us to the effects of these different sequences combined, which form patterns not only for the focal nets but also for other nets in the network. Astley mentioned that a domino effect was present when the community was seriously disturbed. A similar effect was shown in the dynamics of the transport companies except that it did not only stay within one net of basically complementary organizations but continued between different nets of organizations. This would indicate that many nets of the transport companies are interdependent on each other which causes the domino effect to occur between these nets. In this case the effects of the closure of community apply to the total network of transport nets rather than to a single net.

Distribution theories
Economies of scope and scale
Chandler (1990) pointed out the concepts of economies of scale and of scope in combination with transaction cost efficiency as very important driving forces for internationalization. Even
though this was based on coordination within a legal unity it seems to be relevant for coordination within a net of cooperating transport companies as well.

Further Dixon & Wilkinson (1986) argue that the underlying factors that affect effectiveness and efficiency in a distribution system are economies of scale and of scope. They show how these economies influence both technical and administrative sub-systems in a distribution system leading to positive and negative sequences of changes as one of subsystems or both reach an optimum.

For transport companies economies of scale can be applied to 1) a growth within an existing transport system 2) more transport systems of the same type within existing relationship, 3) more transport systems of the same type but linked to other relations. The last two alternatives will also involve elements of economies of scope in that the services are different and especially so in alternative 3 if it is a transport system to another country.

Economies of scale will lead to increased efficiency as volumes grow. As volumes increase there would be economies of scale for transport companies in the utilization of resources in the technical subsystem of the transport system. As for the administrative sub-system, when volumes increase more can be communicated and coordinated at the same time and the routines for communication could become more efficient. Second, it would also be possible to invest in larger and more advanced communication systems which is important for transport companies and increasingly so during the last decades.

Economies of scope on the other hand are based on joint utilization of resources for more than one type of system. Economies of scope can be 1) new types of systems within the same relation 2) new types of systems in other relations. The opportunities of joint utilization differ between the cases depending on the type of resources that can be used jointly.

There seem to be especially important gains in economy of scope in the marketing resources since the customers might need different types of service, customers might be situated in distant geographical places and might coordinate their purchases of transports. This is accentuated as the customers internationalize and the manufacturing industry decreases the number of suppliers.

Since economies of scope and scale seem to be different depending on the total volumes and number of services of a company, the structure and number of relations of the single company will be of importance. Therefore economies of scope and scale could differ between the organizations. These dissimilarities in potential gains of economies of scale and scope between single companies probably would increase the dynamics of a net and push for increased interaction between integration, extension and penetration as well as gradual development.
Over time the focal organizations seem to have been aware of the necessity of utilizing economies of scale and scope. Therefore they have reorganized into more specialized departments or divisionalized or separate companies, thereby getting a quicker access to the economic gains. This has also been suggested by Chandler as a common way to cope with the problems of costs for coordination and administration internally within large groups. However it is perhaps not only a solution to internal problems but also to contextual problem in the sense that what the firm is coordinating is not only its own resources but also the resources of other companies. The creation of these separate "part-nets" might be even more important for the increasing effectiveness in the coordination of the indirectly controlled resources.

On the whole, economies of scale and of scope facilitate the understanding of both a gradual development, interaction between integration and penetration and typical patterns of growth and change sequences at system and net level. However at net level scope seems to have a greater importance than scale.

Summarizing, each of the existing theories seem to support and explain different parts of the findings but none of them follow the development of a company and its sequences of changes over time from one stage to another taking context into account. Moreover the implications of domino effects for the internationalization of companies do not seem to have been studied.

10.2. Integration changes - Support, explanations and limitations of existing research

Integration has been shown in this study to be a process of basic importance for internationalization.

There are several important findings of integration which will be discussed more in detail.
- The content of the growth and change sequences at system level and at net level
- The variation of relative importance of the different aspects of integration have varied over time. Legal integration has increased very much during the 1980's leading to higher integration of the nets and part-nets created.
- The effects of increasing integration on positive and negative connectedness between direct and indirect relations.
- The speed of the change sequences increase.

We shall start by discussing the different supports for the content of the sequences by presenting the life cycle of the relationship and trust in and conflicts of relationships. Then after having shortly commented upon the effects of economies of scale and scope and their
contribution to the explanations of the content of the sequences we finally turn to discuss predominately net level sequences through raising the subject of acquisitions and mergers. The changes of positive and negative connectedness and the changes in different aspects of integration will be intervowen in the discussions.

Life cycle of relations
The studies on the evolution of a relation made by Dwyer, Schurr & Oh (1987) and Liljegren (1988) show a very similar behaviour to that of the growth and change sequences at system level. According to Dwyer, Schurr & Oh the relation starts with an awareness and an exploration phase realization of the problem, finding out possible alternatives and trying a cooperation Liljegren calls this the build up phase. In the first phase a new cooperation is built up. The next phase concerns expansion/ development and commitment which are actually a mixture of closer cooperation and enlargement. In the growth sequence at system level, closer cooperation includes increased integration in the existing relations and in the system while enlargement means an increase in the existing field of cooperation. It seems to be important whether the cooperation involves just closer cooperation within existing services or adding more services. Adding more services of the same or different type is important from the network perspective, since it changes the connectedness to other companies.

The studies of the evolution of a relation over time by Dwyer et al (1987), Liljegren (1988) and Gadde & Mattsson (1987) all include one or two phases of disintegration. Dwyer et al had one phase called dissolution. In the case study of Liljegren (1988) the relation studied did not dissolve but entered a phase of uncertainty which reactivated the existing relation. In spite of this Liljegren claims that there are two phases for dissolution, that of breaking a relation and that of withdrawal. Gadde & Mattsson (1987) observed in their study a gradual disengagement before exit. In very few cases there were direct switches to another supplier and to dissolution of the relation. The exit pattern could also be more complicated, being alternately strengthened and weakened. This combination of growth and change sequence at system level would give a empirical pattern of change similar to that found in this study.

Many other authors have touched upon the life-cycle of relations. Among them are Van de Ven & Walker (1984), who in their study of the development of relationships over time argued that the creation and expansion of the relation also contains the seeds of its disintegration. They claim that increasing formalization and monitoring in a relation cause conflict and dissension among the organizations struggling to maintain their autonomy, that the increasing transactions within the relation over time lead to a shift and that the domain of the organizations will shift from being complementary to becoming overlapping. These changes lead to an increase in conflicts and competition which in turn will lead towards a dissolution of the relation. This
would actually support not only the changes taking place in this study at system level but also changes going on at net level leading to more overlapping nets.

Trust and conflicts
Trust and conflicts are very important factors explaining stability and change of relationships over time.

As has been shown in the cases many relationships existed over a long period. The average time for ASG agent relations was 20-40 years. The same observations have been found in many other studies of the network approach.

Trust in different studies can be seen both as a motive and as an effect of a long term relationship (Young, 1992). The combination of these views on trust would help to explain the establishment as well as the continuation of relations. Heide & Miner (1990) comment that the very expectation of a continued relationship leads to a significant positive effect on cooperative behaviour including trust.

In most cases the discussion of trust is limited to single relationships and will therefore have implications at single system level rather than at net level.

However, according to Granovetter (1985), being embedded in a social network leads to a certain advantage in terms of trust. The organizations gain better and richer information through using the experience and knowledge being stored in the direct or indirect relationships. As a result of this, trust would play an important role at net level and also as a source of information and could, as such, help to explain the changes at net level as well.

The degree to which trust and stability are present in a relation is often dependent on complementarity and competition in that relationship. According to Mallen (1964) if conflicting objectives outweighs the cooperating the effectiveness will be reduced. When that takes place, a change sequence will be followed through.

However, the intensity of the conflict as well as the possibility that it will turn into a real conflict and not just a potential one is dependent on the age of the relationship, trust and communication (Anderson & Weitz, 1987). This indicates that a change into a continuation of the cooperation would be a natural development for long term relations of high trust and communication level rather than dissolution.

Håkansson (1987) widens the reasoning, saying that a relation has five significant and well documented characteristics which are duration of the relationship, adaptations made, technological content, range of contact and social content. These characteristics as well as the stake in the relationship will play a role when discussing the probability of dissolution of a
relationship. This indicates that whether the conflicts lead to dissolution depend on a combination of all these characteristics.

The nature of relationships, showing duration, stability and trust, would indicate that a gradual change in the growth sequence at system level and that the "opening up" alternative at net level would be more natural for cooperations than "joining of nets" involving larger acquisitions. However this does not explain the cases of dissolution of some long term relationships or the radical changes taking place more often during the 1980's.

In order to find explanations to these phenomena the concepts of positive and negative connectedness between nets might be of some help. In this study, changes in other direct or indirect relations in the network seem to be of importance for the balance between trust and conflicts within an existing relationship. If the changes increase the negative connectedness between two nets, this would escalate the conflicts within the existing relationship bridging the nets. The probability of this increases with secondary degree of internationalization.

According to Cook (1982) exchange networks are dynamic, as a result of actors' attempt to restructure power in networks. The number of desirable alternatives for coordination and the number of possible ones are in constant change due to power-balancing between the actors. This changes the interconnectedness in the network over time. Change in the power balance within and between the nets would perhaps help to explain a change in balance between trust and conflict in long term relationships leading to a final dissolution of the bridging relationship. Therefore at net level the degree to which nets are overlapping or complementary seems to be important for understanding the changes going on and why changes in trust and conflicts take place.

Economies of scale and scope and the content of the sequences

Over time, the companies coordinating the transport systems will develop in know-how of what, with whom and how to coordinate and communicate. As for the technical sub-systems, over time the development implies a creation of specialized equipment, utilizing the capacity of the means of transportation more efficiently and specialization of the roles between the companies more clearly. This process will necessitate a "closer cooperation" in a relation. Further, adding new transport systems relying on economies of scale or of scope based on existing competence would then lead to an "enlargement" of the relation.

At net level using economies of scale or scope would be adding systems into new relationships and thus gradually create a net or "opening up". As for "joining nets" it can be explained by making use of economies of scope or of scale depending on the type of nets which are joined.
O/O and O/C nets would be explained by scale economies while C/O and C/C nets would be explained by scope economies.

*Network changes, acquisitions and mergers*

Until the 1980’s the cooperations seem to have been based on informal or rather loose formal agreements concerning exclusiveness for a certain local area which enhanced the importance of the social aspect of integration. The development was gradual. During the 1980’s the legal investments through acquisitions were totally dominating which led to more radical changes and joining of nets.

If legal integration is an important way to increase efficiency through reducing costs and increasing environmental control (Williamson, 1985; Andersson & Weitz, 1987) then why were there so few acquisitions during the 1960’s and 1970’s when large investments and specialization took place? One of the reasons for this might be found in the utilization of economies of scope which actually involves a tendency for decreased specificity in the resources at the systems level.

Dixon & Wilkinson (1990) argue slightly differently. They maintain rather that there would be an interval within which an intermediary would be the choice and then, as volume and number of transactions increased further, an investment would take place. This would indicate that many of the relations in the 1960’s and 70’s were still too small in size.

Even though Williamson (1985) argues for acquisition of critical resources which include a very high asset specificity for a relation he does not comment upon the issue of integrating the resources or not. On the other hand Chandler (1990) found that integration between the acquired companies was necessary in order to increase efficiency. Otherwise the gains of economies of scale and scope were not realized.

Astley & Fombrun (1986) had found horizontal, vertical and diagonal interdependencies when studying development of large cooperations. This was also reflected in waves of mergers and acquisitions taking place over time. During the 1980’s when the vast majority of acquisitions were made of the three focal transport companies these were not of single companies but rather of nets and even though one of the above mentioned interdependence types dominated the others were mostly present as well. This is also in line with the reasoning by Cook et al (1989), who argue that very seldomly are there only positive or negatively connected nets but that the normal situation would be a mixed net which would play an important role for the changes over time.
However, looking at the acquisitions in this study in terms of Astley & Fombrun (1986) there have been a total domination of horizontal acquisitions if acquisitions of agent’s nets are included as horizontal. While Bilspedition showed a tendency to acquire overlapping (O/O) nets from competitors, ASG and IF acquired partly complementary nets (C/O or O/C) through acquisition of agents. At the end of 1980’s Bilspedition added some acquisitions of vertical nets through acquiring some shipping lines.

The diagonal type of acquisitions has been rather infrequent and took place mostly during the 1970’s in a period of diversification and specialization.

On the other hand it is important to note that the acquisitions of the nets during the 1980’s often involved small parts being vertically or diagonally dependent to those of the acquiring firms. Even though the vertical or diagonal parts might be small in some of the individual acquisitions, when there are numerous acquisitions they will finally accumulate to a larger share of the total activities. As they have grown to a more important role, they have to be dealt with. After a period of time, effects on the diagonal or vertical parts perhaps would call for action in terms creating separate part-nets within the existing net or having the parts disposed of. Therefore an expansion in one horizontal direction would probably bear the seed for future expansion either in a diagonal or vertical direction. This happened in several of the cases, as with IF’s development of airfreight services during the first years.

Moreover, the increased efficiency differs, depending on whether the acquisition was C/C, C/O, O/C or O/O. Letting fully owned companies continue to compete internally, which Bilspedition did, obviously did not lead to any increased efficiency but rather the reverse. In spite of their common ownership and the management’s expressed will, the O/O part-nets did not cooperate. This contradicts what Williamson (1985) says about hierarchies and internal control but supports what Chisholm (1989) found in his study on internal rivalry in hierarchies.

Quite often, according to the empirical findings in this study the cause to a merger or a contraction in a net might not derive from the focal companies but is a result of the agents leaving, realizing the overlapping activities between nets. The focal company might have to solve the situation by increasing cooperation between the existing representatives and accelerate the process towards "closing up".

Mattsson (1987) saw both expansion and contraction as important change processes in the network. Changes in networks could have many dimensions, becoming more or less hierarchical, more or less tightly structured, more or less homogeneous more or less exclusive. Both expansion and contraction would involve these but the degrees would be different. A net
contracting such as concentrating the international activities to fewer units would lead to a higher structuredness, more hierarchization and more exclusiveness than a net expanding through opening up or joining of nets. Basically a contracting net would change towards "closing up".

