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**STRUCTURAL CHANGES AND
TRANSPORT CHALLENGES**
**A study about the Danish structural
reform. First report**

**Kent Bentzen and
Michael Stie Laugesen**



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A study about the Danish structural reform

First report

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and
Michael Stie Laugesen

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EXECUTIVE SUMMARY

This report is the first part-report of three consecutive reports about the Danish structural reform. The report takes its point of departure in the changes, which expectedly will happen on a regional planning level, after the Danish structural reform is finally implemented the 1st of January 2007. The report will have a special focus on the expected changes for regional goods transport and logistics planning along with the spatial planning sector. Furthermore the report will focus on how the regions can supply a regional based foundation for the planning of the major transport related issues in the near future.

In order to get a deeper understanding of transport flow development, the concepts of Space of Places and Space of Flows described by Manuel Castells and Hypermobility described by Tore Sager are investigated and put into context to a goods transport and spatial planning perspective.

In the end of the report, it is concluded that the regions are facing a difficult goods transport planning assignment, due to the fact that they lose much of their planning responsibility to the municipalities and the state. The report furthermore concludes that the regions have the possibility to make a good and sustainable transport planning, if they succeed in coordinating the work internally in the regions, for instance by establishing regional theme groups with a transport planning related focus. At the same time the regions should focus on their regional strengths, challenges and possibilities, and when possible cooperate with the municipalities and local businesses in making the regional planning.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
TABLE OF CONTENTS.....	7
LIST OF FIGURES	9
LIST OF TABLES.....	10
1 STRUCTURAL CHANGES AND TRANSPORT CHALLENGES. 11	
1.1 Reform in Denmark	12
1.2 Connections between the transport sector and the new structure	19
1.3 Summary	22
2 PROBLEM FORMULATION	23
3 ANALYTICAL FRAMEWORK AND UNDERTAKEN METHODS. 25	
3.1 Structure of the project.....	25
3.2 Utilised methods during the making of the report.....	29
3.3 Source criticism.....	31
3.4 Interview guidelines.....	32
4 THEORETICAL UNDERSTANDING OF FLOWS AND TRANSPORT DEVELOPMENT.....	37
4.1 Space of Places and Space of Flows.....	39
4.2 Hypermobility	45
4.2.1 Hypermobility means unpredictability.....	47
4.3 Reflection of the two texts in connection with goods transport and regional planning.....	48
5 GENERAL OVERVIEW OF CHANGES WITHIN THE PLANNING AND THE GOODS TRANSPORT SECTOR	55
5.1 Law changes with an impact on the goods transportation sector.....	55
5.2 Overall changes of the road administration	56
5.3 Administrative changes	58
5.4 Reflection on the changes on regional level	63

5.4.1	Little focus on the transport sector.....	64
5.4.2	Transnational co-operation within the goods transport sector.....	66
5.4.3	Ambiguous use of information in the regions future tasks.....	67
5.5	Summary.....	68
6	CHALLENGES, POSSIBILITIES AND CONSTRAINTS WITHIN THE NEW REGIONS.....	71
6.1	Future challenges for the regional authorities with relation to planning	71
6.1.1	Future possibilities and constraints for the regional authorities with relation to transport planning.....	74
6.2	The infrastructure commission: An idea for development....	76
6.3	Summary.....	77
7	RECOMMENDATIONS	79
8	CONCLUSION.....	83
	REFERENCES	85
	APPENDIX 1.....	94

