COMBINED TRANSPORT IN THE PERSPECTIVE OF THE HAULIERS

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1. INTRODUCTION

The role of the hauliers has for long been neglected in research on combined transport, which has been considered as much of a railway matter. The research field is wide but most energy has been put into the development and assessment of new terminal technologies and to the estimation of current and potential goods flows and market shares. Nevertheless, hauliers are competitors and customers to the combined transport system as well as important operators within it. Hence, the final and well awaited large scale breakthrough for combined transport is not likely to happen before the hauling industry is fully in line with the plans. Consequently, this paper takes the perspective of the hauliers. Haulier here denotes a company actually performing road transport for hire or reward with own lorries and combined transport (CT) denotes the combination of rail and road transport using unit loads such as swap bodies, semitrailers and freight containers.

The purpose of the paper is to highlight three topics concerning hauliers’ use of combined transport; (1) the hauliers’ position in the transport industry network, (2) investments and industry development, and (3) the drivers’ working conditions. The general discussion includes facts about the hauling industry in Europe and in the USA, but the primary data collection only concerns Swedish hauliers.

The research is part of a six-year CT research program sponsored by the Swedish State Railways (SJ). Topics covered during the first four years of research are the industry structure, terminal transfer technologies, rail network designs and administrative information systems. This earlier research is obviously an inspiration and knowledge foundation for this dedicated study. Specific data collection methods used in the study include an inquiry covering some 350 Swedish hauliers, in depth interviews and coverage of various sources of secondary data.

Section two is a general discussion about the three main topics based upon earlier research and secondary data. Section three presents the inquiry and its results together with findings from in depth interviews, followed by conclusions and suggestions for further research in section four.

2. HAULIERS AND COMBINED TRANSPORT

Combined transport is the transport service taking advantage of the large scale efficiency of rail transport together with the flexibility of road transport. The two local
Road haulages constitute very important parts of the transport chain. Even though the distances are rather short, they amount to a rather large part of the total door-to-door cost when using CT. In a European example where pulp is transported in swap bodies from a pulp mill in the west of Sweden to a paper mill in the north of Italy - a rail distance of about 1500 km - the Swedish haulage accounts for 8% of the total cost while the Italian haulage accounts for 14% (Woxenius et al., 1995). In a similar American example with a 1600 kilometres rail distance, 29% of the total cost was related to local road haulage (Morlok and Spasovic, 1994).

2.1 The role of the hauliers in the transport industry network

The CT industry network is very complex including many actors, activities and resources needed for moving unit loads from consignor to consignee. Figure 1 shows CT mapped using a systems approach. The picture shows that hauliers perform local road haulage controlling lorries as resources and that they act as sub-contractors for forwarding agents, thus playing a subordinate role to the forwarder in the network. However, normally being part owners of forwarding agents and CT operators, they play a significant role besides their primary activity.

The actors of the hauling industry in Western Europe are to a large extent small or very small companies as table 1 indicates. The tradition with driver-owned lorries is strong and, for instance, the Swedish terms for the hauling company and its owner are commonly used as synonyms.

Table 1. Hauliers and lorries operated for hire or reward in some European countries. All data do not refer to the same year but indicate the structure of the industry.

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of lorries</th>
<th>No. of hauliers</th>
<th>Share of small hauliers</th>
<th>Share of large haul.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>30 000</td>
<td>6900</td>
<td>44% = 1 lorry</td>
<td>1,6% &gt;20 lorries</td>
</tr>
<tr>
<td>Finland</td>
<td>25 000</td>
<td>N.a.</td>
<td>90% &lt; 3 lorries</td>
<td>1% &gt;11</td>
</tr>
<tr>
<td>France</td>
<td>3,6 million incl. own accounts*</td>
<td>N.a.</td>
<td>67% &lt; 5 employees</td>
<td>2% &gt; 50 employees</td>
</tr>
<tr>
<td>Germany</td>
<td>160 000*</td>
<td>N.a.</td>
<td>Local: 50% = 1 lorry</td>
<td>Local: 30% &gt; 2 lorry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Long-dist.: 36% = 1 l.</td>
<td>Long-distance: n.a.</td>
</tr>
<tr>
<td>Italy</td>
<td>250 000**</td>
<td>200 000**</td>
<td>92% &lt; 5 employees***</td>
<td>1,5% &gt; 50 empl.***</td>
</tr>
<tr>
<td>Norway</td>
<td>30 000</td>
<td>15 000</td>
<td>67% = 1 lorry</td>
<td>N.a.</td>
</tr>
<tr>
<td>Spain</td>
<td>750 000****</td>
<td>500 000****</td>
<td>98% &lt; 6 lorries</td>
<td>N.a.</td>
</tr>
<tr>
<td>Sweden</td>
<td>40 000</td>
<td>18 000</td>
<td>59% = 1 lorry</td>
<td>3% &gt; 10 lorries</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>56 000</td>
<td>8000</td>
<td>40% &lt; 3 lorries</td>
<td>11% &gt; 15 lorries</td>
</tr>
<tr>
<td>The UK</td>
<td>2,3 million incl. own accounts*</td>
<td>N.a.</td>
<td>N.a.</td>
<td>N.a.</td>
</tr>
</tbody>
</table>


