

EMCC case studies

Transport and logistics sector: Andreas Andresen, Denmark

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Andreas Andresen A/S is one of the market leaders in Denmark for the transport of temperature-controlled goods and logistics solutions to and from western and eastern Europe, Scandinavia, Russia and the Baltic states.

Since the late 1990s, the company has focused on growth and expansion, and has merged with the German company Kraftverkehr Nagel GmbH Group. However, Andreas Andresen continues to operate under its own brand name.

Andreas Andresen faces the challenges of labour shortages, low loyalty among drivers and readjustment from being a small transport company to being a European operator.

Introduction

Andreas Andresen A/S has specialised in temperature-controlled distribution of food products in western Europe for a number of decades. The company's cold storage facilities in the Danish town of Padborg on the German border act as a central hub for the large number of daily departures of part-load consignments heading north and south to and from destinations all over Europe.

The company has daily departures to and from, for example, Austria, Belgium, France, Germany, Luxembourg, the Netherlands, Sweden and Switzerland, and several weekly departures to Finland, Portugal, Spain, the United Kingdom and selected destinations in eastern Europe.

C. G. Søndergaard established Andreas Andresen A/S as a company in 1916 in the southeastern town of Vamdrup, Denmark. When the Danish-German border was decided after a referendum in 1920, the company moved to the new border town of Padborg. The company headquarters has remained in Padborg ever since.

Andreas Andresen took over the company in 1928 and managed it until his death in 1976. The company remained in the family and continued under the control of Luise Andresen until she died in 1992; responsibility for company operations then transferred to a foundation. The company originally transported livestock and agricultural machinery. This was later followed by food products and industrial goods.

In 1965, the company constructed the first part of the cold store called Padborg Frysehus. This cold store, which was only 1,700 m² originally, now consists of 20,000 m² designed specifically for the storage of chilled and frozen goods.

In 1985, Andreas Andresen A/S owned 15 vehicles. In addition, the company had 38 hired vehicles in service on a full-time basis. At that time, Andreas Andresen employed around 100 personnel at the head office in Padborg and the branch offices in the towns of Hvidovre near the capital city of Copenhagen in east Denmark, Rødby in the south of Denmark and Flensburg in northern Germany. Gradually, Andreas Andresen specialised almost exclusively in the transport and shipping of food products.

Company development

By the late 1990s, the workforce had grown to some 220 employees divided between the head office and the branch offices in St. Petersburg and Moscow in Russia and the northwestern seaport of Klaipėda in Lithuania. The company employed 65 permanent export hauliers.

In an attempt to address the challenges stemming from the significant changes in the structure of the transport sector in the late 1990s, Andreas Andresen purchased the company HST Padborg A/S on 1 January 1999.

In 1999, the whole group employed about 550 employees and had a turnover of DKK 500 million (€67 million, as at 21 April 2008). The group had about 250 of its own trucks, 500 own and leased trailers, and considerable cold and dry cargo storage facilities and washing facilities at its disposal.

Since 1999, Andreas Andresen has focused strongly on growth and has organised mergers both nationally and internationally. In 2001, Andreas Andresen merged with the German transport and logistics company Kraftverkehr Nagel GmbH Group, guaranteeing capital for future expansion. The shares are equally owned by Kraftverkehr Nagel and the foundation responsible for management of Andreas Andresen. The Nagel group wants to keep and strengthen the Andreas Andresen name and profile in the market; thus, Andreas Andresen A/S continues to do business under its own brand name.

Textbox 1: Kraftverkehr Nagel GmbH Group

The head office of the **Nagel Group** is located in the northwestern German town of Versmold in North Rhine-Westphalia. The company operates in the food logistics field within several European countries. Kraftverkehr Nagel's parent company was established by Kurt Nagel in 1935 and has been the German market leader in the field of temperature-controlled food logistics for several years.

In Germany alone, the company has more than 4,000 employees and all together 8,000 employees on a global scale. In 2006, the turnover was €636 million.

Kraftverkehr Nagel should not be confused with the leading transport and logistics company Kühne + Nagel, with a 2006 turnover of €1,974 million and 48,000 employees worldwide.