LIST OF FIGURES

Figure 1	Overview of the main procedures that have taken place during the making of the structural reform. (Own model).....	17
Figure 2	The new administrative division of municipalities and regions in Denmark. The colours indicates the administrative borders. (The Ministry of Interior and Health, 2005 a)	17
Figure 3	Trade of model for urban land use. (Pacione, 2005, p. 146) 20	
Figure 4	Structural diagram for the report.	26
Figure 5	Development in the goods transport work in EU divided on different modes of transport: 1970-2000, 1000 million tkm. Based on (The Ministry of Transport and Energy, 2003, p. 23)	37
Figure 6	Relation between physical spaces (space of places) and virtual spaces (space of flows) and how use of ICT influences this. Own model based on (Gepts, 2002 in (Muhammad, 2003)).....	41
Figure 7	The new structure of the planning system in Denmark after the structural reform.....	60
Figure 8	The responsibility areas of the new regions in form of their planning responsibility. Own drawing based on (The Association of Municipalities, 2006)	62

LIST OF TABLES

Table 1	Strengths and weaknesses of different data collection methods. Based on (Yin, 2003, p. 86)	31
Table 2	The responsible road authorities before and after the structural reform. (Danish Road Directorate, 2006)	57

1 STRUCTURAL CHANGES AND TRANSPORT CHALLENGES

Transportation of goods, persons and information's become more and more important in today's society. The overall amount of transportation is therefore increasing significantly. Prognoses made by the Danish Transport Research Institute show that the transportation of goods to and from Denmark most likely will increase with 75% up until the year of 2025 (Hansen in (Teiner, 2006)). This increase creates a need for well-structured and sustainable transport policies coordinated by the Ministry of Transport and Energy together with the administrative institutions that are resident under this Ministry¹ and the administrative units of the counties and municipalities. These administrative units should in co-operation secure a transport network with sufficient capacity and with the newest technologies implemented, in order for the transport network to work efficiently.

Presently the Danish administrative structure is undertaking a restructuring, which also will affect the transportation sector. This report will mainly focus on the expected changes that the structural reform will have on the goods transport area, and on how the structural reform hopefully can supply a well functioning administrative framework, for a well-coordinated handling of the transportation sector in Denmark. In this way the goods transport and spatial planning can hopefully secure a development, where Denmark will be a front figure within the development of sustainable transport solutions, which among others are necessary, because the present oil consumption is expected to reach its peak within 15-20 years. (Danish Board of Technology, 2003)

Since the EU enlargement in May 2004 the overall amount of heavy vehicles across the Danish-German border is increased with 18.6 percent. This is the same as an increase of 1020 heavy vehicles each day. (Nielsen, 2006) This development is most likely continuing and shows that Denmark has not yet seen the fully size of the problems

¹ The largest administrative institutions under the Ministry of Transport and Energy are: The Road Safety and Transport Agency, the Road Directorate, The Civil Aviation Administration, Naviar - Flight Security Services, The National Rail Authority, The Danish Meteorological Institute, The Danish Coastal Authority and the Danish Energy Agency (The Ministry of Transport and Energy, 2006a)

connected to congestion and pollution from heavy vehicles. A deeper analysis of why the amount of goods transport seems to increase significantly is given later in this report.

Before digging deeper into this topic an overview of the structural reform will be given, in order to supply an understanding of, how the reform has been carried out and what it will mean in general for the structure of the administrative sector and therefore also for the planning of both regional development and goods transport. A more comprehensive analysis of the impacts of the structural reform on the goods transport sector will be given in chapter 5.

1.1 Reform in Denmark

The 1st of January 2007 the new structural reform of the administrative sector in Denmark will be effectuated. Prior to this, large amounts of administrative work have been conducted, in order to analyse how the foundation for the new administrative sector should be structured. The purpose of the reform is, according to the government, to implement a new system that can live up to the increasing demands of a modern welfare society. The former system was more than 30 years old and the Danish government therefore would like to restructure the administrative structure in Denmark. (The Ministry of Interior and Health, 2002a, p. 11) In October 2002 the government therefore established a Commission on Administrative Structure and gave them the following terms of reference:

The Commission on Administrative structure should evaluate the advantages and disadvantages of alternative models for the arrangement of the public sector, and on that background come up with recommendations for changes that could be sustainable during a longer span of years

In order for the Commission on Administrative Structure to do so, the member of the commission should consider the following three topics:

- *Make an assessment of the future geographical sizes of the municipalities and counties and an assessment of the sizes of these in terms of population. In this assessment the contemporary distribution of tasks should be taken into consideration.*

- *Make an assessment of the advantages and disadvantages of different models for a new task distribution between state, counties and municipalities, with starting point in the potential recommendations to the new sizes of the counties and municipalities.*
- *Make an assessment of advantages and disadvantages of reducing the number of public elected administration levels from three to two. The commission should in connection with this assess where the responsibility for the different tasks of the public sector could be placed.* (The Ministry of Interior and Health, 2004a, pp. 21-22)

Twelve members composed the Commission on Administrative Structure. After each name the person's present position is specified. The first position which was occupied was the chairman, who became:

- Johannes Due (Managing Director of Health Insurance Denmark)

Johannes Due had previously been chairman of the Task Commission² and furthermore he knew how the public sector is working, because he, during many years had worked in different parts of the public sector. Besides his working experience he also had the trust of both the Danish Parliament and a major part of the public sector. (Rønnov, 2002)

Furthermore the commission consisted of three independent members, who had relevant knowledge about the subjects, on which the commission should focus. These three experts were:

- Erik Bonnerup (Managing Director of the Danica Concern)
- Poul Erik Mouritzen (Professor at the University of Southern Denmark)
- Jørgen Søndergaard (Managing Director of The Danish National Institute of Social Research)

Erik Bonnerup is former head of department in the Ministry of Finance. Mouritzen and Søndergaard have been chosen, because they previously have worked with municipal structures. (Poulsen, 2002)

² The former Social democratic government had back in 1996 established a Task Commission, which had the assignment to assess the distribution of tasks undertaken by the administrative units, in order to assess the possibilities of making a new distribution of tasks. In 1998 the results of the Task Commissions work was ready. The Tasks Commission assessed that: the distribution of task between the administrative units in the present structure (1998) is deemed appropriate. (The Ministry of Interior and Health, 2004(C), pp. 48-49)

Furthermore there was a representative from each of the following institutions;

- The National Association of Municipalities (Peter Gorm Hansen)
- The Association of County Councils (Otto Larsen)
- The Municipality of Copenhagen (Erik Jacobsen)
- The Municipality of Frederiksberg (Kurt Christoffersen)

Finally a representative from each of the following ministries was selected;

- Thorkil Juul (Ministry of Interior and Health)
- Agnete Gersing (Ministry of Finance)
- Per Bremer Rasmussen (Ministry of Economic and Business Affairs)
- Johan Reimann (Ministry of Justice) (The Ministry of Interior and Health, 2004a, pp. 13-14)

No persons directly connected to the transport sector had been involved in the Commissions work with the developing of their report, but the Commission has received inputs from the Ministry of Transport and Energy, which at that time was called the Transport Ministry (Traffic Ministry) (The Ministry of Transport and Energy, 2006b). All ministries have made sector analysis for the use of the Commission on Administrative Structure in their work.

In January 2004 the result of the analysis made by the Commission on Administrative Structure was handed in to the Danish parliament, in form of a report consisting of 1500 pages. The report among others contained a list of six potential models for the future structure of the public sector. These six models are described underneath.

The models can be divided into two groups of three entities, depending on the number of administrative levels they recommend. The first three models concern three direct elected administration levels, each level with the right to impose taxes:

1. **Unchanged distribution** of tasks but with changed sizes of counties and municipalities
2. **Broad county** model where the tasks of the counties and to a certain extent the tasks of the municipalities are broadened with tasks from the state.
3. **Broad municipality** model where the tasks of the counties are reduced, while the tasks of the municipalities are broadened

significant with tasks from the state and the counties. (The Ministry of Interior and Health, 2004a, p. 11)

The next three models were based on a structure with two direct elected administration levels and two tax collecting administrations:

4. **Municipal and region model** where the municipalities are given more tasks, while the regional level has limited tasks and is led by an indirect elected region council, which members are chosen by the municipal councils in the region.
5. **Party region model** where the municipalities are given more tasks while the regional level has limited tasks and is led by an indirect elected region council, whose members are chosen by and among the members of municipal councils in the region.
6. **State model** where all tasks are placed in the municipalities and at state level. (The Ministry of Interior and Health, 2004a, p. 11)

The six models should only work as an inspiration for the politicians, therefore no explicit recommendation was given from a united commission group. But there was a divergence of how to interpret the terms of reference between the commission members. The three independent experts meant that the commission report should include a recommendation chapter, and they therefore had a separate section in the report, where they gave their recommendations to the model, which they meant would be the best. According to them the best model would be the broad county model with a few modifications. As it will be seen in the section below the government decided to go in the complete opposite direction.

Based on the commission report a negotiation phase among the political parties in the Danish Parliament took place during the first six months of 2004. In June 2004 the negotiation phase ended up with a final decision, based on the lowest possible majority in the Danish parliament. Of the 179 members in the parliament, 90 voted for a model based on a combination of the broad municipal model and the state model, while 89 members was against this model. The final settlement, which was agreed between the Government (The Liberals and the Conservative) and their supporting party the Danish People's party, decided a new structure for the administrative sector, which was build on a mixture of the broad municipal model and the state model, understood in the way that only the state and the municipalities were allowed to impose taxes, but at the same time the regions should be

direct elected. The new reform furthermore meant that there should be new administrative borders in the new system.

It could be claimed that the commission report was not used very much during the process of making the final settlement, and this is further emphasised by the a statement the managing director of the Association of County Councils at that time Otto Larsen, gave after the governments final settlement:

*The commission report was not used for anything by the politicians.
(Larsen, 2006)*

Another opponent of the reform was Frank Jensen, a leading member of the opposition party of the Social Democrats, who stated about the reform:

*The reform is gambling with the welfare society. The government moves around with tasks concerning several hundred billion Danish kroner, without having made the calculations behind the reform.
(Jensen in (Larsen and Thobo-Carlsen, 2004))*

Despite some rather negative statements about the reform and the fact that the reform was decided on the lowest possible majority in the Danish Parliament, the process continued. Therefore the municipalities had to inform the Ministry of Interior and Health about their proposal for their amalgamation with other municipalities at latest the 1st of January 2005. In 2005 the legislation behind the structural reform was implemented and further preparations began in 2006. This among others meant an election of politicians to the new municipalities and regions. The structural reform is supposed to be fully implemented in January 2007, but some parts of the reform will continuously be implemented in the following years in order to develop the administration. (Ministry of Interior and Health b, 2004, pp. 11-12), (The association of County Councils, 2005)

On Figure 1 is given a short overview of the main procedures that has been a part of the work with the making of the reform. As it can be seen from the figure it has been a process of only 2½ year to evaluate the different alternatives for the future administrative structure.