Besides the dominating small hauliers, the railways have substantial ownership interests in hauling companies. These hauliers have a history of supporting wagon load rail transport but also possess equipment for unit load distribution. While partly owned by hauliers, the two large forwarders in Sweden - Bilspedition and ASG - own hauliers
giving a complex cross-ownership situation. Local road haulage is also performed by lorries operated by the shippers themselves, however on a small scale.

The activities performed by hauliers are in most cases demarcated to pure road haulage like shuttles for long-distance traffic and like buses for urban distribution. The norm in the CT industry is that they are contracted by forwarders, shipping agencies, terminal companies or container rail transport companies meaning that they lack a market organisation directed towards the shippers. However, in many European countries a direct shipper-haulier relationship is the norm adding a forwarding role to the activity package (see, e.g., Cooper et al., 1991). The national differences add to the interest - but also to the difficulties - of studying the hauling industry. Hence, researchers from countries with powerful hauliers (e.g., the Netherlands: NEA, 1992; France: Nierat, 1995) give the hauliers a more prominent role in the CT analyses than those from countries with powerful forwarders (e.g., Sweden: Jensen, 1990 and Woxenius, 1994; Germany: Bukold, 1993). The latter researchers focus more on the UIRR, i.e., co-operating national companies founded by hauliers and forwarders with the purpose of arranging CT more efficiently and constituting a stronger negotiating part to the railways than the many small road transport companies could do separately.

On the domestic transport markets, the core CT service - rail haulage and terminal handling - is purchased by hauliers and the same haulier performs both the pick up and the delivery haulages. This implies that the haulier acts as a supplier for long-distance transport, controlling the choice whether to use CT or not. Small hauliers often face great difficulties in arranging both haulages since their size restricts them to hold office and garage in one city. In complex and disturbance sensitive arrangements they then often use CT for one or two unit loads while a lorry carries other unit loads on the parallel highway. The lorry is thus used for local pick up and distribution at both ends as well as for long-distance road transport. Consequently, the hauliers involved in domestic CT are a little larger than the country averages.

Domestic hauliers in countries with histories of strongly regulated road transport, e.g., Germany, France and Denmark, possess powerful positions against the railways since semi-trailer transport presumed a road haulage permit for the whole transport relation. Hence, the railways have not been allowed to arrange door-to-door transport with semi-trailers themselves. Due to deregulation within the EU, the importance of such road permits now decreases meaning that hauliers will lose one tool for executing power against forwarders and railways. However, long time is needed for changing the structure of the market.

In international European CT, hauliers have a more clear-cut role of sub-contractors to forwarders with the sole task to perform the local haulage at one end. This situation is caused by the facts that the distance often is longer and thus more difficult to cover by a single haulier and that the business culture and legislation differ nationally. Furthermore, a local CT haulage is today regarded as a normal domestic road transport implying that a haulier from the originating country must possess a cabotage permit.

There are also differences between the segments of CT related haulage. The semi-trailer segment can be characterised as a spot market with low entry barriers. Container transport is a part of the semi-trailer segment when the containers are loaded onto chassis, otherwise it is a part of the normal road transport market. Swap body
transport means more technical adaptation to CT and a tighter connection to forwarders.