Explanations of speed and timing and increasing integration
Over time, the process of going in and out of the growth and change sequences will give the focal companies a certain experience of the costs of changing agents in different situations, which will probably also affect the way in which they act, i.e how far they will go in adjusting, the speed and timing of the change, etc. The very fact that they expect certain problems to occur when there is a "switch", for instance regarding the relationship between the focal company and the customers of the leaving agent, seems to lead to an increase in the speed with the objective to take the agent by surprise. This happened both in the Belgium event and in the large Scansped merger.

Movement in one or other direction might also be influenced by the expectations of future behaviour. Granovetter (1985) states that experience and information are richer and cheaper in networks. This knowledge can be vital for expectation on future behaviour and for decisions on changing positions. Taking Bilspedition as an example sooner or later it merged most of its overlapping companies or part-nets. This would give reason to believe that it would do the same when acquiring a new company in spite of any assurances it might give to the contrary. This would also increase the speed of changes.

Johanson & Mattsson (1992) use this argument when they discuss how a change in "network theories" for the organizations being part of the network, influences strategic actions. Those "network theories" would probably be based on the expected behaviour of companies in growth and change sequences in the network and on how the sequences are combined into patterns. A possibility to change the network theories would be to change the actors perceptions' of in what phase, in what type and with whom the sequences take place. This would be complemented with the knowledge and information from the network of how the specific companies move in the patterns.

The speed of the sequences also seems to increase over time. Therefore the timing of the new cooperation is important when discussing the speed.

The increasing pace of internationalization seems to be true also whether the internationalization includes acquisitions or cooperations or switching. Once the focal companies as well as the agents and subsidiaries develop several types of services the opportunities for "enlargement" increase. In most cases this decreased the time for growth sequences at system level. In some cases when there is a need for switching, speeding up the dissolution might cause some
practical problems when there is a very high interdependence between the focal company and the agent. How fast would it be possible to change even though there is an available alternative? The difficulties will probably increase with the size of the cooperation and therefore a start with a decrease in the field of cooperation would seem likely.

There will probably be many changes leading to spirals of increasing integration. First, there are internal reasons which originate from interaction between the integration aspects, interaction between the dimensions of penetration and integration and increasing effectiveness through economies of scope and scale. Second, there might be changes in the basic conditions like regulations, technology, infrastructure, which push for a continuation of increasing degree of integration over time or the development of new types of transport systems, new more efficient equipment, new communication systems, etc. Another important reason might be the changes in customer demands as a result of increased international competition for customers giving rise to demands for higher levels of reliability and speed in the existing transport systems.

The existing research on life cycle of relationships and trust and conflicts support and explain the changes mainly taking place at system level. Explanations to net level changes seem to be few and limited when it comes to explaining net level changes and its interactions with those at system level. Further the explanations to the increased speed of the sequences over time and the spiral of changes would need to be developed theoretically. The expectation of changes and the "network theories" could probably add to the understanding.

10.3. Extension changes - Support, explanations and limitations of existing research

The main results concerning extension which will be discussed here are:

- To begin with, extension was gradual as the single systems were integrated involving new countries while later, extension of net changes went either in leaps and bounds or was almost non-existent.

- Extension basically concerned that of first degree during the early years. The secondary degree of extension increased over the years as the number of subsidiaries increased.

- Internationalized organizations being directly or indirectly related to the focal company's total net (including the domestic parts) played an important role as regards the choice and the number of countries.
- The Nordic countries and northern or central Western European countries were among the first for ASG and Bilspedition while IF extended itself to the whole of Europe and to many overseas countries simultaneously.

The theoretical discussion will start by bringing up the concept of psychic distance used by the Uppsala School and combine this with indirect and weak relationships of the network approach. Then we continue to discuss the importance of regions and homebases. Finally we end up by discussing speed and timing.

**Psychic distance and indirect relations**

The Uppsala school combined extension with penetration through presenting the model of increasing commitment and knowledge. Their explanation for choice of country was based on a general knowledge of a specific country called the psychic distance. Psychic as well as cultural distance was supposed to be low to countries nearby compared to more distant countries, which also was supported in empirical studies (Hörnell, Vahlne, & Wiedersheim-Paul, 1973; Johanson & Vahlne, 1977). The findings by Nordström (1991) indicate that psychic distance would play a role but a more limited one and that there is an acceleration of the establishment sequence for the companies entering more recently. Further he comments that there seems to be a levelling out of the psychic distances between countries over time. This seems to be very similar to some of the empirical findings for the first degree of extension in this study. However, besides the psychic distance there are other vital factors, which also seem to increase in importance as the transport companies become more international and secondary degree of extension increases.

In the case studies the existence of direct and indirect international relations to the focal company in other countries would seem to have played a very important role. The concept of psychic distance is based on general factors of internationalization. However, the links in these case studies seem to be specific rather than general in character, and the indirect relations specifically seem to play an important role.

In the network approach, Granovetter (1973) argues that weak ties might be used as bridges to other parts of the network. When trying to develop into new areas it would be natural to look at these relations. Especially since there is knowledge about other organizations available through the network that reduces uncertainty, thereby taking away one of the reasons for the existence of psychic distance. This could be interpreted as supporting the importance of direct and indirect international relations in a focal company's total net in the choice of new countries. It seems reasonable though to expect psychic distance to play a more important role in the cases where direct or indirect relations are too distant or not available.
It is when customers, suppliers and agents become internationalized that the possibility of finding a direct or indirect international relations with other countries increases and the importance of psychic distance therefore decreases. This is also in line with the assumptions that the 'late starter' is less likely to develop according to the establishment sequence based on psychic distance.

"The extension patterns will be partly explained by the international character of indirect relations and the existence of entry opportunities" (Johanson & Mattsson, 1988 p 20)

Regions, extended homebase and secondary degree of extension.
Another factor to note is that the focal companies, as they become increasingly connected, are becoming more interested in regions than single countries. The Nordic countries e.g. are declared to be a homebase for ASG and Bilspedition. Europe is often seen as a single market as to which certain critical points are supposed to be covered. The changes in the European regulation and standards contribute to this. This would mean that extension for the 'late starter' will have another meaning and will be more dependent on the international network structure both of other transport companies and that of manufacturing companies. The sense of a base would include a secondary degree of extension between the countries being part of the base.

Finally, an important factor when discussing extension for transport companies specializing in transports by truck, by rail, by air, or by sea is that there are certain limitations on their economic and physical coverage. Over time certain of these limitations have been overcome by technological development but, for instance, when ASG started. ASG extension was dependent on the economic reach of the railway while Bilspedition, starting later with trucking and trailer traffics, was able to extend to areas more suitable for trucking.

Timing and speed
The speed of extension for a company starting to internationalize is dependent on when they start. These variances seem to support the differences between "early starters" and "late starters".

As for companies continuing to internationalize, the speed with which new nets are added and the degree to which these nets are C/C, O/C or C/O lead to changes in extension. All three might lead to secondary degree of extension while only C/C and O/C would increase first degree of extension.

Summarizing, it seems that there is support both for gradual change and for the increasing speed of extension. However the changes due to net sequences have not been developed in
existing research in terms of extension. Explanations are either limited to gradual changes of extension concentrating on establishment sequence or not formerly applied to extension in the internationalization process.

10.4. Penetration changes - Support, explanations and limitations of existing research

Only more important changes in penetration will be discussed. These are:

- On the whole, the three focal companies studied have increased their degree of penetration over the total period studied due to increased investments.

- The acquisitions of companies gave rise to further investments.

- Penetration in one country became over time increasingly dependent on penetration in another and changes in one country had their effect on other countries.

- The early gradual change was made together with agents. Over time greenfield investments and acquisitions increased. During the late 1980's acquisitions totally predominated.

- The importance of the aspects of penetration differs over time. In the early years of internationalization penetration increased gradually through size and spread of relations. This was in the 1960's and 70's followed by increased variety of services either contributing to new diversified relations or scope of relations of penetration. Then during the 1980's integration at net level predominated over penetration and there were increases as well as decreases, both in size and scope as well as spread of relations.

- Penetration in the sense of increasing growth in size of relation often resulted in further increases in integration level and therefore initiated new changes in internationalization.

The changes in penetration are mainly explained by the research on network advantages and the establishment chain.

Network advantages

The network advantages of a global organization are treated by a number of authors (Chandler, 1990; Johanson & Vahlne, 1990; Kogut, 1983; Magee, 1976; Vernon & Wells, 1976). They have been discussing the advantages in terms of information and knowledge, lower transactional costs, economies of scope and scale and possibilities to utilize locational advantages.
These types of advantages would facilitate the understanding as to why focal companies have continued to increase their degree of penetration of countries and why penetration was allowed to decrease during later periods at the expense of integration.

In this study, however, certain network advantages like economies of scale and scope and part of the technical and informational externalities were relatively quickly reached for the focal companies through creation of a net of agents. Basically the most important advantages during the early years seems to have been economies of scale and scope in marketing and production in the home countries for the focal company, as well as agents which made it possible to cover extended areas with a number of basic services.

As penetration increased over time new network advantages developed and increased in importance, such as using the same communications system, setting a specific quality standard for the net, creation of a common image, etc., all of which necessitated a certain investment in each country. Interpreted in the terms of Johanson & Vahlne (1990) these changes would lead to changes in the "advantage package" and to lower transactional cost activating the "advantage cycle".

The necessity of common investments for the net in order to gain these network advantages would contribute to an understanding of the concentration of agents that took place at the end of the 1970's and during the 1980's as well as the increasing number of subsidiaries. There was a need to give priority to certain types of investments which seemed more important than some of those existing. In order to be able to get the net to make these investments there seems to be a concentration to fewer agents and more subsidiaries, which has decreased the spread of and partly the scope of relations. This concentration of the net has also lead to an increasing homogeneity and perhaps hierarchization. Further as a result of the common investments, new information and knowledge advantages and new levels for economies of scale and scope seem to have been established.

As for the locational network advantage, presenting a possibility to arbitrage between international restrictions, the Common Market is deregulating and homogenizing its rules and this could offer an explanation for the priorities given to the European countries.

Choice of representation or establishment chain
As we discussed earlier, on the whole, the establishment chain, implying increasing commitments over time, was supported by the empirical results in this study, but it must be said also that the increasing of commitments was not only driven internally but also externally through actions taken by other firms.
Even though establishment in foreign countries has changed in the direction of more subsidiaries and less agents over time there have been combinations of representations which are of interest in relation to changes in penetration over a period. From the mid-1950's to the early 1980's a number of sales offices existed in Europe which in combination with the existing agents represented the focal company in the specific area. During the 1960's and the first years of the 1980's greenfield investments in foreign countries seem to have been more common than acquisitions. During the 1980's acquisitions dominated but, looking at the total penetration, they were often combined with the existing agents and former greenfield investments or former acquisitions. The new acquisitions mostly caused conflicts with the existing setting in the country, which resulted in further changes of penetration.

The establishment of sales offices only brought about a temporary increase in penetration. This contradicts the establishment chain hypothesis. The first sales offices created during the 1960's and 70's increased marketing and coordination of the focal company services in the country concerned. The number of direct relations to customers also increased for the focal company and this, in turn, gave rise to conflicts with the agents. After a period the contribution of the sales offices seemed to decrease and the sales offices were closed. However, the direct relations established by the sales office very often continued to exist with the focal company but directly from the home country at head office or divisional level.

Even though the number of subsidiaries increased over time there seem to be differences in the choice between greenfield investment and acquisitions. Forsgren (1985) argues that location, industrial structure and degree of internationalization would be crucial for the choice between these alternatives. Further he found that a greenfield investment would make it easier to keep existing relations to customers, suppliers etc, while acquisitions would make it less possible to do so. In many cases the companies started with a greenfield investment and then continued into an acquisition.

In the case of transport companies, however, in most instances a greenfield investment was taking over representation from an earlier agent leading to a competition between the new company and the former agent. Therefore many of especially the foreign customers and suppliers kept their relation to the local agent rather than to the focal company. On the other hand since many of the acquisitions were of agents these rather increased the possibility of retaining existing customers and suppliers.

Further, as the transport companies and the focal nets get more internationally interconnected, the choice between greenfield investment and an acquisition will rather depend not only on the location, the industrial structure and the degree of internationalization of the focal company but also the degree of overlapping between the acquired and focal nets. The choice between
greenfield investments or acquisitions in a foreign country became quite another one in cases where they would have to fulfil an international role. However, in an international role, both an acquisition and a greenfield investment might create large connectedness problems but in different ways. For greenfield investments the problems are to find new relations in other countries not already tied up and for international acquisitions the problem lies in adapting the acquisition’s existing foreign representatives in other countries to the new international net.

During the 1980’s, as the companies had the capital available, they obviously chose mostly to acquire international companies. In this way they acquired a number of international O/C, C/O or O/O nets leading to many positively and negatively connected relations and transport systems. The degree of overlapping within existing nets gradually increased over time.

In this study, the greenfield investments often involved taking over some of the personnel from the former agent, which increased the possibilities of retaining existing relations to customers and suppliers. This is less possible in the case of acquiring a company, which is not the former agent. Moreover, when companies merge and many agents lack new representatives, the personnel might well take the initiative to start a new company together with agents, as in the Bilspedition case.

**Timing and speed**

First, in line with the reasoning in Johanson & Mattsson (1988), timing and speed differs depending on the firm being a "late starter" or an "early starter". Second, as companies are internationalized, however, the speed of penetration seems to be subject to the degree of overlapping and complementarity of the joining nets and existing part-nets rather than gradual growth. Basically acquisitions of any net will lead to increased penetration. The only exception is merging O/O nets. Over time, as acquisitions have increased, penetration has also increased but, as the number of O/O nets increases, mergers as well as the speed of penetration will be reduced and even decreased.

Third, the changes taking place in other countries will also have to be taken into account due to the necessity to balance resources between countries.

Fourth, as was discussed by Dunning (1989) specific location advantages are supposed to be combined with internalisation and ownership advantages. This is of very particular importance for transportation companies since the rules and regulations for transports as well as for transport companies have been many and rigid. Through the creation of the internal market within EC the size of relations in the dimension of penetration seem to play a more important role. Indirect relations from the focal companies’ point of view or more direct relations within the net seem to be increasing in value.
In summary the establishment chain of the Uppsala School seems to support the overall changes of increasing commitment over time. However, this model does not comment upon what aspects of penetration that are changing and not on the decreases in some aspects of penetration taking place during 1980’s. The explanations to the changes of 1980’s are based on the degree of overlapping and complementarity between nets and the use of network advantages. The network advantages are difficult to get without making certain investments for the net in specific countries. Further, such investments also seem to be important prerequisite for continued integration This leads us to understand the importance of the interaction between integration and penetration.
11. A dynamic network model for internationalization

This model is based on a combination of empirical patterns of internationalization and basic driving forces to these patterns taken from the theoretical discussions.