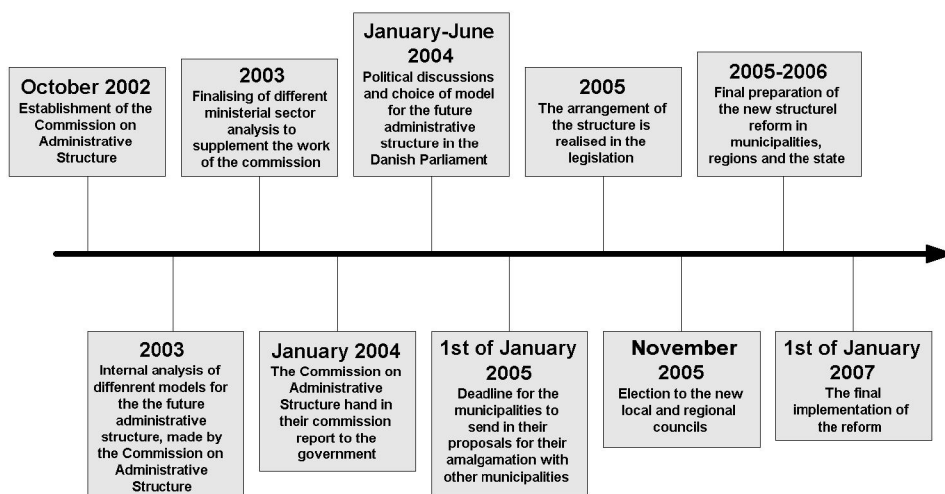


Figure 1 Overview of the main procedures that have taken place during the making of the structural reform. (Own model)

As it can be seen on Figure 1 the whole process has been undertaken during a four-year period. This is quite fast compared to the fact that the last reform in Denmark took 20-25 years to settle and finalise (Blom Hansen, 2004). Figure 2 shows how the borders of the new geographical structure ended up looking both on municipal and regional level.

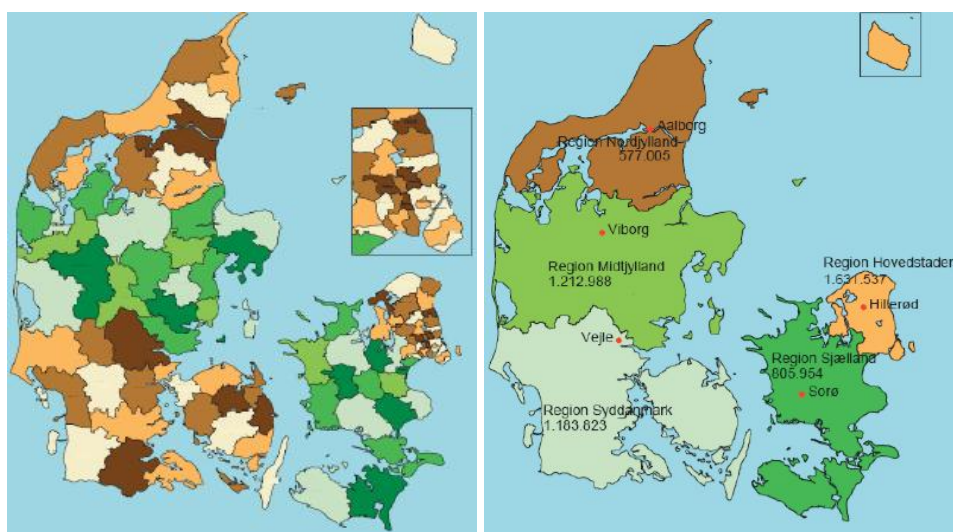


Figure 2 The new administrative division of municipalities and regions in Denmark. The colours indicates the administrative borders. (The Ministry of Interior and Health, 2005 a)

In order for the municipalities to be operational to control the new tasks, which they have been assigned after the reform, the government had a few criteria, which should be fulfilled regarding the sizes of the new municipalities. The municipalities should aim at having a minimum of 30.000 inhabitants within their new administrative borders. If at least a minimum of 20.000 inhabitants was not achievable, the municipalities should agree on co-operation agreements with neighbour municipalities, which could secure a sustainable management of the increased number of tasks.

The new regions largest tasks are to take care of the hospitals, the areas of social care and specialist instructions and the overall coordination of the regional planning sector. Furthermore the regions will be the coordinator of the tasks, which the municipalities not can handle appropriately due to their size. (Reseke, 2007) The sizes of the regions have to a certain degree been made due to demographic and regional relations. (The Ministry of Interior and Health, 2004 a, p. 42)

In overall the settled agreement has the following main characteristics:

Geographical based changes:

- The 271 municipalities are transformed into 98 municipalities, which in the new system are assigned tasks from the former counties and in general have more than 30.000 inhabitants.
- Smaller island municipalities are allowed to continue in their present size, as long as they agree to make binding cooperation's with their larger neighbour municipalities.
- The 14 counties are transformed into new 5 regions with the health care system as their primary task.
- The new regions will have between 0.6 and 1.6 million inhabitants.