The CT industry in Central and Eastern Europe is in an infant stage. Besides freight containers, articulated lorries are transported on rail - so-called rolling highway - with the purpose of decreasing emissions from eastern lorries entering the west. A giant transition from state owned monopolies or oligopolies to a structure more like that in Western Europe with private ownership is well under way.

A similar situation to European international CT is found in the USA after a significant shift in responsibility of local haulage. Small efficient hauliers have replaced the railways’ own subsidiaries, acting as sub-contractors to CT marketing companies or railways (Morlok et al., 1992). Effective July 10, 1995, Burlington Northern (BN) came more closely in line with industry practices when it gave CT marketing companies the option of controlling road haulage. BN alone in the industry had offered CT marketing companies door-to-door service that compulsory included road haulage by one of BN’s contract and selected hauliers (Burlington Unbundles Drayage, 1995). The American market situation is now very scattered with many small hauliers acting on the spot market or in alliances with CT marketing companies or container shipping lines. However, there are large companies transporting door-to-door using CT as well as massive fleets of own lorries.

The hauliers’ resources naturally vary according to their size and scope of operations. Some hauliers specialise in hauling semi-trailers or swap bodies while other larger companies possess vehicles for all types of transport. Unit loads are other resources supplied by some hauliers. While containers and semi-trailers normally are treated as own identities, swap bodies are less standardised and have been regarded as more of a part of the vehicle giving that hauliers own a larger share of swap bodies than of other unit loads.

To sum up, the hauling industry in Western Europe is very scattered and dominated by companies with less than five employees, however with national differences. Hauliers involved in domestic CT are generally larger than those involved in international CT. This stems from the fact that domestic hauliers are customers of core CT services arranging local road haulage at both ends while hauliers handling international CT have a more subordinate role to the forwarder only carrying out one local haulage.

2.2 Investments and industry development

A severe problem for CT expansion is the hauliers’ unwillingness to invest in suitable equipment. Interviews and informal discussions have revealed a reluctance to turn to CT due to the anticipated dependency on the railways after investments in equipment dedicated to CT. The mutual mistrust between the industries is partly to blame, but a strong tradition of investments in road-only equipment is clearly visible.

According to the Swedish Hauliers’ Association (1993), the general educational level is insufficient in the hauling industry. Consultants and trade associations assist, but without in-house competence the hauliers run a great risk of investing wrongly and in too traditional equipment. Due to ownership situations and the small size of companies, day-to-day operation is unfortunately often prioritised before strategic thinking.
and advanced training. Consequently, the industries manufacturing vehicles, superstructures and unit loads execute technology push rather than the hauliers execute technology pull. For example, many Swedish hauliers have been encouraged to buy large-volume semi-trailers lately although the full volume is very rarely utilised with traditional Swedish cargo. Many hauliers state that they want the same units as the efficient Dutch hauliers, however without reflecting that they use them for flowers and vegetables rather than general cargo (Woxenius et al., 1995). Moreover, most hauliers only face a derived demand through forwarders since they lack a direct relationship to the shippers.

Road transport involves very low entry barriers - a lorry and a permit for transport on hire or reward are the only prerequisites for entering the business. Financing help is offered by lorry manufacturers such as Volvo and Scania who sell lorries with only 20% down payment, the rest of the capital is lent with the lorry as the only security. Consequently, there is no bank demanding comprehensive investment calculations before financing. After an era of governmentally decided prices, road haulage is now a very efficient market giving low profit margins. In such an environment, small hauliers have a tendency to underestimate or neglect the depreciation of their vehicles as means to stay in business for a short term. Other common measures to ease the financial strain are to work extra hours without salary and to scamp with maintenance.

Another problem is the different technical life times for rail and road equipment. Long-distance lorries are normally used for less than 10 years, unit loads for some additional years while rail wagons are modified and renovated for use for up to 30 years. Moreover, many of the European transshipment terminals were built in the late 1960’s and they have reached their economic as well as technological terms of life. Europe will probably face large scale replacement investments the coming years. It is then evidently problematical for hauliers to know what CT technology to buy even though the problem would be much worse if the relation between life times was the opposite.