The development according to the traditional gradual pattern of internationalizing has over time set the stage for a new different pattern of internationalizing through net changes. This has an impact both for continuation and start of internationalization. The new pattern increases the complexities and investments.

How the gradual pattern over time will lead to the new pattern used in the 1980’s will be expressed in three different sequentially dependent phases. The behaviour is described in terms of integration, extension and penetration i.e. the three dimensions of internationalization.

The dominant patterns of changes in integration are based on the sequences presented in the event analysis, both for systems and net level. Extension is shown as a result of integration which is also the case for penetration. Increases in penetration will further have an impact on integration which causes a continuation in internationalization once started. For all three dimensions speed and timing will be taken into consideration as an aspect of starting or continuing operations during the three phases.

The model will concentrate on the dominating changes over the period and not on all the parallel processes going on.
Finally, the driving forces to the internationalization process and their importance over time will be presented.

Phase 1 - gradual increase at system level (traditional pattern)

Period 1945-65

Integration: The changes are made through growth sequences at system level which are repeated over and over again. First the sequence concerns new cooperations in new countries and then it continues into several new cooperations within single countries. A gradual internationalization takes place.

Extension: The number of countries increases very much during this period. The majority of countries are geographically close.
Penetration: The growth in volumes is high and therefore the size of the relations grows. The spread of relations increases as the result of extension but also directly due to integration. The growth in volumes especially caused further increase in integration.

During this period the companies, whether they are starting to internationalize or continuing internationalizing, will be expected to follow the same growth sequence of integration only that they will have reached different stages in that sequence.

**Phase 2 - Increased specialization and diversification of services**
**(predominantly traditional pattern)**

**Period 1966-79**

Integration: Single systems integration is combined with net changes. Through the patterns of internationalization at single system level (1-2-1) a net has been created. Opening up at net level increases internationalization. Now and then joining of nets interrupts and causes a sudden leap in the gradual changes. Drifting closer and away to/from certain representatives’ nets seem to increase as many new nets have been created.

Extension: The number of countries increases further and this time to countries not covered earlier in Europe. Then there is a continuation to the overseas countries as new services are developed. First degree of extension is still most common but secondary degree of extension increases during the period.

Penetration: There is an increase both in scope of relations and in new diversified relations through adding new types of services. Specialization will sometimes result in a decrease in size of relations taking goods from existing services. However, after a period both diversification and specialization will lead to an increase in size of relations through growth. Further the increasing internationalization of the subsidiaries will also add to an increase in size of relations. During this period there will probably be a difference between the development of a company starting to internationalize and a company continuing internationalization in the sense that the former will have more joining of nets in the process.

**Phase 3 - net changes (new pattern)**

**Period 1980-90**

Integration: Growth and change sequences at net level are totally dominating and within these sequences joining and leaving of nets will be the most common depending on the situation. The
growth and change sequences at system level are results of changes at net level. Positive and negative connectedness and the increasing degree of overlapping between nets in the total network will lead to domino effects and a movement towards closing up for the nets.

**Extension:** The patterns of sequences will maintain the first degree of extension. The change will take place in secondary degree of extension. Moreover, extension is concentrated on large economically important regions like Western Europe or the Nordic countries or the Far East, etc rather than on individual countries.

**Penetration:** Penetration might decrease in favour of integration for an internationalized company since concentration to fewer agents and to subsidiaries will take place. A certain continued diversification in services like time-guaranteed transports, logistical services, etc., will also be behind an increase in scope of relations.

Starting up during this period will generally be achieved through joining of nets, first a C/C net and then others. Continuation can be made both through opening up or joining of nets but there will be an increasing amount of the latter.

**Driving forces for the process**

There are a number of driving forces which appear as important in the theoretical discussions. These are divided into driving forces being either predominantly internally or predominantly contextually driven. Some of these are subject to analysis in this study while others not. The internal driving forces are generated through the relations at system level and/or at net level. The contextual driving forces are generated from organizations being part not only of focal relationships and nets but to a larger extent of other relationships and nets being part of the same total network. Finally there are some important contextual driving forces added to this model which have not been subject to analysis in this thesis. The most important of these are customers' internationalization and technical development.

Since this study includes changes taking place for the companies both internally and in the context we have chosen to combine the most important internal and contextual driving forces. The basic criteria for the choice of driving forces from the study have been that they are 1) repeated as important explanations in many different discussions 2) underlying many of the explanations, 3) initiating other driving forces to change and 4) seem to exist over all periods. All of these driving forces are accepted to continue to the extent that they might create a higher effectiveness for a focal transport company.

Some of the contextual driving forces are added even though they are not directly studied in this thesis. However, the reasons for their presence among the driving forces are that their
importance has been mentioned several times in the study and that they are vital prerequisites for the internationalization processes of transport companies.

These driving forces interact in the development of this process of internationalization.

The most important driving forces are:

Internal -
- Trust in relations
- Economies of scale and of scope
- Intangible assets (creation, development, access to, protection of)

Contextual -
- Number of direct and indirect relations
- Positive and negative connectedness
- Expansion and internationalization of agents, suppliers, etc.

(Not directly studied in this thesis)
- Customer internationalization and customer demands
- Technical development (means of transportation, equipment, etc)
- Rules and regulations
- International trade and economic situation
- Infrastructure

Even though they are all important driving forces they differ in importance during the phases.

**Internal driving forces**

Trust in relations and the stability it creates, is an extremely important prerequisite for the growth of single relations. Since internationalization of transport companies to a large extent is based on establishment and development of a large number of relationships trust is a vital force. This was especially the case during the first two phases of internationalization when single system integration was still vital for the development. Later when large nets are present each single case is of lower importance but the type and number of organizations by which they are trusted still affects the trustworthiness of the focal company in the network.

Economies of scale and of scope are both very important over the whole period but from different aspects. During the first period gains, of economies of scale dominate through growth in existing systems and adding more of transport systems of the same type. During phase 2, which involves specialization and diversification of services, economies of scope are present between different types of services and relations. In these cases economies of scope are gained through utilizing the same facilities, market knowledge and marketing resources, communication systems for different services, etc. During this period specialization resulted in economies of scope sometimes being reached at the cost of economies of scale. In phase 3 both economies of scale and scope are of importance since the demands of the customer on higher frequency in the transport systems have increased the importance of scale and the offering of alternative services is vital.
Intangible assets

The creation, development and protection of and obtaining access to intangible assets are important driving forces over time. During the 1950’s and 60’s the existing intangible assets of the focal company are developed and new assets are created in the more vital relationships. As the focal companies become related to an increasing number of organizations the intangible assets will be developed and spread over many relationships and their transport systems. In this way intangible assets create a higher interdependence between the companies in the net.

Over time, furthermore, the intangible assets, being strategic for the net, will be of importance to protect, especially from organizations being part of negatively connected nets. On the other hand, obtaining access to new strategic intangible assets might be important for future development and therefore new relations have to be added to the existing net. As valuable intangible assets are developed and become more specialized over time through different investments in know-how and relations, the companies in the nets are more aware of the risk of leakage and spillover which can take place. Therefore companies in a net will react more to changes in relations that will have an impact on negative or positive connectedness between nets. Through developing and protecting these intangible assets we create network advantages.

Contextual driving forces

The number of direct and indirect relations is an important contextual driving force. When starting to internationalize the number of relationships with international activities will increase the opportunities for the focal company to become internationalized. Later the number of direct relations will increase in trust, due to economies of scope and of scale and the development of intangible assets will increase the degree of internationalization over time. On the whole, the number of direct and indirect relations will play a very important role for the development into new areas and services. However, the ties to other companies are not only important for the possibilities to expand but they also create restrictions for developing into specific areas and services. Finally, as the total number of direct and indirect relations grows, the possibility to protect the intangible assets decreases which in turn might lead to closing up of the net.

Positive and negative connectedness and direction of changes of these are important for the development during all phases.

In the beginning, the very fact that the focal company in its relationships is positively connected to internationally related companies, either being directly part of the same transport systems or with other types of connections, seems to increase the probability that they internationalize over time. When changes occur in the conditions of effectiveness for the transport system the focal transport company might take the opportunity to internationalize or might be driven to do so. It
might even lead to a situation where these other companies are pushing them towards internationalizing.

In phase 2, the connectedness will lead to new conflicts and cooperations, due to the diversification and internationalization of subsidiaries, agents, suppliers and other partners. Therefore the situation will have to be rearranged in order to avoid conflicts leading to decreased effectiveness, the risk of the agent breaking the relation and to protect against leakage of intangible assets. As for the new cooperations, there might be a possibility to gain access to valuable intangible assets and reach economies of scope and scale by adding new resources.

In phase 3, when most transport companies are internationalized and/or are part of international nets then the negative and positive connectedness between nets will be increasingly important for internationalization. These changes will be discussed in terms of the other nets which are overlapping or complementary in type of service and area covered (C/C, O/C, C/O or O/O). For companies starting to internationalize during phase 3 this is made through a C/C or O/C net while the changes and the effects of the nets being O/O,C/O,O/C or C/C will be of extreme importance for a company continuing the process. Further, the direction of net development in terms of connectedness is important. The companies might be drifting away or drifting closer and the expectations on future continued development in the same direction would cause companies to take certain proactive actions. Such expectations of changes positive and/or negative connectedness might lead to domino effects in the total network.

Expansion and internationalization of subsidiaries, agents, suppliers and competitors. The same type of changes and driving forces as described above are assumed to be applicable to the agents, suppliers, competitors etc. Especially the expansion of subsidiaries and agents into other areas geographically as well as into other services will either result in changes in the degree of overlapping or degree of complementarity between the organizations which will then forward internationalization in new directions. The fact that the agents, suppliers, etc., internationalize leads to an increase in the interdependence of the total network as well as helps to create possibilities for closer cooperations with certain trusted organizations while others will be left outside. This will lead to the development of nets.

Customer internationalization and customer demands are an important driving force for the internationalization of the transport companies. Changes in demands on more international transport and higher control of international systems have caused transport companies to internationalize and integrate their systems. The internationalization of single customers will be especially important in the beginning of the internationalization process while as transport companies grow internationally the demands of the customers will be of higher importance. The demands on new and more effective transport systems will stimulate the transport companies to move into new areas and services over time. Further, some of the services developed are based
on taking over parts of the activities formerly performed by customers like warehousing, packaging, distribution, etc. As customers develop into MNE with international or global distribution networks this will have an impact on the continued internationalization of transport companies both in terms of what regions are of importance to cover and the service offers needed to be considered an important supplier.

Technical development creates opportunities and limitations for the transport companies. New types of systems have another reach, as in the geographical reach of the airplane in comparison to land-transport, etc. In other cases the development and diffusion of container technology changed the possibilities for the freight forwarders to control their goods and to further integrate in their systems. Therefore the technical developments create new opportunities as well as change the possibilities for differentiation within the systems and nets. Technical development leads to development of new services as well as gains in economies of scale and of scope, which will have effects on the existing services and changes of roles between transport companies.

Rules and regulations are important driving forces. If they are changed there are always some companies that can take advantage of the changes. After the war, trucking traffics were strictly regulated to shorter distances but when this was changed it started a wave of development of trucking transports. The expected harmonizations and deregulations have caused and will cause large changes in the opportunities and threats for the transport companies during the early 1990’s.

Infrastructure, international trade and economic situation will also have an impact on the opportunities for transport companies and to the extent that they develop positively over time. More trade, better infrastructure and industrial growth would increase the possibilities for many transport companies to start or continue internationalization.

Conclusion
The patterns of changes and the driving forces seem to lead towards closing up after a long period of increased interconnectedness. If it continues this development would lead to a clustering of the network into separate nets and also increase the total level of integration in the network for transport business. The intention to develop and protect these clusters might lead to the domino effects. These domino effects break up existing clusters and lead to the formation of new clusters. However on the whole the clustering seems to increase. A simplified illustration of a the growth sequence and change sequence at net level is shown in figure 12.1.
Phase 3 (period 1980-1990)
Patterns of net changes

Closing up

Direction of change
• = organization

Main direction of change

Figure 12.1. Patterns of changes at net level. Illustration of two nets closing up

The question is to what extent will this closing up continue? What factors might put an end to this tendency? Based on this, what conclusions concerning changes of the total network are possible to draw for the transport companies in the future? This will be discussed under continued research.

What are the available strategies for the future in such a situation? This will be discussed under Managerial Implications.
12. Managerial implications

The main interest in this chapter on managerial implications of the results, will be in formulating strategies based on the dynamic network model of internationalization. Furthermore interest will be focused on the new patterns of internationalizing. The strategies thus formulated should be regarded merely as ideas as to how it would be possible to adapt the reasoning in this thesis to management issues. Being mainly ideas to implications also signify that they are still formulated in the conceptual framework of this study and will therefore not be described in the everyday management language.

The model presented in chapter 12 will serve as a base both for an understanding of what changes are going on in the network and formulating strategies for a specific company and net. Further the basic concepts used are clarified in the model of analysis (chapter 4).

The strategies will differ depending on stages in the sequences of changes for transport companies showing typical ways of growing and changing found in the study (chapter 9). We will discuss the strategies for each stage of the sequence separately in terms of its driving forces and its specific problems and strategies. This will serve as a base for a more general strategy formulation. The type and strength of driving forces are especially important both for choosing suitable organizations for cooperation and for continuation of the stage. The final generalization of strategies will summarize the sequences of changes in the form of general comments and three basic factors. These are content, speed and timing.

12.1. Expansion and growth (the growth sequence at net level)

Joining of net (s)

This is a very open stage where the number of direct and indirect relations to other organizations is high and the level of integration in the net relatively low. An example of joining nets is when a focal international company is acquiring another international transport company. The interaction with companies outside the existing net will be very high. Positive and negative connectedness will be shifting. Former competitors may turn into partners and vice versa. The effects on suppliers, competitors, partners etc. will not have had time to settle though. During this stage the potential gains due to economies of scale and of scope from the change have not been realized and the new strategic intangible assets of the net not developed. The spillover and leakage of existing strategic intangible assets are probably high since trust in many relationships is not yet established and the borders of the net are not yet clear.