In 2003–2004, Andreas Andresen had a turnover of DKK 785 million (€105 million) and employed 568 full-time employees. In 2003, Andreas Andresen took over the company Holger Pagh Sellerup ApS and 50% of the shares in KK Transport Struer. Holger Pagh Sellerup ApS was acquired to strengthen the market position in western Europe, while KK Transport Struer was known for its national distribution of temperature-controlled goods.

In 2004, KK Transport Struer took over 90% of the shares in EKV Transport A/S. The latter is known for its activities in the national distribution of food products.

Together the companies have a size that enables them to provide a national as well as an international operation covering all needs in the distribution of food products. In Denmark, Andreas Andresen is represented with branches in: Hvidovre; the central town of Hørning south of the city of Århus; the southern town of Vejle; the village of Bjæverskov northwest of Copenhagen; and – through associated companies – in the western town of Struer and the eastern town of Sorø. Furthermore, as noted, the company has branch offices in St. Petersburg and Moscow in Russia and in Klaipėda, Lithuania.

In 2006, Andreas Andresen had a turnover of DKK 1.2 billion (about €160 million).

On 1 January 2008, Andreas Andresen acquired the share capital of Trans Mar A/S. This company has extensive experience in transporting and exporting fresh fish. The combination of the competencies of Trans Mar, particularly regarding fresh fish and iced fish products, and the coverage of semi-manufactured fish products for retail distribution in Europe through Andreas Andresen creates a complete package to cover the demands of the fish industry. Trans Mar

was established in 1989 and, in 2003, it merged with Peter Hansen Transport A/S; the latter was founded in 1932. Trans Mar continues its activities under its own name. With 90 employees, Trans Mar has an annual turnover of DKK 135 million (€18 million) with headquarters in Padborg next to Andreas Andresen and branch offices in the city of Aalborg and town of Skagen in northern Denmark.

Furthermore, Andreas Andresen owns several European haulage contractors in Europe. Today, Andreas Andresen owns 400 trucks and has 800 trailers in international rotation and 300 trailers for Denmark alone. Of the 400 trucks, 200 are registered in Germany, 100 in Poland, 60 in Lithuania, 30 in Luxembourg and 10 in Denmark. Andreas Andresen works with subcontractors and operates some 1,100–1,200 trucks every day; during peak seasons, this total increases to about 1,300 trucks.



Figure 1: Aerial view of Andreas Andresen A/S in Padborg, Denmark

Note: The terminals and warehouses to the left of the buildings and parking lots have since been extended.

Source: Google aerial view, 2007

Storage facilities

At the cold store in Padborg and the two modern terminals nearby, large amounts of foodstuffs are dispatched daily to and from most of Europe in a continuous and temperature-controlled chain within tight delivery schedules.

Andreas Andresen has facilities for both short and long-term storage of dry cargo, chilled and frozen goods, as well as facilities for freezing, packing, labelling and picking. At the same time, the cold store and terminals serve as a central hub for the company's European general cargo concept. Many of the leading Danish exporters of food products use the storage facilities.

The overall operation comprises the following property:

- 200,000 m² of land, of which 25,000 m² is developed;
- 5,100 m² of dry storage facilities, including 3,900 m² on long-term hire;
- 3,500 m² of terminal facilities at Trans Mar;
- 3,100 m² for cleaning and storage of reusable packaging;
- 20,000 m² of cold storage facilities for frozen goods;
- 9,100 m² of cold storage facilities for chilled goods;
- 1,400 m² for the canteen, garage, bathrooms and other personnel facilities;
- 2,700 m² for administration.

Localisation

Although Andreas Andresen still has its headquarters in Padborg in Denmark at the German border, all drivers in the company are from Germany, Poland and Lithuania. The company headquarters remains in Padborg because of the experience in freight forwarding and logistics. However, the main means of operation – drivers and trucks – have moved eastwards to Poland and Lithuania over the past five years.