The EU Commission makes heavy demands upon the European national railways. Within this millennium, the railways are obliged to show profitable operations, dramatically increased efficiency, new ways of co-operation as well as openness to new operators on the tracks. Several railways and CT operators already show great improvements, but the mistrust among hauliers is hard to wipe out. Much are old prejudices, but the railways have certainly earned some of the bad reputation. The issue now is to get the hauliers interested in trying the new improved services in spite of bad experiences from the past. Earlier research (e.g., Sjögren and Woxenius, 1993) indicates the hauliers’ weak willingness to test CT. The small size of hauliers also makes the decision of using CT almost binary and only an option when replacing one of the few lorries. To play down the test procedure, the Swedish CT provider Rail Combi AB now offer special unit loads for lease during test periods.

Especially small hauliers see the long-distance traffic as their only business since it is more demanding to be an integral part of a complex transport chain than driving from consignor to consignee on the forwarder’s direct instruction. The “trucker” life style of the profession is another important factor strengthening the traditional “road-only” attitude. Furthermore, CT is regarded as a way of losing control and shares of value added. The hauliers are also afraid of revealing their customers’ identity and thus open for competing single-mode rail transport services. Many hauliers also fear that
using CT will speed up the current development towards being pure sub-contractors cut off from the important shipper contacts.

The hauliers have faced far-reaching demands from the environment movement to turn heavy road transport onto rail. As politicians have a tendency to listen to those screaming in the media the hauliers have learned to fear any political decision concerning the transport sector. Consequently, the professional hauling press is generally negative to everything involving railways.

National bodies have so far been financing much of the technology development, but through extensive R&D programs, the EU will play the most significant role in harmonising the CT technology in the near future. The long term development must be aimed at system optimisation through openness and discussions between all actors involved. Most hauliers, however, are considered too small and too focused on day-to-day operations for taking an active part in the development process. Technology development and investments is more like a selection process for those hauliers.

2.3 Working conditions of the drivers

When shifting from long-distance road transport to CT, drivers face vastly different working conditions. The drivers will perform local road haulage during business hours rather than spending several days away from home. Moreover, the part driven in urban areas will increase as well as the number of loading operations. However, a shift towards handling unit loads also has a tendency to imply less handling of the actual cargo for drivers. Instead, unit loads are left and picked up at loading docks where specialised terminal workers empty and fill the unit loads. As the employers have to take more economic responsibility for working related injuries, this issue is anticipated to attract much attention in the near future.

In the USA the issue of drivers has helped to boom CT demand since large carriers such as J.B. Hunt and Schneider turn to CT in order to attract drivers. Due to the size of the American continent, US drivers spend weeks away from base, which is not easy to combine with normal family life. Moreover, drug tests and stricter driver license legislation have created a shortage of drivers (Machalaba, 1993). Operation of the new information systems implemented in the lorry fleet also require employees with a higher educational level than the "cowboy-style" drivers dominating today's long-distance traffic. To attract educated people, the hauliers now offer local employments with short haulages during normal business hours. J.B. Hunt has stated this as the primary incentive for exchanging parts of the semi-trailer fleet for containers that can use the highly productive double-stack services.

3. FINDINGS FROM THE INQUIRY AND THE INTERVIEWS

Data collection for studies of local road haulage as a part of a CT service is a delicate task. The complex industry structure with national differences implies that studies need to be strictly demarcated and that broad generalisations are of limited worth. Moreover, the competition is fierce and the entry barriers are very low giving a general reluctance to submit information. As the Swedish hauling industry includes many small companies and that detailed cases contain more competition sensitive information, a survey approach including an inquiry and interviews was found relevant.
3.1 Methodology

The inquiry was carried out in co-operation with a group of students in the master’s education program (see Färm et al., 1994). In order to prepare the questionnaire, a number of introductory telephone interviews were performed. These should not be mistaken for the in depth interviews carried out after the inquiry with the purpose of clarifying and enriching the investigation. Then a test questionnaire was distributed to ten respondents before designing the final survey instrument. Much effort was spent in order to design the questionnaire for easy answering. The absolute majority of the 39 questions only required the respondent to mark the accurate alternative. Moreover, the topics were clearly demarcated in sections giving options of only filling out parts of the questionnaire.