Important strategies for the specific company in this stage would be to search for knowledge and information about the total network through the existing relationships as well as to search
for valuable intangible assets such as critical knowhow, design of transport systems etc. that could be developed and spread in net at a later stage in the sequence. It seems important to establish trustworthy relations to the representatives showing these future capabilities.

A way to identify a suitable net to join would be through using the contact net of the existing direct and indirect relations to owners, suppliers, representatives etc as well as the knowledge and information of those contacts.

**Closer cooperation**

The stage of closer cooperation is focusing more on existing relations than the former one and is also less exposed to changes and effects outside the net. The strategic intangible assets should be developed in existing relations and adapted to or changing the existing systems. An example could be creating a new communication system that is to be used by a large number of companies cooperating in the net. The gains from economies of scale and of scope in existing relationships will be exploited and standardization and formalization will be present to a larger extent. This stage will be very important for the establishment of trust in the relationships but at the same time internal conflicts will become more obvious. This will affect the degree of positive and negative connectedness between representatives in the net. One of the effects of this stage might be that the focal company will drift closer to other nets through the closer cooperation with some of the existing agents. This will be a possible indicator of future relations to develop.

Exploitation of all possible economies of scale and of scope and the development of strategic intangible assets within the existing relationships, would be typical strategies in this stage.

**Closing up**

A net closing up will become increasingly interconnected. A typical example would be when a focal transport company, their subsidiaries and very close agents to a larger extent cooperate with each other excluding others. It is probable that a common image for the net is created. During this stage there is intensive homogenization within the net in terms of systems design but heterogeneity in terms of the roles of companies and their representation for different areas. This implies that economies of scale and scope are continuously exploited and the profitability increasing. The possibility for a company to change its position is limited in the network since the network effect of such a change would be considerable.

The strategic intangible assets are well protected, due to greater distance to other nets. The disturbances from organizations outside the net will have to be strong in order to impose changes since the companies are so interconnected. During this stage there will be a spread of the intangible assets and a continued homogenization and hierarchization will take place. The existing positive and negative connectedness within the net will be very clear. Companies not willing to adapt and to invest in common resources, will have to leave.
Very high stability and trust could be a problem, in that it might lead to a stagnation and decrease in the value of the intangible assets. It should therefore be necessary to increase the search for new strategic intangible assets and to continue development within the existing relationships. In spite of the high stability and the relatively low impact of much of the changes in the context, companies should be very much aware of what changes are going on since a disruption to their stability would be costly.

If the closing up will achieve successful results other actors of other nets will probably imitate the way of internationalizing. This will in turn be a reason for continuing the process of closing up.

12.2. Reducing cooperation (The change sequence at net level)
The change sequence on net level is usually less clear in its form than that of the growth sequence. However it is very important when it comes to forming strategies, since it concerns divesting in the set of existing cooperations and preparations of a new base for growth.

**Drifting away**
Drifting away from another net is based on decreased priorities put to cooperation with certain agents which also are tied to one another or to other nets.
This stage is important merely for its first indication of changes in priorities going on. It does not change relationships more than marginally but it points at the direction of changes in terms of overlapping or complementarity of nets. Being aware of these changes would seem to be very important for a company. Risk of leakage or spillover of important intangible assets might be the reason behind these changes. It has an impact on the distance to indirect relations. Drifting away seems to be an indicator of cooperation between companies when cooperation is either already loosened and/or becoming looser in the future.

**Looser cooperation**
The stage of looser cooperation might develop due to depreciation of valuable intangible assets, decreasing economies of scale and of scope or to disappearance of certain network advantages. Further it might be a result of decrease in trust, change in priorities and an increase in competition between companies.
However depending on the length and strength of the cooperation such companies may be interested in finding a new common solution. Sometimes there will be a change and a looser cooperation will not continue into leaving net.
Crucial factors here are if cooperating companies desire to continue their relationships or not, the cost of breaking a relation and the number of alternative cooperations available. If this stage shall continue into that of leaving the net, it has to be planned. If there is a a reason and will to
continue the relationships it will be likely to continue into a stage of closer cooperation instead of dissolution.

A strategy for this stage might be to look for the underlying changes causing this situation and see if it is possible to regain lost economies of scale, of scope and of intangible assets or if new alternatives have to be found.

**Leaving the net**

This stage will differ very much in time depending on the amount and type of resources and relations involved in the restructuring. Leaving a number of cooperations almost simultaneously will normally be costly. Furthermore, the compatibility between probable new resources and of the existing resources will be of importance. The learning cost for a new alternative and the possibilities to exploit the existing skills and know-how will be important.

Where will the existing net or part net go? Will a substitution be found easily for the focal company or will it be necessary to wait and invest in order to find new representatives? In some cases there may even be special costs associated with breaking contracts when leaving the net. The divestment costs for leaving a net will vary, depending on the situation.

There is a high instability in this phase, not only for the companies involved but also for other indirectly involved companies. The effects on the context will be large and domino effects might be present. Therefore the necessary investments might increase drastically compared to what is expected. The costs involved of a drawn out process might be very high. Thus a quick outcome can be vital.

12.3. General strategies and dimensions adapting to specific company situation

An important general strategy would be to follow the growth sequence through in order to get the necessary gains. If disruptions are likely it would seem important to go through the change sequence as fast as possible. In order to avoid too many disruptions, the creation of part-nets, smaller net within the total focal net, will make it more likely to be able to follow the growth sequence towards closing up. However the general strategy will have to be modified depending on the situation of the company in question. Further there are the three basic factors of content, speed and timing according to which strategies are changed or modified to fit the situation of a specific company.

**Content**

The content of a stage can be changed in order to make the stage include or exclude more/less of or different resources and relationships in different areas.

This will be important in the cases when companies seem to think that the stage offers more or less than intended or expected. For example in the case of joining nets, more and different resources are added with the purpose of increasing the gains in economies of scope and scale
within the existing relations. This would lead to an increase in content. In other cases the reverse situation might be present.

*Speed*

Speed can be slowed down by the actor and therefore delaying the next stage or it can be accelerated. Both cases seem to be of high importance in relation to changes of the context. Slowing down/delaying can be used when there exists a wish to delay the next phase. Delaying can be made through twisting rules in contracts, or finding any excuses not to enter the next stage. One important reason might be that a company can foresee that they have to leave the net but finding new alternatives is difficult. Another reason might be that the company does not want to become more dependent on a specific net.

Speeding up on the other hand, aims to get all the possible gains from the on-going stage but during a shorter period. This seems to be extremely important when it comes to the costly stages like joining nets, leaving net or looser cooperation. Speeding up into stage of closer cooperation and closing up is necessary in order to get a better profitability.

*Timing*

Being part of a changing context makes timing extremely important. Following what is happening to other companies and other nets is vital in order to make use of the opportunities and risks that will stem from these. As the context constantly changes, the timing of when to join or leave a net or when to proceed into the next stage in the sequence seems to have a large impact not only on the possibility to act but also on the effects of the action. Therefore the timing for a specific company of moves in and out of the stages in the sequences, will influence the possibility to use the changes going on in the total network instead of being subject to the effects of them.

12.4. Conclusions

An important conclusion for the specific company as well as for the net is to continue the growth sequence from the stage of "joining nets" into that of "closing up". The changes taking place on the way are likely to have a positive impact on profitability and create a stronger position of the company and net in the total network. For a single company the main factors used for changing their position would be the content, the speed and the timing of the stages in the sequence.

Further, the choice of cooperation for each company will be determined by the type and strength of driving forces involved.

The change sequence which basically concerns a potential divestment should by necessity be as short as possible either by a return into closer cooperation with the same partner or by dissolving the cooperation with the adaption to the new partner in mind.
The strategies formulated here assume that the companies are aware of their situation in a net as well as of their relations to other nets.
13. Continued Research

The findings of this thesis pose a number of questions that would be of interest for continued research. Some questions of importance concern the problem of generalization based on case studies while others concern development of existing theoretical research. We have chosen to focus on questions related to the network model of internationalization, the industry dynamics involving domino effects, on forces that serve to stop the further internationalization processes and finally on the interaction between the transport companies and some of their customers in the process of internationalization. We start by discussing the model of internationalization involving the changes of patterns of sequences and driving forces.

The dynamic network model of internationalization

First, to what extent can the model be generalized and applied to other types of companies? In the model of internationalization the companies concerned change their pattern of internationalization over time. The sequences that they are part of differ depending on the context. The notion of companies being part of nets and changing through these rather than as separate companies would be of interest to study for other type of service companies like banks, insurance companies, advertising agencies etc. Is the same phenomenon present for them as for the transport companies?

Further, it would be of interest to know whether the suggested network model on internationalization can be applied to manufacturing companies. Many researchers applying the industrial organization approach have formulated a need for further research which takes the higher interdependence within the context into account. At the same time network researchers have formulated an interest to continue into creating a dynamic model of internationalization. Distribution researchers look upon distribution systems as networks in order to be able to combine sets of distribution systems and to discuss the interaction within and between these.

Second, a question of importance concerns how the model is related to that of the choice of, development of and the interaction of the driving forces. Are there any other driving forces which seem to be of equal importance as the ones mentioned here?

Third, there seems to be many interesting questions for further studies as regards each of the specific driving forces. Some of these will be further elaborated here.

Trust, which is a very important concept in the network approach, is a relationship phenomenon. An interesting question is to what extent other relationships in a network have an impact upon trust in a specific single relationship. It seems in this study that the knowledge and information that are available in networks (Granovetter 1985) will play both a positive and negative role for trust between the companies in the network.
Another question is the protection of intangible assets and the boundaries of a net. What is of importance as regards the intangible assets when it comes to setting border of a net? If the intangible assets are important for the choice of actors taking part in closing up they would probably also have an impact on the design of the net as well as its borders.

Further as was discussed in the dynamic model of internationalization the scale of economies and scope of economies seem to play different roles over time. Are these changes typical for other service companies as well as for manufacturing companies?

Another matter is the influence on internationalization of direct and indirect relationships. There has been a number of network studies concerning the importance of having a high number of indirect relations for development into new areas. This seems to be a fruitful way of looking upon internationalization for companies especially as they start to internationalize.

Finally, the behaviour in the past seems to set restrictions on how the company can internationalize. For example the degree to which companies develop overlapping nets with their agents through subsidiary internationalization will have effects on the possibilities of future growth of their existing relationships and their abilities to select new representatives in other areas. Therefore the past behaviour of establishing subsidiaries limits their possibilities to develop in the future. This past dependence would be of interest for further studies.

**Industrial dynamics and domino effects**

The domino effects is a phenomenon worth studying to a much deeper level. The high interdependence between companies that is the cause of these effects lead to a new type of industry dynamics. Similar types of effects might be experienced in several other industries like banking, insurances and advertising. In this thesis we have only followed some cases and from the perspective of internationalization. An interesting question would be to find out the costs of domino effect-related network changes and how the negative effects could be reduced. Finally studies of domino effects should involve their influence on the total network.

Another interesting field to study would be to continue on the idea of "network theories" developed by Johanson & Mattsson (1992) and discuss to what extent the domino effect induce and is a result of changes in "network theories" of the actors in a network.

**What are the forces that will stop the movement towards closing up and further internationalization?**

What are the forces that will lead to a decrease in terms of internationalization and how will that influence the situation of a specific company? We have seen in this study that sometimes companies decide to decrease in one dimension of internationalization for a shorter period in order to get future gains. However in some cases there might be decisions to decrease the
degree of internationalization for a longer period. Some of the interesting questions related to this concern the basic reasons for such a development and if the driving forces are the same.

**Interaction between transport companies and their customers in the process of internationalization**

We know that international transport systems are interdependent with manufacturers' international distribution systems. It would be of interest to find out when and to what extent the changes going on in the transport systems are caused by underlying changes in the international distribution systems and how the manufacturing industry takes transport alternatives into consideration when internationalizing? Such studies on the interaction between transport and manufacturing companies would indicate what importance the effectiveness of the transport systems and the design of net of the transport companies will have for manufacturers' development, and also indicate how internationalization of a transport company influences that company's capacity for customer orientation and its cooperative strength.
References


Englund, M., 1990. Inter-organisatoriska Informationssystem.- En utvärdering av potentialen i fem svenska fall av datoriserad kommunikation med kunder. Stockholm; IMIT at the Stockholm School of Economics.


Gundersen, H., 1975. NSB- med Linjegods i lasten. Oslo; Pax Förlag A/S.


Laage-Hellman, J., 1989. Technological Development in Industrial Networks. Uppsala University; Department of Business Studies; Uppsala (Dissertation).


Lindholm, S., 1979. Vetenskap, verklighet och paradigm. Stockholm; Almqvist & Wiksell Förlag AB.

Lindqvist, M. "Infant Multinationals - The Internationalization of Young Technology - Based Swedish Firms. Institute of International Business; Stockholm School of Economics (Dissertation).


Regnell, H., 1982. *Att beskriva och förklara*. Lund; H. Regnell and Bokförlaget Doxa AB.