The main reason for this trend is lower wages and easier recruitment of truck drivers, but hiring across cultures has its downsides – as the Chief Executive Officer (CEO), Steen Sørensen, explains:

'We have moved our "production" to Germany, Poland and Lithuania. Wages are lower and because of labour shortages in Denmark recruitment is much bigger here. In our experience, there are huge cultural differences in drivers' attitude towards work, and the loyalty towards Andreas Andresen is very low. Some 45% of the drivers jobhop every year because of wage differences. They leave very quickly — so fast, that you risk being 20 drivers short on Monday morning, because they quit their job and left for someone else. Other drivers just left their truck behind in Italy when quitting their job. Another difference is diesel consumption or outright theft of diesel. The low loyalty, low responsibility and the difficulties in planning because of the cabotage rules might mean that the disadvantages exceed the advantage of a lower wage. In a few years, the wage level in Poland will equal the German rate.'

Cabotage is the transport of goods or passengers between two points in the same country, and 'cabotage rules' refer to the right of a company from one country to trade in another country. Mr Sørensen mentions the cabotage rules several times in the interview, viewing them as protectionist regulations obstructing free competition and making trailers drive empty on the German autobahn and elsewhere. Human Resource (HR) Manager Kim Anker Hansen explains: 'Most of our transports are still north—south in Europe and, with Polish and Lithuanian drivers, the cabotage rules add complexity to the logistics process.'

Textbox 2: Cabotage rules

Cabotage rules regulate non-resident national road haulage services in other states. Based on Article 71(1)(b) of the **EC Treaty**, the Community Regulations give the following definition:

'Any non-resident carrier who is a holder of the Community authorisation is entitled to operate, on a temporary basis and without quantitative restrictions, national road haulage services in another Member State, without having a registered office or other establishment in that State.'

'On a temporary basis' means that such transport must not be carried out over a longer period of time or systematically or continuously. For some of the new Member States, transitional periods still apply and hauliers from these countries are excluded from performing cabotage in other Member States.

The European Commission's **Directorate-General for Energy and Transport** has further **information about cabotage** on its website.

If the company were to be relocated today, it would be better to place it further south in Germany to be closer to southern markets. The only problem is that the experience is vested in the staff in Padborg. Nonetheless, in the future, terminal centres like Padborg will still be important, Mr Anker Hansen believes. He expects that road transport between terminals and redistribution between these points will become more important – especially if the retail chains place their terminals in easily accessible transport centres. That would also be an advantage in relation to city distribution and to avoid congestion in cities.

Textbox 3: Driving time and rest periods

Regulation (EC) No. 561/2006 on the harmonisation of certain social legislation relating to road transport provides a common set of Community rules for maximum daily and fortnightly driving times. It also stipulates daily and weekly minimum rest periods for all drivers of road haulage and passenger transport vehicles, subject to specified exceptions and derogations. The regulation aims to avoid distortion of competition, improve road safety and driver working conditions within the Community.

The daily driving period shall not exceed nine hours, with an exemption of twice a week when it may be 10 hours. Up to six driving periods a week are allowed. The total weekly driving time may not exceed 56 hours and the total fortnightly driving time may not exceed 90 hours. The daily rest period shall be at least 11 hours, with a possible option in exceptional cases of reducing it to nine hours three times a week. Provision is made for a split rest of three hours followed by nine-hour rests to make a total of 12 hours rest per day. A weekly rest period is 45 continuous hours, which can be reduced to 24 hours. Compensation arrangements apply for reduced weekly rest periods. Breaks of at least 45 minutes (separable into 15 minutes followed by 30 minutes) should be taken after 4.5 hours at the latest.

Source: Directorate-General for Energy and Transport website

Experience and innovation

The sources of knowledge, innovation and development in Andreas Andersen come from its own development staff, HR personnel and external consultants. However, the company expects that the merger with Nagel will also be an important source of knowledge. The first signs of this development are already showing. Mr Anker Hansen notes:

'We are still working as an individual company, but in time we'll see a further integration in business and systems with Nagel. Today, we are cooperating with Nagel on the use of terminals and we have just implemented integration in our enterprise resource planning (ERP) systems.'

New technology

Andreas Andresen uses a number of information technologies (IT) in its business operations. Key technologies are the following:

- COMLOCK for communication with trucks;
- Autoroute or Routelogic for route calculation and planning;
- AS400 for internal communication;
- Systems Applications and Products (SAP) business software for economy and resource planning this is integrated
 with Nagel.