The questionnaire was distributed by mail to some 350 hauling companies selected in co-operation with the Swedish Hauliers’ Association using their member register. The selected hauliers fulfilled one of the following criteria; (1) 30 or more lorries operated in total, (2) 3 or more lorries operated for long-distance haulage, (3) 3 or more semi-trailer tractors operated; (4) 5 or more lorries operated for local distribution. To make the result more accurate the selection was demarcated to hauliers from provinces with CT terminals or reasonable distances to CT terminals in other provinces and to hauliers active in other businesses than local distribution of groceries and construction materials. All 50 hauliers fulfilling criteria 1 and every 10th haulier fulfilling any of criteria 2 to 4 were selected. The latter hauliers were treated as one group since several of them fulfilled more than one of criteria 2 to 4. Since the inquiry was not considered to include competition sensitive questions, the replies were not treated anonymously. After two weeks, reminders were distributed together with a promise of sending a summary of the final report as encouragement.

Disappointing but partly foreseen, the reply frequency was low - 30 % (106 replies) and the falling off due to insufficiently filled out inquiries was as high as 45% (48). Of the remaining 17% (58), the large hauliers were over-represented with 25% (15 replies) compared to 14% (50) of the small hauliers. Moreover, 26 % (15) used CT of which 40% (6) were large hauliers. The reply result is summarised in table 2:

<table>
<thead>
<tr>
<th></th>
<th>Send questionnaires</th>
<th>Received answers</th>
<th>Insufficiently filled out</th>
<th>Remaining answers</th>
<th>Of which current CT users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large hauliers</td>
<td>50 (14%)</td>
<td>25 (7%)</td>
<td>10 (3%)</td>
<td>15 (4%)</td>
<td>6 (2%)</td>
</tr>
<tr>
<td>Small hauliers</td>
<td>300 (86%)</td>
<td>81 (23%)</td>
<td>38 (11%)</td>
<td>43 (12%)</td>
<td>9 (3%)</td>
</tr>
<tr>
<td>Total</td>
<td>350 (100%)</td>
<td>106 (30%)</td>
<td>48 (14%)</td>
<td>58 (17%)</td>
<td>15 (4%)</td>
</tr>
</tbody>
</table>

Reasons for the low reply frequency is primarily sought in the severe pressure upon the small hauliers at the time of the inquiry. Telephone calls to hauliers that did not reply disclosed that the managers were too much involved in day-to-day operations and stated that filling out inquiries was of low priority. Deficiencies in the member register used was identified as the major cause for insufficiently filled out inquiries - several respondents stated that they were not potential CT users - although some re-
respondents had clearly not read the instructions for filling out the questionnaire thoroughly enough.

The 58 answers included in the analysis were rather narrowly distributed, i.e., the opinions were rather uniform in the group giving a satisfying reliability. However, the low reply frequency limits the possibilities of generalisation to a larger group, i.e. the validity can not be regarded as satisfying. There is a risk that the replying hauliers have a greater knowledge of and interest in the CT issues and that those hauliers under financial strain or strongly focusing on day-to-day operations are less likely to think strategically or consider using CT.

Another problem was that the actual respondents identity and positions could not be controlled. For instance, the questions referring to the driver’s working conditions were actually addressed to their employers who might find an interest in displaying positively experienced working conditions. Interviews with drivers were therefore performed to check for different opinions. Despite the shortcomings of the inquiry, the data are used in conjunction with in depth interviews and secondary data enhancing the analysis and the conclusions from the combined study.

All answers were keyed into a data base designed as a Microsoft Access application allowing crosstab queries for analysing the material. The result from a number of such queries revealed no significant differences between groups, e.g., large vs. small hauliers and current users vs. non-users of CT.

The in depth interviews were used for the purposes of deepening the discussion, getting answers to questions not suitable for questionnaires as well as getting more accurate knowledge about questions on which the inquiry revealed unexpected answers. The respondents were selected from hauliers expressing deeper thoughts, from hauliers giving divergent but interesting answers as well as from contacts from earlier research.

3.2 The hauliers' position in the combined transport industry network

The terminal function is somewhat the core of CT and is often used for illustrating the distinction from single-mode transportation. Today Rail Combi AB, mainly owned by SJ, is the principal of all Swedish terminals although some are operated by hauliers, forwarders, port authorities or large shippers like IKEA. The hauliers in the inquiry found themselves as most suited for operating terminals, closely followed by Rail Combi, forwarders, the UIRR company Swe-Kombi and port authorities. The main body of SJ and the railways’ CT operator Intercontainer-Interfrigo (ICF) were rated as unsuitable terminal operators. The hauliers’ ability to operate terminals could however be questioned due to the companies limited sizes and geographical coverage. Of course, different hauliers can operate local terminals, but there will be a great risk of suboptimization in the network.