Appendix 1

ASG case

Primary sources of information

Interviews:
- B. Jönsson (President, formerly responsible for European Division)
- B. R. Hansen (Vice Pres. - responsible Overseas Division)
- R. Teltscher (Dir. European Division)
- B. Stödberg (Man.Dir. of the subsidiary Road Ferry /former Traffic mgr. of Continental Division, board member of ASG Belgium)
- A. Brunninckx (Man.Dir. of ASG Belgium)
- L. Enquist (Traffics Mgr. of special European markets)
- J. Andresen (Man.Dir. of ASG Deutschland)
- R. Müller (Man. Dir. of Atege Stuttgart)
- R. Hertz (former Manager of Overseas Division)
- W. Rueger (responsible for Sweden traffics by Natural AG)
- H. Bell (Director of Natural AG)
- R. Wilton (former Man.Dir. of ISA)
- H. Larsson (former Man. Dir. of ISA, Vice Pres. of Bilspedition)

Other persons contributing with information material

E. Westling (form. Man. Dir. of ASG Belgium, former Mgr. of European Repr. Office)
A. Lundström (Finance Mgr. member of the board of many international subsidiaries)
M. von Baumgarten (ASG advertising, information)
M. Hellström (Administration)

Secondary sources of information

Annual Reports 1967-90
Sales Material, pamphlets etc
Earlier reports on specific topics (concerning agent representation, WACO, company planning etc)
Protocols from meetings
ASG Internal magazines
Articles, interviews in papers, etc

Bilspedition case

Primary sources

Interviews:
M. Lundberg (President, Bilspedition Group)
E. Sterner (Man.Dir. European Division Scansped)
B. Madsen (President Scansped Group)
L. de Leeuw (Man. Dir. Scansped Belgium)
I. van Beurden (Administration, Scansped Holland)
L. Törnqvist (Man. Dir. Scansped Sweden)
J.P. Blumröder (Finance Dir. Scansped Germany)
H. Kuhlmann (Man. Dir. Gebr. Hellman, Osnabrück)

Other sources contributing with information
S. Osvald (Dir. Group Corp. Communications)
D. Fagring (Dir. of information Scansped Group)
R. Rux (Scansped Group)
A-C Kutzner (Administration Scansped Sweden)

Secondary sources of material

Annual Reports 1960-91
ACC Group - ett kvartsskek
Special information 1983, 1985, 1990/91 invitation to buy new shares
Pamphlets and sales material (Scansped Group, Scansped Belgium, Scansped Holland,
Bilspedition and Gebr. Hellman)
Scansped Magazine
Lists of international representatives: Bilspedition 1967, ATA 1988, Wilson 1988,
SkandiaTransport/ F&L 1988, Scansped 1989
Articles in magazines and papers: Affärsvälden, Dagens Industri, etc.
Inter Forward

Primary sources

Interviews:
H. Bergström (President Inter Forward)
A. Sörås (Senior Vice President Inter Forward)
G. Stolpe (Senior Vice President Inter Forward)
E. Scherer (Former Man. Dir. Züst & Bachmeier)
N. Fischer (Dir. Züst & Bachmeier, Stuttgart)
G. Wild (Dir. Züst & Bachmeier, Nürnberg)
A. Herzog (Fin. Dir. Züst & Bachmeier)
H. Johannecken (Man. Dir. Züst & Bachmeier)
L.W.H. Leibbrand (Man.Dir. Amas Holding)
A.M. Hageman (Man.Dir.Copex Air)

Other sources contributing with information

K. Åström (Fin. Dir. Inter Forward)
L. Larsson (former Man.Dir. NAC, special responsibility Züst & Bachmeier reorganization)
R. Teltscher (Dir. NTS Gen. Cargo)
G. Glimstedt (Controller Inter Forward)
Speeches and discussions at the Inter Forward Group Conference June 1989 in Stockholm

Secondary sources

Inter Forward Group Conference material
Sales Material and Pamphlets (Amas, Z&B, Copex Air, IASA, NTS Denmark)
Lists of international representation 1985, 1989
Articles in magazines and papers
Interview Guide

Letter to President

Internationalization of the transport companies from a network perspective - S. Hertz
(Economic Research Institute at the Stockholm School of Economics)

Febr. 1989

Interview guide

General

The interviews are semi-structured and therefore I only present the different areas that I
would like to talk about. It is up to the person interviewed to decide how they want to
comment on the area in question.
Hopefully I can perform these discussions with persons from different levels in the
organisation (for ex.1-2 persons at group level, 2-4 persons at divisional level and 3-6
persons concerning a specific event more in detail). If the company agrees I would also
like to meet some long-standing customers and find out how they have reacted to
changes made by the transport company over a period.
Each interview will take at least two hours.

Group level

My main interest here is to find out historically how the Group has grown internationally
over a period and how the network of companies with which the Group is cooperating or
competing has changed over a period. It would also be of interest to be given a
description of the important events for the Group over a period when internationalizing.

Question areas:

1. Facts about the Group

Type of services (basic, complementary)
Type of resources (means of transportation, terminals, know-how, personnel, etc)
Type of organization (functional, divisional, etc.)

Changes over a period concerning services, resources and transport systems in amount
and size and in strategic importance for the Group.

Material like annual reports, organization charts and other descriptions of the Group and
its development over a period are important as a complement.

2. Business policies for internationalization of the Group concerning

services offered
resources (owned, controlled in other ways)
representation abroad
management
financing
info/communication system
etc.
Change over a period and reasons for change.

External or internal reports and statements concerning policies are examples of material that could support the discussions.
3. The Group and the network

3.1 Task environment

Customers  
Partners/agents  
Suppliers  
Competitors  
Others (like different authorities, banks etc)

Relationship characteristics (cooperative ventures, conflicts, dependencies, contacts etc.)  
Number of years that other companies have existed in the specific categories. Strength in the relationship to the Group.  
Changes in respect of the companies within these categories in the exchange in responsibility, in payment/compensation, information/communication and in the flow of goods, etc.

3.2 Other parts of the network of interest

Other types of transport companies (not direct competitors)  
Other types of industry  
Other types of suppliers within the field (not mentioned above)  
Other partners/agents  
Others

Existing connections between these other parts of the network and the companies in the task environment (over a period of time).  
Change over a period in how these companies have been connected in groups or smaller nets of companies.  
Positive or negative relations between the different constellations of companies.

Material that could be of help would be details of change in market shares over a period, brochures, possible other reports of historical value concerning cooperations, contracted agreements, conflicts, etc.

4. Specific events of importance for the Group

Criteria for importance of the events. Possible reasons for the change.  
Materials of interest here can be historical reports, statements, etc.

Level II - a specific unit of the Group (like a division)

The interest is focused on how the unit has changed internationally over a period.

1. Facts about the unit

Type of services/traffic systems  
Volumes  
Sales  
Profitability  
Investments (in different types of resources)  
organization  
etc
Development over a period of these variables.

Materials of type annual reports, brochures, etc would facilitate.

2. The unit in the Group over a period

Reasons for being a separate unit
Cooperation and conflicts with other units in the Group
Borderlines between the units

3. Business policies of the unit

Type of resources
Type of representation abroad
Type of management
Type of info./communication system, etc

Changes over a period

4. The international representation

Location of the different type of traffic systems/services
Location of fully or partly owned or controlled in other ways representation
Location of partners
Location of suppliers involved
Other companies of importance

Characteristics of the relationships
Changes over a period in location of, type of, importance of, etc
Reasons for change over a period
Conflicts with the unit over a period
Criteria for choice-change over a period
Cooperations and conflicts between the different partners, suppliers, etc

Lists of representation abroad from different periods of time would be valuable.

5. Customers

Long term relations /short term relations
Type of
  Development
  Geographical spread
Importance to the unit

Changes over a period.

Internal or external articles or reviews, etc., that present different customers and their relationship to the unit would be of interest.
6. International net

Characteristics of the systems
Flow of goods
Technical development
Marketing
Personnel
Responsibility
Compensation/payment
etc

Changes in efficiency over time

Materials that could be of help are internal or external articles that discusses the changes in and objectives of efficiency.

7. Activities

Who controls what in the different systems generally?
Who is doing what?
Who has the customer contacts?

Changes over a period

8. Initiatives to change in services /traffic systems

Starting new
Divestment

Reasons?

9. Cooperative ventures/conflicts

Between different groups of companies that the partners or suppliers are connected to?
Effects on the unit?

10. Specific events of importance

New partners
New suppliers of importance
New technology
New services, etc
with high importance on the unit

Causes, adaptations, etc
Level III A specific event concerning a specific country

What is important to know in this case is what happened before, during and after the event. It is probable that the persons who have the detailed knowledge about the event have only parts of what has happened. Therefore the interviews have to be adapted to the specific person and his/her knowledge.

The different questions that I would like to cover in these interviews are presented below in a summarized version.

Question areas

1. Reasons for the event
2. The importance of the country to the Group or the unit in question
3. Initiative to the event
4. Before the event
   4.1 Facts
      Type of traffic systems/services
      Type of activities performed
      Resources involved for the different activities
      Organization
      etc
      Different internal and external reports and statements are important as a complement
   4.2 Relations of importance for the traffic systems/services in the specific country
      Partners (in the country or in other countries)
      Suppliers
      Customers
      Other parts of the Group
      Other actors
      Characteristics of the relations
      Long term relationship
      Conflicts in the relationship

5. During

Different stages of the event
Actions taken
Resources involved

Timing, size and effects short term
6. After the event

6.1 Facts

See 4.1

6.2 Effects on relations see 4.2.

Change in cooperative ventures, conflicts, dependencies, etc

7. Effects on business policies for the unit and the Group

Example on event level

(Slightly adapted to the situation, the same interviews were made in Swedish and German.)

I The international development of the Amas group before the takeover of Inter Forward

1. The start of the Group/ company

When was the company established? Why?
What was the basic business idea?

2. How has the company or the Group developed internationally since then?

2.1. What type of countries have come to be involved?
In what order?

2.2. What type of businesses have been developed?

2.3. What means of transportation has been involved?
How has this changed over a period?

2.4. What type of agents did the company have? Have there been any changes in the policies towards agents?

2.5. When was the first subsidiary or representative office started? Where? Why?
How has this changed over time?

2.6. What did the network of agents and subsidiaries look like before IF took over?

3. How have the relations to the suppliers of transport services changed over a period?
4. Resources and investments

4.1. What are the basic areas for investments?
4.2. Where have you invested internationally? In what?

5. Industry and Customers

What type of industry and companies were your customers at the start? How has this changed over time?
Who are the most important customers today?

6. What were your basic strengths and weaknesses before the takeover?

II The takeover

1. What was the basic reasons for selling the Group/company?

2. Why Inter Forward? Did you have any contacts with IF companies before the takeover?

3. Did you consider any alternatives?

4. How did it come about? (in practice)

III After the takeover

1. What were the effects from the takeover? (Direct and indirect effects)

1.1. Externally?
    The agents?
    The customers?
    The competitors?
    The suppliers like trucking companies, etc?
    Other?

1.2. Internally?

Organization?
Marketing?
Services? traffic?
Administration?
Financially?
Communication systems?
Reactions from employees?
etc
1.3. Were the effects as expected?

How do you think that EEC changes will affect your Group/ company?

Direct via changes in regulations, rules, etc

Indirect via agents, customers, competition, etc

Have any of the companies cooperated in some country with any of the Bilspedition companies, for example Scansped Group or ASG companies?
Appendix 2: Glossory and lists of transport companies

Glossory of transport terminology

**Loads/ goods**

*Break-bulk* = Traditional method of freight handling. heterogeneous cargo packed into cases cartons, drums etc of an infinite sizes and shapes. Each package handled separately when loaded. This is basically performed in terminals and more or less mechanized.

*Consolidation goods* = Normally 100- 1000kg

*Full load* = The total capacity of the carrier is filled.

*Unit load* = when package loads is partially consolidated into larger units of uniform dimensions and which can be easily transferred at low cost from one transport mode to another.

*FCL* = Full Container Load

*LCL* = Less than container load

*Parcel load* = 1-100kg

*Part load* = 1-5 tons

*Bulk* = Consisting homogeneous cargo shipments of single commodities such as petroleum, vegetable oils, grains, ores etc.

**Type of transports**

*Traffic* = Transport system utilizing any mean of transport

*Long-distance transport* = More than 200 km

*Local transport* = Pick up/ Collecting and Delivery ( sometimes distribution is used )

*Direct traffic* = A direct transport system from one area to another. From there on local transports will take place

*Direct goods/ transport* = Goods without terminal handling

*Customized traffics* = A transport system especially designed for a specific customer.

*International traffic* = Consists of both local and long distance transports

*Full load traffic* = A traffic that goes direct from a shipper to a receiver.
**Unit load traffic**

A traffic based on unit loads of containers, trailers, flats etc. Such a traffic can easily use and switch between different means of transportation.

**Consolidation/ groupage traffic or LCL traffic**

A transport system based on is break-bulk goods. If it is a trucking or LCL traffic it might also include part loads.

**Combi-traffic**

A combination between different means of transportation like air-sea, road-rail, air-road, etc. In most cases it is based on unit loads.

**Project transports**

The transport company taking on these type of transports normally include both consulting, planning, transport and customs clearance for large specific industrial projects like turn-key investments etc.. The transports are taking place during a time limited period and might involve several different countries.

**Organizations**

- **FIATA** = Federation internationale des Association Transitaires Assimilés
  The international forwarders Association

- **IATA** = International Air Transport Association- a voluntary organization for scheduled airlines.

- **NSF** = Nordic Forwarders Association

- **Shipper** = Consignor=Sender of the goods

- **Receiver** = Consignee=Receiver of the goods

- **Forwarder** = A forwarder does no normally own the means of transport. They have traditionally been an organizer and advisor to the shipper or receiver of transport as well as the performer of the transport documentation.

- **Border Broker** = A forwarder located at the border specialized in handling customs clearance and brokerage.

- **Customs Broker** = A forwarder specialized on import documentation

- **NVOCC** = Non-Vessel-Operator-Common-Carrier
Documentation

*Terms of delivery* = Regulate the responsibilities of and costs to be carried by seller and buyer. Mostly used is the internationally accepted Incoterms. Examples: Ex Works, Free Carrier, Free-on-Board, Ex ship, Delivered at Frontier, Delivered Duty paid etc.

*Terms of payment* = Cash on Documents (COD), Letter of Credit (L/C), Cash on Delivery (C/D) etc.

*NSFAB* = Common Conditions for forwarder’s responsibilities in the Nordic Countries.

*Bill of lading* = Freight document

*Airway bill* = Freight document for air transport

Facilities, equipment

*Container* = Standard sizes 20” (6,06m) and 40” (12,12m)

*Trailer* = Standard size 12,5 m -on wheels.

*Flat* = A standard sizes length: 6,06m, 6,6m and 7,15m. Legs can be attached.

*Terminal* = A station for sorting and reloading of basically break-bulk goods and for changing from local to long-distance transports. Shorter warehousing is often included. Possibilities for shippers and receivers to collect or leave their goods. The goods can be repacked.

*Pallets* = A wooden, aluminium or plastic base made for goods which is adapted to and facilitates handling by fork lifts. The EUR pallet (1200mm x 800mm)

Operational structures of transport systems

*Network system* = Direct traffics between different local terminals. In Europe this is the dominating operational structure until the end of 1980’s.

*Central terminal* = There are several local terminals but only one central terminal. All traffics go via the central terminal and all long distance traffics go to/from the central terminal. Some of the large parcel companies are using this type of operational system.

*Hub-Spoke system*
Satellite system= A hierarchical system where the longdistance transports go between head terminals. Is similar to a very concentrated network system. Common in U.S. for domestic transports.