COMLOCK is an online tracking and fleet management system used to track the position of trucks. The system is used for route planning – except for subcontracting trucks because the system needs onboard technology. Online access in the fleet management system means that the company can check information without disturbing drivers to establish how much driving time they have left; subcontracting drivers must still be contacted by mobile phone. The IT department, comprising five staff members, helps to develop the technological capacity of Andreas Andresen. Tracking and fleet management offers advantages for customers, besides greater organisational efficiency. As Section Manager Jan Rasmussen explains:

'Development in the use of IT is driven primarily by employees and the IT department. We are evaluating new track in trace systems and the payback time. There are many options with time tracking systems, milestones on routes, alarms or tracking by satellite. Track in trace is a demand from the customer and it saves administrative resources when updating can be done without the use of a mobile telephone.'

A large number of competing fleet management systems are available in the transport and logistics sector; in this respect, the sector is not harmonised and many companies use a combination of off-the-shelf solutions with some tailoring to their existing systems. Technologies are developing at a great pace, and that complicates the calculation of profitability and durability of solutions. As noted earlier, Andreas Andresen owns about 400 trucks but on a day-to-day basis the company operates some 1,100 trucks or more.

The additional trucks come from different subcontractors. Consequently, one of the challenges is to find affordable track 'n trace systems that also work reliably in rented trucks and trailers. This would be possible with a standardised system. However, it is a considerable task to come to an agreement on standards that work in all European countries – particularly in a fast developing technological area such as track 'n trace. Mr Sørensen comments:

'We hope that technical solutions on trucks such as onboard computers, milestones on routes and tracking systems can outweigh some of the disadvantages we experience by having a more volatile and less responsible workforce.'

Company growth

Andreas Andresen is an active expanding company. This is the impression that observers get when visiting the Padborg headquarters. Builders are working to expand the administration space, which is much needed as freight forwarders, computers and desks are crammed into an office space built for a much smaller company. Outside, trucks and trailers with the Andreas Andersen brand name drive in and out of the terminal area in an almost endless stream.

The company has expanded its activities very quickly over the past five to 10 years, from an annual turnover of DKK 500 million (€67 million) in 1999 to DKK 1.2 billion (about €160 million) in 2006. Indeed, during that period, Andreas Andresen has become a part of the much larger transport company Kraftverkehr Nagel.

Company growth has been at a rate of up to 25% a year and is the result of a strategy to match the market and business customers in the retail sector as well as the manufacturing sector. Food producers are merging and growing bigger all the time – as are the supermarket chains. To stay in business, transport and logistics companies have had to match this growth to be a serious partner for large enterprises such as Nestlé or Unilever.

The expansion and the takeover of companies have happened quickly, and Andreas Andresen has not attempted to fit all parts of the company family into the same system at once. Changes are expected to come more gradually. The strategy of expansion is under consideration in the company and now is time to readjust the organisation. Mr Rasmussen explains:

'Where we used to focus on growth we have a much more strategic approach today. Competition is fierce in the international market, and we have to do things right on all levels. We have come from being a small player to becoming a market leader. The company has developed very fast since 2000, and we meet new demands all the time – how are we to transform the organisation into being a company this size?'

Mr Sørensen outlines how the company is improving its internal organisation by adopting the concept of lean manufacturing; this strategy aims to eliminate waste and ensure an optimal production flow with no stockpiling.

'We have experienced 25% growth a year for some time now. We probably have to slow down to around 10% in order to adjust our organisation and systems to a larger company. We have begun to improve internal organisation and we use the 'lean' production principle as one of the methods. To accomplish that we have hired an engineer with lean expertise and we are cooperating with an external lean consultant. It is an eye-opening process.'

Growth has affected many areas of the company. Mr Sørensen gives some insight into the situation:

'In the past two years, our IT systems have had trouble keeping up with the growth. The finance department alone grew from 12 to 40 staff. That calls for a reorganisation and new IT systems, and in December 2007 we implemented SAP – which is a huge challenge for the finance team.'