Hauliers and forwarders were also by far rated as best suited for handling the important direct connection to shippers. This indicates that the hauliers find CT as basically a road transport product using the railways as pure subcontractors. Ownership of unit loads is obviously another strategic question for hauliers. By owning this resource they can control the door-to-door transport and they have the option of using CT or
long-distance road transport. If the forwarders own the unit loads, the hauliers are more likely to be degraded to pure subcontractors for one short haul. Consequently, and almost in unison, the hauliers stated themselves as the best suited for owning unit loads, followed by much lower rated forwarders, leasing companies and a joint unit load pool. Even shippers were rated higher than Swe-Kombi and "the rail league", i.e., Rail Combi, SJ and ICF.

Hence, the suitable industry structure is, according to the hauliers asked, that they own the unit loads, operate the terminals and sell CT directly to shippers.

3.3 Investments and industry development

One of the key issues in future CT expansion is how to convince hauliers that investments in CT equipment are likely to be profitable. The hauliers in the inquiry found shippers followed by forwarders more suited for influencing their investment decisions than manufacturer and agents selling vehicles and unit loads. The Swedish Hauliers’ Association, other hauliers and "the rail league” were found unsuitable but the hauliers use trade journals for surveying the market. Factors triggering investments were rated in the following order: (1) changes in transport demand, (2) shippers’ specific requirements, (3) worn out material and (4) new available technology. Hence, the demand side is stronger than the supply side and the railways themselves are not likely to succeed in convincing the hauliers to invest in CT equipment. Furthermore, haulier executives expressed doubts about the long-term price development of core CT services as the major cause of not investing in CT equipment.

The preparation for investment decisions was remarkably insufficient. Statements such as "if the wallet is full" were common. One of few structured answers reads: "Continuous analysis of the current situation and the need for investments. Discussions internally as well as with shippers and vehicle manufacturers. Recommendation by the managing director to the board.” Decision parameters were - quite foreseen - the overall economy, price, quality and the actual need.

A delicate question concerning the future of CT is which actor should lead the general development of the industry. Today Rail Combi AB is regarded as taking the lead, however in a rather conservative way (see Woxenius, 1994). The answers were relatively evenly distributed, but SJ and especially governmental bodies earned low rates. Several hauliers stated that earlier subsidisation and legislation in the field has been unfavourable to hauliers. The general reluctance to governmental involvement is considered to endanger the EU’s plans for guiding the development.

The hauliers regarded themselves as best suited for leading technology development, but the other actors are relatively evenly graded in total, however with substantial differences between individual respondents. The awaited reply about broad co-operation could not be confirmed by the inquiry, but an interviewed haulier executive hoped for joint development between SJ and forwarders. A strong market adaptation was stressed, a fact giving hauliers and SJ problems since they lack direct shipper contacts.

A dedicated question to those hauliers currently using CT revealed several reasons for starting to use CT services. Most common were demands from shippers or forwarders.
Some hauliers stated that mergers of hauliers contributed to achieve the critical size for using CT, strengthening the supposition that small hauliers find the use of CT difficult. Another common reason was that CT is used for covering demand peaks. Some hauliers calculated the potential profitability before buying CT specific equipment, but noticeable is that many haulier executives followed their intuition more.

Conclusions from this part of the inquiry are that co-operation between the actors without governmental involvement should be the base for developing CT services and that the methods used for preparing investment decisions unfortunately are insufficient as anticipated.

3.4 The drivers' working conditions

Long-distance road transport imply long stays from home for each transport task. Working weeks are normally divided into 3-4 intense days of work followed by days off. The norm is that the driver sleep in his lorry between the working days. The inquiry stated that one third stayed less than 50 nights away from home, one half stayed between 51 and 100 nights away and the remaining sixth stayed more than 100 nights away from home. Drivers working with local pick up and delivery work 40-hour weeks comparable to those of other blue collar workers and spend all nights at home.