Others

Cabotage= The right for a foreign transport operator to take on domestic transports in their traffics.

Sources

Abrahamson & F. Sandahl, 1992. *Internationella Transporter och Spedition* Malmö; Almqvist & Wiksell


Cont Appendix 2

The largest transport companies in Europe - passenger and freight (ranked by sales) in 1988

<table>
<thead>
<tr>
<th>Company</th>
<th>HQ (Country)</th>
<th>Type of activities</th>
<th>Sales ($)</th>
<th>Employees</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DB</td>
<td>D</td>
<td>Rail</td>
<td>15.2</td>
<td>268,176</td>
<td>(-1,789)</td>
</tr>
<tr>
<td>2. SNCF</td>
<td>F</td>
<td>Rail</td>
<td>7.8</td>
<td>223,202</td>
<td>(-163)</td>
</tr>
<tr>
<td>3. BA Plc</td>
<td>GB</td>
<td>Air</td>
<td>7.6</td>
<td>43,617</td>
<td>478</td>
</tr>
<tr>
<td>4. Lufthansa</td>
<td>D</td>
<td>Air</td>
<td>6.6</td>
<td>49,056</td>
<td>133</td>
</tr>
<tr>
<td>5. P&amp;O Co</td>
<td>GB</td>
<td>Sea/road etc.</td>
<td>6.0</td>
<td>55,600</td>
<td>565</td>
</tr>
<tr>
<td>6. Air France</td>
<td>F</td>
<td>Air</td>
<td>5.8</td>
<td>42,663</td>
<td>290</td>
</tr>
<tr>
<td>7. BR</td>
<td>GB</td>
<td>Rail</td>
<td>4.6</td>
<td>154,748</td>
<td>201</td>
</tr>
<tr>
<td>8. Danzas AG</td>
<td>CH</td>
<td>All types</td>
<td>4.6</td>
<td>13,400</td>
<td>72</td>
</tr>
<tr>
<td>9. SAS</td>
<td>S</td>
<td>Air</td>
<td>4.4</td>
<td>35,600</td>
<td>604</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Schencker) W-G</td>
<td>4.0</td>
<td>11,500</td>
<td>450</td>
</tr>
<tr>
<td>10. SJ</td>
<td>S</td>
<td>Rail</td>
<td>3.2</td>
<td>37,210</td>
<td>28</td>
</tr>
<tr>
<td>11. Bilsedtion</td>
<td>S</td>
<td>All types</td>
<td>3.1</td>
<td>41,700</td>
<td>(1)</td>
</tr>
<tr>
<td>12. Swissair</td>
<td>CH</td>
<td>Air</td>
<td>3.0</td>
<td>17,910</td>
<td>51</td>
</tr>
<tr>
<td>13. Iberia</td>
<td>E</td>
<td>Air</td>
<td>3.0</td>
<td>27,305</td>
<td>0</td>
</tr>
<tr>
<td>14. Alitalia</td>
<td>I</td>
<td>Air</td>
<td>2.9</td>
<td>18,453</td>
<td>59</td>
</tr>
<tr>
<td>15. Kühne &amp; Nagel</td>
<td>CH</td>
<td>All types</td>
<td>2.9</td>
<td>8,868</td>
<td>23</td>
</tr>
<tr>
<td>16. KLM</td>
<td>NL</td>
<td>Air</td>
<td>2.8</td>
<td>22,257</td>
<td>157</td>
</tr>
<tr>
<td>17. NFC Plc</td>
<td>GB</td>
<td>All types</td>
<td>2.7</td>
<td>31,800</td>
<td>161</td>
</tr>
<tr>
<td>18. Chargeurs SA</td>
<td>F</td>
<td>All types</td>
<td>2.6</td>
<td>22,126</td>
<td>191</td>
</tr>
<tr>
<td>19. Nedloyd</td>
<td>NL</td>
<td>Sea/road etc.</td>
<td>2.5</td>
<td>21,500</td>
<td>73</td>
</tr>
<tr>
<td>20. van Gend &amp; Loos NL</td>
<td>All types</td>
<td>2.4</td>
<td>7,900</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>21. Panalpina AG</td>
<td>CH</td>
<td>All types</td>
<td>2.2</td>
<td>6,800</td>
<td>2</td>
</tr>
<tr>
<td>22. Lep Group Plc</td>
<td>GB</td>
<td>All types</td>
<td>1.9</td>
<td>8,300</td>
<td>33</td>
</tr>
<tr>
<td>23. Hapag Lloyd</td>
<td>D</td>
<td>Sea/air etc.</td>
<td>1.8</td>
<td>7,700</td>
<td>63</td>
</tr>
<tr>
<td>24. Swedcarrier</td>
<td>S</td>
<td>All types</td>
<td>1.4</td>
<td>10,500</td>
<td>58</td>
</tr>
<tr>
<td>25. Kühne &amp; Nagel</td>
<td>D</td>
<td>All types</td>
<td>1.1</td>
<td>3,700</td>
<td>16</td>
</tr>
<tr>
<td>26. TDG Plc</td>
<td>GB</td>
<td>All types</td>
<td>1.0</td>
<td>13,100</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ASG S)</td>
<td>1.0</td>
<td>4,500</td>
<td>25</td>
</tr>
<tr>
<td>30. SCAC</td>
<td>F</td>
<td>All types</td>
<td>1.0</td>
<td>9,400</td>
<td>1</td>
</tr>
</tbody>
</table>

Source:: U.N International Classification Standard by ISIC: Industrial codes 71, Transport and Storage

---

1. Billion dollars
2. Million dollars
3. International
List of the largest transport companies in Europe (ranked by sales) in 1977

<table>
<thead>
<tr>
<th>Companies</th>
<th>HQ</th>
<th>Activities</th>
<th>Sales (DM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DB</td>
<td>D</td>
<td>Rail</td>
<td>16.9</td>
</tr>
<tr>
<td>2. SNCF</td>
<td>F</td>
<td>Rail</td>
<td>11.6</td>
</tr>
<tr>
<td>3. BR</td>
<td>GB</td>
<td>Rail</td>
<td>6.5</td>
</tr>
<tr>
<td>4. FS</td>
<td>I</td>
<td>Rail</td>
<td>5.7</td>
</tr>
<tr>
<td>5. BA</td>
<td>GB</td>
<td>Air</td>
<td>5.2</td>
</tr>
<tr>
<td>6. Lufthansa</td>
<td>D</td>
<td>Air</td>
<td>4.6</td>
</tr>
<tr>
<td>7. Air France</td>
<td>F</td>
<td>Air</td>
<td>4.5</td>
</tr>
<tr>
<td>8. Danzas AG</td>
<td>CH</td>
<td>All Types</td>
<td>4.0</td>
</tr>
<tr>
<td>9. P&amp;O</td>
<td>GB</td>
<td>Sea/Road</td>
<td>3.8</td>
</tr>
<tr>
<td>10. SJ</td>
<td>S</td>
<td>Rail</td>
<td>3.7</td>
</tr>
<tr>
<td>11. Schenker</td>
<td>D</td>
<td>All Types</td>
<td>3.6</td>
</tr>
<tr>
<td>12. NS</td>
<td>NL</td>
<td>Rail</td>
<td>3.2</td>
</tr>
<tr>
<td>13. Kühne &amp; Nagel</td>
<td>CH</td>
<td>All Types</td>
<td>3.0</td>
</tr>
<tr>
<td>14. Swissair</td>
<td>CH</td>
<td>Air</td>
<td>2.7</td>
</tr>
<tr>
<td>15. SB</td>
<td>CH</td>
<td>Rail</td>
<td>2.6</td>
</tr>
<tr>
<td>16. KLM</td>
<td>NL</td>
<td>Air</td>
<td>2.6</td>
</tr>
<tr>
<td>17. SAS</td>
<td>S</td>
<td>Air</td>
<td>2.5</td>
</tr>
<tr>
<td>18. Chargeurs</td>
<td>F</td>
<td>All Types</td>
<td>2.4</td>
</tr>
<tr>
<td>19. SNCB</td>
<td>B</td>
<td>Rail</td>
<td>2.4</td>
</tr>
<tr>
<td>20. Hapag-Lloyd</td>
<td>D</td>
<td>Sea</td>
<td>2.2</td>
</tr>
<tr>
<td>21. Nedlloyd</td>
<td>NL</td>
<td>Sea/road etc</td>
<td>2.2</td>
</tr>
<tr>
<td>22. ÖB</td>
<td>A</td>
<td>Rail</td>
<td>2.1</td>
</tr>
<tr>
<td>23. Panalpina</td>
<td>CH</td>
<td>All Types</td>
<td>2.1</td>
</tr>
<tr>
<td>24. Altalia</td>
<td>I</td>
<td>Air</td>
<td>2.0</td>
</tr>
<tr>
<td>25. RATP</td>
<td>F</td>
<td>Rail/bus</td>
<td>1.9</td>
</tr>
</tbody>
</table>

---

4 Bill. German Mark (Exchange rate)
5 International AG
APPENDIX 3

Enclosure 1

<table>
<thead>
<tr>
<th>Countries</th>
<th>Subsidiaries (minority and majority) in Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denmark</strong></td>
<td></td>
</tr>
<tr>
<td>ASG Dk -59 (air)</td>
<td>100%</td>
</tr>
<tr>
<td>TK Nord-89/91 (land)</td>
<td>10% 65%</td>
</tr>
<tr>
<td><strong>West-Germany</strong></td>
<td></td>
</tr>
<tr>
<td>ASG Hamburg-60 (land)</td>
<td>100%</td>
</tr>
<tr>
<td>Atege Stuttgart-76 (land/air)</td>
<td>100%</td>
</tr>
<tr>
<td>ASG Bielefeld-87 (land)</td>
<td>100%</td>
</tr>
<tr>
<td>ASG Deutschland-76/91 (hold.com)</td>
<td>100% 70%</td>
</tr>
<tr>
<td>Horst Wiedeman GmbH-89</td>
<td>100%</td>
</tr>
<tr>
<td>Atege Germany -91</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td></td>
</tr>
<tr>
<td>Finnexpress-68 (land)</td>
<td>25% 20%</td>
</tr>
<tr>
<td>decrease of shares-75</td>
<td></td>
</tr>
<tr>
<td>ASG Finland-88 (air/sea) -90 (land included)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td></td>
</tr>
<tr>
<td>NG-Globe-71-74</td>
<td>70%</td>
</tr>
<tr>
<td>Air Contact-77</td>
<td>100%</td>
</tr>
<tr>
<td>Flygods-79 (air)</td>
<td>65% 100%</td>
</tr>
<tr>
<td>increase in shares-85 named ASG( Norge) A/S</td>
<td></td>
</tr>
<tr>
<td>Nordex-85 (land)</td>
<td>60% 100%</td>
</tr>
<tr>
<td>increase in shares-86 and named ASG (Transp. &amp; Sped) A/S</td>
<td></td>
</tr>
<tr>
<td>ASG two Norwegian comp. merged</td>
<td></td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td></td>
</tr>
<tr>
<td>ASG Belgium-77 (land)</td>
<td>76% 100%</td>
</tr>
<tr>
<td>increase of shares-83</td>
<td></td>
</tr>
<tr>
<td><strong>U.K.</strong></td>
<td></td>
</tr>
<tr>
<td>ASG U.K.-80 (air)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td></td>
</tr>
<tr>
<td>Nova traffic-84 (air/sea)</td>
<td></td>
</tr>
<tr>
<td><strong>Holland</strong></td>
<td></td>
</tr>
<tr>
<td>ASG Intern B.V.-89 (holding)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Sweden based</strong></td>
<td></td>
</tr>
<tr>
<td>Road Ferry (land)</td>
<td>50% 100%</td>
</tr>
<tr>
<td>Confracta-72/73 (land)</td>
<td>37.5% 50%/</td>
</tr>
<tr>
<td>increase in shares-88</td>
<td></td>
</tr>
<tr>
<td>sold -89 to Faxxion(J/V)</td>
<td>40%</td>
</tr>
<tr>
<td>ERT -79 (land)</td>
<td>100%</td>
</tr>
<tr>
<td>1959/60-------------70---------------------80---------------------90 Year</td>
<td></td>
</tr>
</tbody>
</table>

---

6In 1976 ASG Hamburg formally changed its name to ASG (Deutschland) GmbH and Atege Stuttgart became a part
### ASG - Net of representation of Europe (agents, Group companies etc)

1967 landtransportation (excl air)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
</tr>
<tr>
<td>East Germany</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>8</td>
</tr>
<tr>
<td>Great Britain</td>
<td>2 (1 sales office)</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
</tr>
<tr>
<td>Norway</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
</tr>
<tr>
<td>Rumania</td>
<td>1</td>
</tr>
<tr>
<td>Soviet Union</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
</tr>
<tr>
<td>West-German</td>
<td>20-25 (1 subsidiary)</td>
</tr>
</tbody>
</table>

**Total**: 48-53

### ASG - Net of representation of Europe (agents, Group companies etc)

1976 and 1989 landtransportation (excl air)

<table>
<thead>
<tr>
<th>Country</th>
<th>1976</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Belgium</td>
<td>2 (1 sales office)</td>
<td>2 (Group)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>East Germany</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>1 (J/V)</td>
<td>1 (J/V)</td>
</tr>
<tr>
<td>France</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Great Britain</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Norway</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Country</td>
<td>1989</td>
<td>1976</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Portugal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rumania</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>49</td>
<td>28</td>
</tr>
</tbody>
</table>

**ASG - Net of representation of Europe (agents, Group companies etc)**

Airfreight 1989 and 1976 (within brackets same as landtransp.)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1989</td>
</tr>
<tr>
<td>Austria</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Denmark</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>East Germany</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Finland</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
</tr>
<tr>
<td>Norway</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>Poland</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Portugal</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Rumania</td>
<td></td>
</tr>
<tr>
<td>Soviet Union</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1 (same)</td>
</tr>
<tr>
<td>West-Germany</td>
<td>1 (same)</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20 (5 Group)</td>
</tr>
</tbody>
</table>

**No of the agents**

- 1989: 9
- 1976: 2
### Natural - Switzerland

#### Net of representation of Europe (agents, Group companies etc)
**Number of**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
</tr>
<tr>
<td>East Germany</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>5</td>
</tr>
<tr>
<td>Great Britain</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
</tr>
<tr>
<td>Norway</td>
<td>2</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
</tr>
<tr>
<td>Rumania</td>
<td></td>
</tr>
<tr>
<td>Sovjet Union</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

7 In the beginning of 1976 before the acquisition of Atege ASG Hamburg was the only subsidiary in West-Germany and their only had three international traffics Denmark, Holland and Sweden. As the new terminal was opened in Hamburg the international traffics were increasing in number.