The challenge is not only to readjust technology use. Handling the mergers with and takeovers of companies implies handling different corporate and national cultures. Some of the new companies cannot be moved because their freight forwarders prefer to stay where they are. They know the business – so the business has to stay.

As noted earlier, Andreas Andresen has taken over the neighbouring company Trans Mar A/S, and the freight forwarders of Trans Mar and Andreas Andresen are moving into the same offices when the ongoing reconstruction of the Andreas Andresen administration building is finished. Although the staff from Trans Mar are only moving across the street, it is a challenge which must be managed. Mr Rasmussen notes: 'Clearly, it is a challenge and it does take time to integrate different cultures and systems. Integration of Andreas Andresen and Trans Mar is happening but we are not 100% there yet.'

Profile of the workforce

The workforce of Andreas Andresen is divided into two groups: the management office staff, freight forwarders and clerks working in the headquarters in Padborg; and the drivers operating the trucks. The office staff is bilingual in Danish and German – most of them are Danish or German. They tend to be young, while the drivers tend to be older. As noted earlier, the drivers are German, Polish and Lithuanian.

These two groups work separately except for the daily communication by telephone or onboard computers or in person at the headquarters.

Freight forwarders

The operation of Andreas Andresen is organised in the following four steps.

- 1. The sales department receives orders through electronic data interchange (EDI) or fax.
- 2. The freight forwarders register the orders and plan the logistics. This is a complex task involving consolidation, storage, scheduling, handling and distribution of goods and very often further elements such as advisory services or procuring insurance. The freight forwarders work in close cooperation with the rest of the company and use IT to organise the transport, handling and storage of goods.
- 3. After the freight forwarders, the trailer department organises the trailers to be ready for the transport with the necessary equipment.
- 4. Finally, the driving department organises trucks and drivers. If too many orders are received at one end, the driving department has to solve this problem at the other end. Thus, it is crucial that all departments coordinate at all times.

Padborg has a large pool of specialised knowledge about freight forwarding, which is one of the reasons that the company keeps its headquarters and offices there.

According to Mr Rasmussen, freight forwarders are usually individualistic, young people who have learned the trade through practical experience. A common background is a commercial education and some are former drivers. The section manager comments: 'The important thing is that the freight forwarders have a flair for buying and selling and trading. Technically, it is not a demanding job. In general, this business employs very few academics – we are no different.'

In the planning of transport journeys, the forwarders must know about wages, ferry prices and time schedules, distances, fuel prices, driving time and rest period rules, and route planning in order to optimise the transport as much as possible. The costs are calculated per km and, with one truck alone driving 150,000 km a year, this is very important when several hundreds of trucks are in operation.

One challenge is to provide the right communication and planning tools. According to Mr Anker Hansen, most electronic planning tools cannot handle the amount of data automatically without interception from the freight forwarders. Currently, a forwarder handles 10 to 15 transport journeys a day. In the future, with better tools, a forwarder could perhaps handle 30 journeys a day.

It used to be a very stressful job which required staff to work until 21.00 or 22.00 every evening, but the work culture is changing quickly. It is still stressful, requiring coordination and communication at all times, but the working hours are not that long anymore. As Mr Rasmussen explains, 'We had a narrow focus on growth in previous years – and less on job satisfaction and welfare. That focus was necessary in order to double the turnover in just five years.'

Truck drivers

Driver shortages in an area of low unemployment and recruitment of drivers are important issues for the company, as they are for many other road haulage and distribution companies. Years ago, young drivers could be hired directly after their military training during which they had already received the necessary training and licences for truck driving. Thus, there is little or no long tradition of internal education and training of truck drivers.

According to Mr Anker Hansen, training is needed more today for several reasons:

'Training is necessary to make sure that the drivers have the right competencies and that we are an attractive workplace. The drivers expect to be treated as individuals with a balance between work and family life, and to have flexible working hours. They expect to be part of the team and not just to be pushed around by the freight forwarders. Finally, some drivers would find working in our company more attractive if they could work their way up and advance to working in the office, managing and planning the driving.'