Administrative changes:

- The states role is strengthened, as the state receive tasks from the former counties.
- The municipalities' position is strengthened as the municipalities receive tasks from the former counties.
- The number of tax imposing levels in Denmark is decreased from three to two levels. The state and the municipalities.
- The budget of the new regions will in overall be approximately 87 billion Danish kroner (11.5 billion €)
- The new regions will from the 1st of January 2007 be in charge of:

- The hospitals:
 - Budget 80 billion Danish kroner (10.6 billion €)
- The areas of social care and specialist instructions
 - Budget 5 billion Danish kroner (660 million €)
- Coordination of the regional development
 - Budget 2 billion Danish kroner (266 million €)

49 new laws have to be implemented as a result of the new structure. (Four of these explicit concern the Ministry of Transport and Energy)

1.2 Connections between the transport sector and the new structure

Before the new reform the counties were in charge of the overall coordination of the urban and environmental planning, but by the new reform large parts of this responsibility will be transferred to the municipalities.

A wondering, which has initiated the making of this report, is what will happen to the coordinated planning when the counties are no longer there to make this planning on an overall level. The former planning system in Denmark had to a certain degree described how the planning should look like, if all considerations to the nature were taken into account every time a new plan was developed. This is also the intention of the new system, but by transferring more responsibility to the municipalities a risk could be that the municipalities will plan in a way, where the benefits are kept inside each municipality. Hereby the foundation for the regional coordination would disappear. This tendency is maybe also applicable within the planning of the goods transport and infrastructure area. Below is shortly described some of the issues, which has to be dealt with in the future at municipal, regional as well as national level.

With the new reform a larger part of the Danish population will live in municipalities with a least one middle-sized city. In many cases this city will work as a dynamo for the industry and business sector, while the settlement of new families in the nearby areas, will contribute to a geographical concentration of both working force and knowledge in the municipal centres, and in this way create a structure based on a monocentric urban structure. (Pacione, 2005, p. 620) This will furthermore increase the tendencies, which has been prevailing during

the last decades, that people work in the larger cities and settle down in areas outside the cities where they can afford the rents and further more has the opportunity to enjoy the facilities, which they deem most beneficiary for their family life. (Næss, 2006, p. 373) Figure 3 shows how a trade off model for urban land use can describe the settlement of new commercial, industry and residential areas.

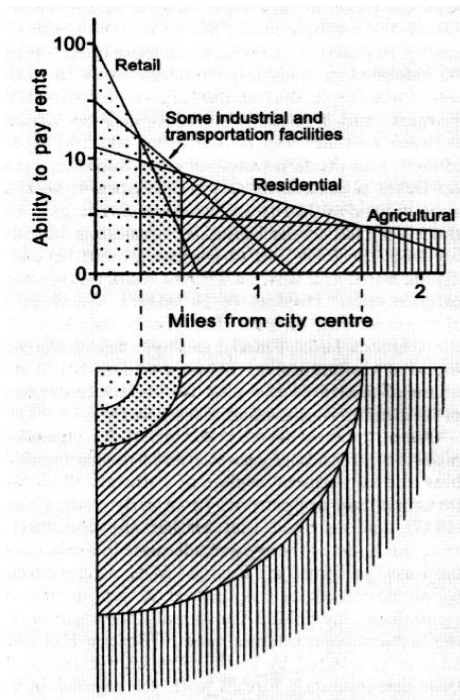


Figure 3 Trade of model for urban land use. (Pacione, 2005, p. 146)

As it can be seen from figure 3, many cities are today structured in a way where it is the land prices that determine where the different urban functions are located. In addition the growing middle class is in many cities split between the possibility of living in the hectic city life with its many possibilities for leisure activities, but at a high rent, and the possibility of living in a quiet neighbourhood in the suburban area, where other needs such as a private garden and a low crime rate are among the attractive factors.