8 The former ASG agent van Gend & Loos was acquired by Nedlloyd Group. AS Nedlloyd acquired Uniontransport in West-Germany the cooperation with ASG had to cease. ASG started to cooperate with a subsidiary to the Belgian agent instead.
Great Britain ______ 1 (sister company) 
Greece ______ 1 
Hungary ______ 1 
Ireland ______ 1 
Italy ______ direct distribution 
Yugoslavia ______ 
Luxembourg ______ 1 
Netherlands ______ 3 
Norway ______ 1 (ASG) 
Poland ______ 
Portugal ______ 1 (sister company- same agent as ASG) 
Rumania ______ 
Soviet Union ______ 
Spain ______ 3 (1 sister company) 
Czechoslovakia ______ 
Turkey ______ 2 
West-Germany ______ 1 (ASG) 
Sweden ______ 1 (ASG) 
Total ______ 21 + Italy and France (direct distribution) 

Net of representation outside Europe

1989, 1981 and 1976 airfreight and seafreight

<table>
<thead>
<tr>
<th>Countries</th>
<th>1989</th>
<th>1981</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA ______ 6 (2 Group) 9</td>
<td>4 (1 J/V Group, 1 S.O) 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada ______ 1</td>
<td>2</td>
<td>3 (1 S.O.)</td>
<td></td>
</tr>
<tr>
<td>Far East</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong ______ 1 (Group)</td>
<td>2 (1 Group)</td>
<td>1 (J/V Group)</td>
<td></td>
</tr>
<tr>
<td>Singapore ______ 2 (1 Group)</td>
<td>3 (1 S.O.)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Japan ______ 3 (1 Group)</td>
<td>2 (1 Group)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Taiwan ______ 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China ______ 2 (1 S.O.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand ______ 1</td>
<td>1</td>
<td>1 (J/V Group)</td>
<td></td>
</tr>
<tr>
<td>India ______ 2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia ______ 2 (Group)</td>
<td>1 (Group)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>New Zealand ______ 1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania ______ 11</td>
<td>1 (Group)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya ______ 11 (J/V Group)</td>
<td>1 (Group)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9 Within brackets means out of which 2 are ASG Group companies
10 A company was acquired during 1989 by ASG
11 ASG company sold to personnel and continue as agent
12 ASG Kenya was changed from fully to partly owned
<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Nigeria</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Uganda</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>South America</td>
<td>Brazil</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Argentine</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Venezuela</td>
<td></td>
</tr>
<tr>
<td>Middle East</td>
<td>Iraq</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Iran</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kuwait</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Saudi Arabia</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

13 To Iran there were also a trucking traffic
Appendix 4
Bilspedition- organization 1960's

Before 1967

1967
Eight districts and centralization of invoicing, bookkeeping as well as selling and traffics to the larger central offices of the district.

1970
Continued centralization to the regional offices for sales, bookkeeping, etc. Sales for domestic as well as international traffics became centralized to the regional offices in Sweden. ATA basically became only an operational company without sales.
Bilspeediton - organization 1970's and 80's

1975

Group

Domestic division

- 19 larger offices
- 106 smaller offices
- etc.

International division

- 8 subsidiaries
- etc.

Administration

Traffic (service, planning etc)

Construction

1977/78

Group

Four divisions

Domestic

- Frozen goods warehousing (Cold Stores)

International

- Finance & admin.

Subsidiaries

- Etc.

1983 Wilson &Co were added

1986

Group

Business areas

- Domestic incl. Cold Stores etc.
- Bilsped. Info. Systems
- Scansped incl. Wilson & Co etc.
- Bilsped. Finance & Buildings
- Bilsped. International incl ATA, TK etc.

1989

Group

Staffs

- Service functions
- Transport Groups

- Finance comp. Biljonen
- Bilspeed. Info. Systems
- Bilspeed. Domestic
- Scansped
- Scanship
**Cont. Appendix 4 - Enclosure 2**

**In 1967/68 GBS (Bilspedition) had the following representation in Europe**

<table>
<thead>
<tr>
<th>Country</th>
<th>Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Scandinavia-Austria Express Autotransport GmbH Wien</td>
</tr>
<tr>
<td>Benelux</td>
<td>Rederij van Swieten N.V., Amsterdam (ceased 1969)</td>
</tr>
<tr>
<td>Denmark</td>
<td>Nordisk Bilspedition A/S (subsidiary)</td>
</tr>
<tr>
<td>France</td>
<td>Mory. S.A., Paris</td>
</tr>
<tr>
<td>Finland</td>
<td>Kaukokiito Oy</td>
</tr>
<tr>
<td>Hungary</td>
<td>Hungarocamion (start 1968)</td>
</tr>
<tr>
<td>Italy</td>
<td>Transmare S.I.T.R., Milano</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Lentz, Luxembourg (start 1968)</td>
</tr>
<tr>
<td>Norway</td>
<td>Skandinavisk Bilspedition A/S (subsidiary)</td>
</tr>
<tr>
<td>Poland</td>
<td>Pekaes, Warsaw</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Autotransit A.G. Internationale Spedition, Basel</td>
</tr>
<tr>
<td>West-Germany</td>
<td></td>
</tr>
<tr>
<td>Stuttgart</td>
<td>Franz Lebert &amp; Co Intern. Sped.</td>
</tr>
<tr>
<td>Hannover</td>
<td>Karl Nelke Sped.</td>
</tr>
<tr>
<td></td>
<td>Bilspedition Sales office (start 1968)</td>
</tr>
<tr>
<td>U.K.</td>
<td>Continental Ferry Trailers Ltd (ceased -69)</td>
</tr>
<tr>
<td></td>
<td>Atlas Express Ltd</td>
</tr>
<tr>
<td></td>
<td>Eurofreight, London</td>
</tr>
<tr>
<td></td>
<td>Trailer Express Ltd (1968 - a subsidiary)</td>
</tr>
</tbody>
</table>
### International subsidiaries of Bilspedition

<table>
<thead>
<tr>
<th>Time -year</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
</tr>
</thead>
</table>

#### Denmark

1. Nord. Bilsped/ATA -57 (50%) --- 61 (100%) --------------------------/  
2. SGS -70(50%), -83 (100%) 50%-----------------------------------100%  
3. Flygspedition 71/72(59%) -50% -100%-----------------------------1974 (100%)  
4. Eurotrans -79-83(100%)   100%--/  
5. Danish Express Co -83-86 100%---/  
6. Scanflight A/S-87 100%---  
7. Adams Transport -87(100%) 100%---  
8. Scansped Denmark-88(100%) 100%--

#### Norway

1. Skand Bilsped/ATA A-57 (50%) 50%---100%-----------------------------------60%-----/  
2. SGS -70(50%), -83 (100%) 50%-----------------------------------100%---  
3. Linjegods -84(20%) 20%  
4. Skandiatransport -85 (100%) 100%-----/  
5. Scandinavian Rail Cargo -85 (100%) 100%---  
6. Scanship-86(100%) 100%  
7. Skand. ADR Transport -86(57%) -88(100%) 100%------  
8. Scansped-88/89(100%) 100%--

#### Finland

1. Autotransit OY -87-88(49%) 49%---/  
2. Scansped Oy -88(95%) 95%  
3. Speditor Group-90 (100%) 100%  
4. Transocean OY -88(100%) 100%--

#### Belgium

1. Autotransit NV (73)87-88(100%) 100%--  
2. West-Friesland NV-86-87(100%) 100%---/  
3. Scanroute NV-87-88(50%) 50%--/  
4. Castra NV -85-89(100%) 100%---/  
5. SA Carion freres-85-89(100%) 100%--/  
6. Scansped/carion Freres-90(100%) 100%--/  

#### Holland

1. Trailer Exp/ATA-72-88(100%) 100%------------------------------------/  
2. West-Friesland-85/86 100%--  
3. van Casteren-85-88(100%) 100%--

4. Multiport BV/Continex -82/83) 100%--  
5. Transit Internationale -82-88(100%) 100%--  
6. Scansped Holland BV-89-(100%) 100%--  
7. Autotransit Representation Office Europe  
8. Cool Carriers -87(100%) 100%  
9. Incotrans BV-87(50%), -88(100%) 50% 100%
France
1. Nord Express SA-85-88(100%)
2. Carion Freres SA-85-88(100%)
3. Scansped/Nordexpress-89(100%)
4. Scansped/Carion freres-89(100%)
  100%

Italy
1. Autotransit Srl-77(40%),82(100%)
  sold-89
2. Incotrans Srl-88(100%)
  100%

Poland
Scanpol-90(50%)
  50%

Switzerland
1. Autotransit AG-79-88(40%)
  40%--------------------------------------/
2. Incotrans AG-87(100%)
  100%--
3. Scansped AG-89(100%)
  100%-

UK
1. Trailer Express Ltd-68-75(100%)
  100%------/
2. Autotransit Ltd-80-89(100%)
3. Wilson &CO-85-89
  100%--/
4. Skandiatransport Ltd-85-89(100%)
  100%--/
5. Transocean Shipp.Ag-88(100%)
  100%-
6. Cool Carriers-88(100%)
  100%
7. Global Equipment Management-88(100%)
  100%

West-Germany
1. Bilsedtion Represen.Office-68-71
2. Autotransit GmbH-80-88(100%)
3. Wilson GmbH-83-88(100%)
  100%-------/
4. ADR Transport GmbH-86(57%),88(100%)
  100%--
5. Incotrans GmbH-88(100%)
  100%-
6. Tek Trans GmbH-89(100%)
  100%-
7. Nellen&Quack GmbH-90(100%)
  100%

Sweden based (international companies)
1. ATA-62(10%),-64(50%),-65(100%)
  50%--100%------------------------------------------/
2. Trailer Express-68/69(100%)
  100%-
3. SGS-71(part owning),-83(100%)
  100%------------------------------------------/
4. Scandinavian Ferry Trailers-69(100%)
  100%------------------------------------------/
5. Flygsedition-71(50%),-72/73(100%)
  100%------------------------------------------/
6. Alpen&Parelius-76(100%)
  100%--
7. Coldsped-71(50%),79(100%)
  50%--100%------------------------------------------
8. Coldstore 75-79(100%) 100%-----------------
9. Wilson&Co -83-(100%) 100%-----
10. InterScandinavian Airfreight -83-86(100%) 100%--/
11. Wilson Shipping-83(100%) 100%-------

12. Nyman&Schulz-83(100%) 100%-----
13. SkandiaFallenius-85-88(100%) 100%-----
14. Transportkompaniet-85-86(100%) 100%--
15. ADR Transport AB-86(57%),-88(100%) 57%--
16. Anton Pettersson Sped.-85(100%) 100%-----
17. AB Aug Andersson-85(100%) 100%-----
18. Kungsholms Express-85(100%) 100%-----
19. Scanflight-88(100%) 100%-----
20. Scansped AB-85(100%) 100%-----
21. Scansped Equipment AB-85(100%) 100%-----
22. ABSkandiatransport-85(100%) 100%-----
23. G. Smiths Ab-85(100%) 100%-----
24. ACL AB -87(100%) 100%--
25. Rederi AB Transatlantic-87(100%) 100%--
26. Cool Carriers AB-87(100%) 100%--
27. Rederi AB Transocean-87(100%) 100%--
28. Simon Edström AB-87(100%) 100%--
29. Transocean Shipping Agency AB-87(100%) 100%--
30. Lindblom &Co-90(100%) 100%

Outside Europe Bilspedition had only 25% in Wilson &Co Inc., until 1985. In 1989 they were situated in HongKong, Canada, Mexico, Japan and Australia. Except for one company in HongKong and one in the US these companies belonged to the Scanship Group. Subsidiaries to non transport organizations are not included.

Net of representation of Europe of the Swedish companies of ATA14, Wilson and SKT/F&L15 - before merger 1988 (excl air)

<table>
<thead>
<tr>
<th>(number of)</th>
<th>ATA</th>
<th>Wilson</th>
<th>SKT/F&amp;L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Belgium</td>
<td>1(Group)</td>
<td>1(J/V)</td>
<td>1(Group)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>1(Group)</td>
<td>1(Group)</td>
<td>3(3 Group)</td>
</tr>
<tr>
<td>East Germany</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1(Group)</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>2(1 Group)</td>
<td>2</td>
<td>6(1 Group)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1(Group)</td>
<td>4(1 Group)</td>
<td>2(1 Group)</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td>(1via)</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14 ATA was at that time the dominating part of Bilspedition International
15 SKT/F&L as well as Wilson were both part of Scansped even though they competed internally
<table>
<thead>
<tr>
<th>Country</th>
<th>Group</th>
<th>J/V</th>
<th>Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Rumania</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>West-Germany</td>
<td>2</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

**Total**: 57 (14 Group and 43 agents)

**Summary**: 126 (out of which 25 Group companies, 2 J/V and 99 agents)

---

**Net of representation in Europe of Scansped Sweden, after the merger 1989 (land-transport)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Group</th>
<th>J/V</th>
<th>Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Germany</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>7</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumania</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soviet Union</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td>12</td>
<td>2</td>
<td>15</td>
</tr>
</tbody>
</table>

**Total** 57 (14 Group and 43 agents)
Net of representation in Europe of Scansped Belgium, before and after merger in the end of 1988 (land-transports) (number of)

<table>
<thead>
<tr>
<th>Country</th>
<th>early 1988</th>
<th>early 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ATA Castra</td>
<td>Scansped</td>
</tr>
<tr>
<td></td>
<td>x(^{16})</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Austria</th>
<th>1(Grupo)</th>
<th>1(Grupo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Denmark</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>East Germany</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Finland</td>
<td>2(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>France</td>
<td>1(Grupo)</td>
<td>3(Grupo)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Greece</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Norway</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Rumania</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Spain</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>3</td>
<td>2(Grupo)</td>
</tr>
<tr>
<td>Sweden</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Total</td>
<td>8(Grupo)</td>
<td>15(Grupo)</td>
</tr>
</tbody>
</table>