Andreas Andresen does not have a training programme for new office employees or for the drivers. The typical new employee gets a short induction, a mobile telephone and then is expected to do the job. In spite of good corporate intentions towards training and development, new employees very often have to learn by doing.

Mr Rasmussen points out that recruiting a sufficient number of drivers is a considerable challenge. Many people do not find driving attractive and the average age of drivers is rising towards 40 years. He expands:

'More and more drivers are pensioned off – and truck driving is not attractive to young people. Our drivers are primarily German and Polish, but they are not very loyal to the company. We try to invest in new trucks – no trucks are older than three years – and that makes us more attractive as a workplace. Looking at the company as a whole, we have many young people at the office and many older people behind the wheel in the trucks.'

Labour shortages and low wages have made foreign labour markets more attractive. Today, Andreas Andresen has 200 trucks registered in Germany, 100 in Poland, 60 in Lithuania, 30 in Luxembourg and 10 in Denmark. The low costs are attractive but, as noted earlier, cabotage rules complicate planning and the loyalty of drivers is an increasing problem. Some drivers have, for instance, left the company over the weekend by abandoning the truck in Italy. Shortage of drivers increases the recruitment competition among transport companies and, very often, a higher wage offer will persuade drivers to take a new job at short notice.

Communicating with drivers scattered all over Germany and Poland is difficult. Much of the information is provided in Danish or German – but there is still a great distance in terms of reaching the drivers. Internal communication is becoming more complex because of the company growth, and it is difficult to get in personal contact with the drivers or to develop a team spirit. On top of that, drivers sometimes ignore the information that is transmitted.

Future challenges

Handling growth in Andreas Andresen is one of the acute challenges. According to Mr Sørensen, the market has changed. The road haulier business used to be very fragmented with numerous small companies but, with globalisation, customers have consolidated and grown.

The customers of Andreas Andresen are planning globally and many have relocated. Transport for the company used to be on a mainly north—south axis but now it delivers all across Europe. The strategy to handle these changes has been to expand and to become part of the larger Kraftverkehr Nagel GmbH Group. This move has given access to customers such as Unilever or Kraft. The strategy is international, and Andreas Andresen can be considered a European transport company.

Other challenges are described below.

Just-in-time deliveries and road congestion

Traffic congestion makes it increasingly difficult to ensure just-in-time deliveries. It also hinders efforts to maintain a high frequency of delivery and to manage narrow time windows at terminals. The demand for fresh produce is constant, but represents a challenge due to congestion and the drive and rest period regulations.

Liberalisation

Mr Sørensen points to the cabotage rules as a serious challenge: 'The regulations mean that expensive trailers are driving empty. That is inefficient and is adding to congestion on the roads – the rules of cabotage are protectionist.'

Handling growth in demand for transport

The demand for transport is growing faster than gross national product (GNP). Congestion, driving time and rest period regulations, and labour shortages are a challenge to growth. According to Mr Sørensen, road congestion in combination with the driving time regulations make it difficult to optimise transport journeys. The CEO refers to an analysis from the Frauenhofer Institute for Systems and Innovation Research (Fraunhofer Institut Systemtechnik und Innovationsforschung) in the southern city of Nuremberg in Germany. The study of 2,000 transport companies found a 3% loss in efficiency due to driving time and rest period regulations on return trips between terminals and up to a 19% loss of efficiency in multi-drop deliveries, with an average loss of 9.6%. Furthermore, Andreas Andresen has to handle labour shortages. Mr Sørensen expects that just-in-time deliveries and narrow time windows will be too expensive for customers in the future.

Environment

Efficient and environmentally friendly transport journeys are difficult because customer demand turns the trailers into rolling storage with just-in-time delivery of goods. From an environmental point of view, Andreas Andresen considers that there is plenty of room for improvement but the demand for fresh products makes it difficult to reduce transport journeys. At present, drivers must be ready to unload the trailers in most places between 06.00 and 10.00; this makes it difficult to fill the trailers completely and the large number of trucks adds to traffic congestion problems during rush hour.

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Interviews

Interviews were conducted in Padborg on 4 and 5 December 2008 with:

CEO, Steen Sørensen

HR Manager, Kim Anker Hansen

Section Manager, Jan Rasmussen

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