In order to make an efficient traffic flow in cities, where people live in the suburban areas and work in the inner city, the infrastructure in the areas near the cities has to be well functioning in order to create the

foundation for a high accessibility³. This is not always an easy task to secure a high accessibility and the transportation sector is facing a number of challenges in the forthcoming years. Congestion on the roads near the larger cities is an increasing problem, which according to the newest prognoses for traffic, will continue to worsen in the future. And with the increased congestion follows an increased pollution of the cities made by the vehicles. (Marfelt, 2006a) To secure a development within the transport sector where it will be possible to control these problems, there will be need for coordinated policies regarding investment in new infrastructure and in ICT – Information and Communication Technology - that together with research within the field of transport should secure a combined effort for efficient transport and logistics solutions. Efficient transport solutions between the bigger cities are therefore required. Hopefully the new administrative structure can secure the administrative framework for this development

Another important issue is the number of traffic accidents. From 2000 to 2005 the number of traffic accidents with mortal effect has decreased with 33% on the Danish roads, so that the number of people killed in traffic in 2005 was 331. (Statistikbanken, Uheld1, 2006) In order to secure a further decrease, it is important to make a coordinated effort in analysing and utilising new knowledge that can fulfil the target of getting under 300 mortal accidents per year before the year of 2012. (Ministry of Transport and Energy, 2006a, p. 7), (Ministry of Transport and Energy, 2000) After the reform it will still be the Danish Road Directorate who is in charge of the planning for decreasing the number of traffic accidents. With the increased use of ITS – Intelligent Transport Systems – an effort can be done to minimize the number of accidents in traffic. (Hansen in (Marfelt, 2006b))

In the Danish national strategy for sustainable development from 2002 the Danish Government has decided some goals for the direction, in which the government would like the transport sector to develop. In the strategy the governments superior goal for the transport sector is to break the connection between the increase in environmental and healthcare problems from the economical growth. By setting up this goal the government will try to create the foundation for a sustainable development within the transport sector. Furthermore it is emphasised in the strategy that the transport and infrastructure systems should

³ Accessibility is in this report defined as the easiness of which an area or function is reached from another point of departure. (Jensen, 2004) Accessibility can be measured in terms of time and costs for traveling. (Pacione, 2005, p. 666)

secure the populations access to working places, shops, public service and leisure activities, and all of the population should be secured a high mobility through public and private transport solutions. (The Danish Environmental Protection Agency, 2002, p. 65)

Issues like urban and rural transport planning along with a coordinated planning for road safety, pollution and a plan for handling the congestion is needed. A question, which could be stated in this case, is how this administrative framework for handling this planning expectedly will function after the new structural reform. In the next chapter is set up a problem formulation, which should help answering this question.

1.3 Summary

By giving this description of the overall procedures behind the structural reform the foundation for a deeper analysis of the impacts on the goods transport area should be present. As it should be clear from the above written, the transport issue has not been a large part of the making of the structural reform. How can this be and what can be done in order to secure that transport planning becomes an even larger part of the planning sector in the forthcoming years are also issues which will be investigated in this contemporary report.

The mentioned transport related issues like the coordination of environmental planning, urban planning and traffic safety planning etc. are areas, which the new administrative units should handle. As such this is not different from the present structure, but what is different, is that it in some cases will be other or new units, which are in charge of the assignments.

What will happen with regional planning? Where will it happen? And what will be the expected impacts for the administration of goods seen from a planning perspective? Questions like these leads to the problem formulation for this contemporary report. This problem formulation can be found in the next chapter.

In this case it should be underlined that other elements than the restructuring of the administrative sector, of course also will have an influence on the future development of the transport sector. An analysis of other impacts that could have a large influence on the goods transport flows are analysed in chapter 4. A more detailed description of all the chapters can be found in chapter 3.