As a compensation for the days and nights spend away from home, the drivers get subsistence allowance and extra wages or compensatory leave. Not remarkable, the inquiry stated that the drivers perceived the loss of the subsistence allowance as a result of turning to CT as negative and the attitude was directly related to the number of nights stayed away from home. However, the expected trade of not wanted stays for subsistence allowance and extra leave could not be confirmed. On the contrary, the positive attitude towards staying away from home was actually stronger for those frequently doing so. For obvious reasons, interviewed haulier executives accentuated the financial advantages of less stays overnight.

An increased share of CT local haulage means more driving in urban areas and more but shorter transport assignments. Driving is then considered as more demanding for the drivers. A majority 60% of the drivers experienced this as negative or very negative compared to long-distance haulage. Only 5% of the replies showed positive attitude towards short urban hauls. One interview respondent stated that CT would turn the ”truckers” into taxi drivers.

CT also implies more loading and unloading operations, referred by one respondent as ”kicking and shoving the cargo”. According to the inquiry, 90% of the drivers involved in local road haulage took care of 50% or more of the loading and unloading operations themselves. They load and unload less of the long-distance cargo but the differences more depend on the layout of the transport system than on the distance. Although specialised terminal workers or short haul drivers load, the long-distance drivers must exercise control over the loading process since they are responsible for the secure fastening of the cargo onto the lorry platform and for what cargo is carried over national borders. The safety procedures have certainly attracted attention after the severe ferry accidents in Scandinavia during the past few years. The driver’s atti-
tude towards an increased number of loading and unloading operations was remarka-
ably neutral. 48% replied that they were neutral, 19% were positive, 28% were nega-
tive and 5% were very negative. The fact that CT implies less handling of the actual
cargo and more placing of unit loads did not influence the attitude towards CT to a
remarkable degree.

To sum up, the drivers are not supposed to find a potential change towards CT as a
benefit to their working conditions. The absence from their family is actually per-
ceived as positive, especially when related to the economic and spare time benefits. A
larger number of short hauls in urban areas is negatively perceived. The majority of
drivers thus have a negative attitude towards CT, however in this case rendered by
their employers.

4. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

New information technology, longer transport distances, demand for more advanced
logistic services and further EU legislation point towards dramatic changes in the
European transport industry. The average European haulier with less than five em-
ployees is anticipated to find it difficult to withstand the increased power of forward-
ers. Forwarders want to combine the services of subcontractors implying that hauliers
will supply single local road haulages on a spot market or on long-term contracts with
forwarders. The small hauliers then have two options; (1) to accept and adapt to the
new situation as pure subcontractors or (2) to expand, merge or establish a network
among hauliers for increased size. However, throughout the inquiry, the hauliers think
highly of themselves as operators and developers, while their trade association and the
UIRR company are lowly rated. Consequently, they neither identify the need for
strengthening their position nor find the current co-operation forms satisfactory.

The small size of hauliers and the lack of time for strategic thinking also limit their
possibilities of taking active part in technology development and invest wisely. The
small hauliers will probably only choose from existing technologies while the larger
hauliers have options to operate own terminals and optimise the technology used.

The working conditions for drivers are rather dramatically different between long-
distance and local road haulage. In order to develop and extend the CT services in the
short run, the drivers must at least accept - but more likely favour - the change in con-
ditions. However, in the long run a replacement of drivers like that in the USA is fore-
seen in Europe. Due to increasingly complex technologies and services, the future
drivers face stricter qualification requirements and the majority will carry out local
assignments during normal working hours.

There is a large need for highlighting the hauliers’ situation in the CT industrial net-
work in further studies. Hauliers need supportive studies since they lack the perma-
nent resources for strategic studies that the larger actors, e.g., forwarders, CT oper-
tors and railways, possess. If the EU commission have serious intentions of support-
ing an expansion of European CT services, informative studies concerning hauliers
might be the key for success. In order to be useful, the studies must be down-to-earth,
both concerning issues and the language used. At Chalmers University of Technology,
a continuing study on the Swedish hauliers’ situation after the last economic recession is planned for the autumn. The study, however not demarcated to CT hauliers, is a co-operation with a regional haulier association.

REFERENCES


Figure 1. Actors, activities and resources in the combined transport industry network. The supplier relationships concerns European international combined transport. In domestic combined transport, the hauliers act as intermediary parts between forwarders and other actors. The figure is described in detail in Woxenius, 1994.