Net of representation of Europe of Scansped Holland before and after the merger in the end of 1988 (land-transports) (number of)

<table>
<thead>
<tr>
<th>Country</th>
<th>early 1988</th>
<th>early 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ATA van Casteren</td>
<td>Scansped</td>
</tr>
<tr>
<td></td>
<td>x(^{16})</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Austria</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Denmark</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>East Germany</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Finland</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>France</td>
<td>1(Grupo)</td>
<td>5(Grupo)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>West Germany</td>
<td>3</td>
<td>2(Grupo)</td>
</tr>
<tr>
<td>Sweden</td>
<td>1(Grupo)</td>
<td>1(Grupo)</td>
</tr>
<tr>
<td>Total</td>
<td>8(Grupo)</td>
<td>15(Grupo)</td>
</tr>
</tbody>
</table>

\(^{16}\) Via Mother company in Netherlands
### Net of representation of Europe of Scansped West-Germany before and after merger in the end of 1988 (land-transport)(number of)

<table>
<thead>
<tr>
<th>Country</th>
<th>early 1988</th>
<th>Scansped 1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>2 (1 Group)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>1 (Group)</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>East Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1 (Group)</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great Britain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yugoslavia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>2</td>
<td>3 (1 Group)</td>
</tr>
<tr>
<td>Norway</td>
<td>1 (Group)</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumania</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soviet Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>1 (Group)</td>
<td>1 (Group)</td>
</tr>
<tr>
<td>Total</td>
<td>14 (4 Group)</td>
<td>17 (7 Group)</td>
</tr>
</tbody>
</table>
Appendix 5 Inter Forward

Net of representation of Europe\(^{17}\) NTS Sweden
(number of)

<table>
<thead>
<tr>
<th>Country</th>
<th>1989</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Belgium</td>
<td>1 IF Group</td>
<td>1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>1(IF Group)</td>
<td>1</td>
</tr>
<tr>
<td>East Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>3 (IF Group)</td>
<td>5(1 NTS Group)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3(1 IF Group)</td>
<td>3</td>
</tr>
<tr>
<td>Norway</td>
<td>1(IF Group)</td>
<td>1(NTSGroup)</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Rumania</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Soviet Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td>16(2 IF Group)</td>
<td>13(1 NTS Group)</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 1989 40 (7 IF Group) 42 (3 NTS Group)

Net of representation of Europe -1989
(number of) NTS DK Jerre Rail(S) NTSRail(S)

<table>
<thead>
<tr>
<th>Country</th>
<th>NTS DK</th>
<th>Jerre Rail(S)</th>
<th>NTSRail(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>2(1 IF)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>2(1 IF Group)</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>2(1 IF Group)</td>
<td>1(IF Group)</td>
<td>2 (IF Group)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>2</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>Yugoslavia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>1(IF Group)</td>
<td>1(NTSGroup)</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Rumania</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soviet Union</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td>16(2 IF Group)</td>
<td>13(1 NTS Group)</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

17 Not including airfreight and rail agents
18 Number of agents unknown
### Net of representation of Europe - 1989 (spring)

<table>
<thead>
<tr>
<th>Country</th>
<th>Z&amp;B</th>
<th>NTS F</th>
<th>Intern. Exp. Copex (Amas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1(IF Group)</td>
<td>x</td>
<td>x+direct</td>
</tr>
<tr>
<td>Belgium</td>
<td>x</td>
<td>x</td>
<td>direct</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>x P19</td>
<td>x(IF Group)</td>
<td>x(IF Group)</td>
</tr>
<tr>
<td>Denmark</td>
<td>x(IF Group)</td>
<td>x</td>
<td>x+direct</td>
</tr>
<tr>
<td>East Germany</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>x</td>
<td>x</td>
<td>x+direct</td>
</tr>
<tr>
<td>Great Britain</td>
<td>x(IF Group)</td>
<td>x</td>
<td>x+direct</td>
</tr>
<tr>
<td>Greece</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>x P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>x(IF Group)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td>direct</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>x P</td>
<td>x(IF Group)</td>
<td>x</td>
</tr>
<tr>
<td>Poland</td>
<td>x P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>x P</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Rumania</td>
<td>x P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soviet Union</td>
<td>x P</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>x (1 IF Group)</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West-Germany</td>
<td>x (1 IF Group)</td>
<td>x</td>
<td>x+direct</td>
</tr>
<tr>
<td>Sweden</td>
<td>x(IF Group)</td>
<td>x(IF Group)</td>
<td>x</td>
</tr>
</tbody>
</table>

**Total**

- **Z&B:** 18 countries (at least 5 IF Group)
- **NTS France:** 14 countries (at least 4 IF)
- **Copex:** 13 countries (at least 2 IF)

---

19 P = agents for project transports
IF Group Foreign subsidiaries in 1990

Austria
1. Z&B(100%)(T) 2y
2. Impazel(Trading Co)20 Amas

Belgium
1. Satraco(100%)21
2. Belcomex de Wolf (Amas)
3. Neptun (Amas)
4. Belcomex n.v.
5. van Huls(Amas)
6. Sasse Co(Amas)
7. Subsidiary to Beyer, France

Denmark
1. NTS Denmark(100%) 0y
Tid. Erritzoe, Hansen
2. ITM (Amas)

Finland
1. Railcarriers( 66%)
1.J.Jerre OY

France
1. NTS France
2. Woodtrans
3. Nortrans S.A.
4. Beyer
5. Rambaud
6. SMTS
7. All Transports

Great Britain
1. Norfreight(100%) -88
2. Z&B(100%) -88
3. London Carrier International -90
4. Bondelivery

Italy
1. NTS Rail(repres)

Luxembourg
1.J.Jerre International S.A.
2. Subsidiary to Beyer, France

Netherlands
Amas (1988)
Gen &spec forw. division

20 Winded up 1990
21 Sold 1990
2. Schut-Copex
3. Copex IGS B.v.
4. Terwee Okker
5. Hofsteenge b.v.
6. Meubeldistrib.&Serv.b.v.
7. Mondia Europe
   Airfreight Division
8. Copex Air b.v.
9. Speed b.v.
10. Skylink Handl.Serv.b.v.
11. Air agencies Holl.b.v.
12. Mondia Europe b.v.
13. Copex Hillegom b.v.
   Customs clearance division
15. van Huls

Norway
1. NTS Norway A/S

Spain
1. NTS rail (repres.)

Switzerland
1. Z&B (100%) - 88

West-Germany
1. Z&B 100% - 88
2. Z&B Verpackungsges. - 88
3. Schier & Otten 100% - 88
4. NTS Germany 100% - 85
5. Fenthol & Sandtman 100% - 89
6. DMP 100%
7. Subsidiaries (2) to Beyer France
Appendix 6

Epilogue of the cases for year 1991 and 1992

Since 1990 ASG, Bilspedition and Inter Forward have endured a period of decreasing results, due to economic downturn in important markets and overpriced acquisitions. They have met these changes by restructuring their Groups in different ways. However, here I will only shortly comment upon some of the changes in their international activities.

ASG, which has had a conservative approach regarding acquisitions outside their core business, has focused much of their interest to the Nordic countries. In 1994 they made an agreement with Danzas, a large multinational transport group. Danzas will represent ASG world wide in areas where ASG does not have their own offices. ASG became the new agent of Danzas in Scandinavia and the Baltic States. The idea were continued international expansion with limited economic risk.

For Bilspedition the problems have mainly derived from activities outside their traditional forwarding and transport activities such as real estate, airline and shipping operations. These engagements have caused Bilspedition severe losses and therefore most of them have been sold during the last two years or are for sale. However, the Scansped Group, which have continued their growth and concentration of the international net and its profitability has improved.

The economic development has forced Inter Forward to cease their expansion by acquisitions. It has entered a period of consolidation and increasing coordination between the acquired companies. They have started merging and restructuring the groups of companies existing within their most important markets. The company has received more capital from its owners for the task.

Sources: Annual reports and some newspaper articles.
Published in the language indicated by the title


Andersson, T., Ternström, B., External Capital and Social Welfare in South-East Asia. Research report

Benndorf, H., Marknadsföringsplanering och somordination mellan företag i industriella system. EFI/MTC


Björkegren, D., Mot en kognitiv organisationsteori. Research report

Claesson, K., Effektiviteten på Stockholms Fondbörs


Engshagen, I., Finansiella nyckeltal för koncern versus koncernbolag. En studie om finansiella måltal. Research report

Fredriksson, O., Holmlöv, PG., Julander, C-R., Distribution av varor och tjänster i informationssamhället.

Hagstedt, P., Sponsring - mer än marknadsföring. EFI/MTC


Kylén, B., Digitalkartans ekonomi. Samhällsekonomiska modeller för strategiska val. Delrapport 2 i "Nordisk Kvantit"

Lundgren, S., Elpriser: Principer och praktik. Research report


Swartz, E., Begreppet federativ organisation belyst i ett organisationsteoretiskt, juridiskt och empiriskt perpektiv. Research report.


1988

Andréasson, I-M., Costs of Controls on Farmers’ Use of Nitrogen. A study applied to Gotland.

Björkegren, D., Från sluten till öppen kunskapsproduktion. Delrapport 3 i forskningsprojektet Lärande och tänkande i organisationer. Research report

Björkegren, D., Från tavistock till Human-relation. Delrapport 4 i forskningsprojektet Lärande och tänkande i organisationer. Research report


Dahlgren, G., Witt, P., Ledning av fusionsförlopp. En analys av bildandet av Ericsson Information Systems AB.

Forsell, A., Från traditionell till modern sparbank. Idé organisation och verksamhet i omvandling. Research report


Hultén, S., Vad bestämmer de svenska exportmarknadsandelarnas utveckling?

Häckner, J., Biobänslenas konkurrenzkraft i ett framtida perspektiv. Research report
Jennergren, P., Näslund, B., If the Supreme Court had Known Option Theory: A Reconsideration of the Gimo Case. Research report


Lagerstam, C., Business Intelligence. Teori samt empirisk studie av elektronik- och bioteknikbranschen i Japan. Research report

Liljegren, G., Interdependens och dynamik i långsiktiga kundrelationer. Industriell försäljning i nätverksperspektiv. Research report


Olsson, C., The Cost-Effectiveness of Different Strategies Aimed at Reducing the Amount of Sulphur Deposition in Europe. Research report

Philips, Å., Eldsjälar. En studie av aktörsskap i arbetsorganisatoriskt utvecklingsarbete. Research report

Sellstedt, B., Produktionsstrategier. En diskussion med utgångspunkt från litteraturen. Research report

Skogsvik, K., Prognos av finansiell kris med redovisningsmått. En jämförelse mellan traditionell och inflationjusterad redovisning. Research report


Wahlund, R., Varför och hur olika svenska hushåll sparar. Research report

Vredin, A., Macroeconomic Policies and the Balance of Payments. Research report

Åkerman, J., Economic Valuation of Risk Reduction: The Case of In-Door Radon. Research report.

1989

Andersson, T., Foreign Direct Investment in Competing Host Countries. A Study of Taxation and Nationalization. Research report

Björkegren, D., Skönhetens uppfinnnare. Research report

Björkegren, D., Hur organisationer lär. Studentlitteratur.

Blomström, M., Transnational Corporations and Manufacturing Exports from Developing Countries. Research report.


Davidsson, P., Continued Entrepreneurship and Small Firm Growth. Research report


Glader, M., Datorer i småföretag. Teldok

Jakobsson, B., Konsten att reagera. Intressen, institutioner och näringspolitik. Carlssons Bokförlag


Kylén, B., Hur företagschefer beslutar innan de blir överraskade. Ett försök till förklaring av svarsmönster i svagsignal-situationer.
Lagerstam, C., Jämförelse av skydd med samlad valuta/aktieoption och skydd med separata aktie- och valutaoptioner samt härledning av optionspriser. Research report

Lagerstam, C., On the Pricing and Valuation of Forwards and Options on Futures and their Relationship. Research report.


Styrm, B., Information Technology and Competence Formation in the Swedish Service Sector. IMIT/EFI

1990


Drottz-Sjöberg, B-M., Interests in Humanities, Social Science and Natural Science. A Study of High School Students.


Patrickson, A., Essays in the Latin American Fertilizer Industry.


Steiner, L., Ledningsfunktionen i tillväxtföretag. Ledningssteamens sammansättning och funktion i tillverkande företag inom informationsteknologiindustrin.


1991


Brytting, T., Organizing in the Small Growing Firm - A grounded theory approach


Ericson, M., Iggesundsaffären - Rationalitet i en strategisk förvärvsprocess


Lundgren, A., Technological Innovation and Industrial Evolution - The Emergence of Industrial Networks.


Wirsäll, N-E., Julander, C-R., Den lättlättna detaljhandeln.

1992

Charpentier, C., Ekonomisk styrning av statliga affärsverk.

Edlund, P-O., Karlsson, S., Forecasting the Swedish Unemployment Rate: VAR vs. Transfer Function Modelling.


Eliasson, M., Julander, C-R., Productivity in Swedish Grocery Retailing. Changes over time and a causal model.

Ewing, P., Ekonomisk styrning av enheter med inbördes verksamhetssamband.

Fredriksson, O., Datorkommunikation i Distributionssystem.

Erfarenheter och effekter vid införandet av två multilaterala interorganisatoriska informationssystem - exemplet BASCET Infolink AB.


Holmberg, C., Effects of Feature Advertising and Other Promotions Research Report.


Ljung, A., Intressentstrategier - En longitudinal studie av utvecklingen i två svenska företag.

Kokko, A., Foreign Direct Investment, Host Country Characteristics and Spillovers.

Mårtensson, P., Mähring, M., Information Support From Staff to Executives. - An Explorative Study. Research Report


Persson, P-G., Basket Analysis. A New Way of Studying Short Term Effects of Promotions in Grocery Retailing.


Södergren, B., Decentralisering. Förändring i företag och arbetsliv.


Wahl, A., Kvinnliga civilekonomers och civilingenjörers karriärutveckling.

1993

Ekvall, N., Studies in Complex Financial Instruments and their Valuation.

Söderlund, M., Omvärldsmodeller hos beslutsfattare i industriföretag - en studie av svenska leverantörer till fordonsindustrin.

Whitelegg, J., Hultén, S., Flink, T., High Speed Trains. Fast tracks to the future.