2 PROBLEM FORMULATION

In chapter 1 it was described how a new structure for the Danish Administrative Structure at present time is being implemented. This new structure will to a certain degree make a new administrative foundation for the handling of the transport sector and transport related projects and issues. Especially the fact that the regions are more or less being abolished will expectedly have a certain impact on the planning of the goods transport sector. In chapter one a wondering about these impacts was stated. Based on this wondering a problem formulation is made:

Which impacts will the structural reform expectedly have on the regional planning, with a special emphasis on goods transport and logistics planning, and how can the new regional planning authorities supply the foundation for the handling of the major transport related issues in the near future?

For answering this question a more through analysis of the specific changes of the structural reform that expectedly will effect regional planning and hereunder goods transport and logistics planning, will be undertaken in chapter 5. The second part of the problem formulation will mainly be discussed and analysed in the chapters 5 and 6.

By setting up this specific research question as problem formulation, a few delimitations have been made. First of all the investigation of the structural reform will from this point of, mainly focuses on the goods transport area. This means that private car transport and public transport not will be the focus of this contemporary report. Because of the impacts the transport area has on the area of regional planning and vice versa, this report will also investigate the part of the regional planning, which effects the goods transport planning, especially seen in the light of, that many of the possibilities the counties had in the previous administrative structure, will be changed with the new structure. More about this will also follow in chapter 5.

Furthermore a second delimitation is set up. This will secure that the focus mainly will be the impacts of the structural reform on a regional level, basically with concern to planning of goods transport. Therefore a

case region is chosen. In this report the new region of Northern Jutland is chosen as case region. This region has, compared to the other four regions, a smaller population basis, but faces nevertheless the same transport related problems as the other new regions of Denmark in form of pollution, congestion, noise, etc.

Despite its small population size, the region of Northern Jutland still plays a large role for the Danish and Scandinavian transport sector. The ferry connections from Frederikshavn, Hirtshals and Hanstholm to harbours in Norway and Sweden annually transport 7.2 million ferry passengers and 3.7 million tons of goods across the Kattegat and the Skagerak. (Nordic Link, 2004) Furthermore Aalborg Harbour A/S has just extended their rights to handle the container traffic to Greenland, which together with the rest of the goods handling at Aalborg Harbour means a total handling of 3 million tons of goods per year. (Petersen, 2006)

In overall the region of Northern Jutland is a very important link between the Scandinavian countries of Norway and Sweden and the rest of Europe. The former county of Northern Jutland had also been responsible for several projects where especially two of them are of certain interest seen from a goods transport perspective. The two projects are NTN (Nordic Transportpolitical Network) and Nordic Link. The overall purpose of these two projects has been to create the foundation for a regional development in the involved regions, by developing transport corridors on a sustainable and effective way, for instance by using intermodal transport solutions or by economical and political cooperation (NTN. 2006), (Nordic Link, 2004). With the structural reform such initiatives can maybe not continue in the same form. To investigate what will happen to these regional projects after the decrease in the regions responsibility areas, an interview with the Project Manager for NTN and Nordic Link has been conducted. In addition to this the Harbour Captain of Aalborg Harbour, who at the same time is chairman of the Transport Club of Northern Jutland, will be conducted, and the results will among others be used in the chapters 5 and 6.

Before all of these questions will be answered, a theoretical insight into why the goods transport area is important to plan for, and why the amount of transport is expected to increase, will be given in chapter 4.

A more thorough description of each of the topics, which will be investigated and analysed in this report, will be given in chapter 3 in form of a structural diagram and a detailed description of all the eight chapters.

3 ANALYTICAL FRAMEWORK AND UNDERTAKEN METHODS

The purpose of this chapter is to set up the analytical framework for the report. In this chapter it will therefore be explained how different approaches have been used to get deeper into the investigation of the structural reforms influence on the planning sector, with a special emphasis on the goods transport sector. In addition to this the chapter will account for the structure of the conducted interviews.

This report will focus on what changes that will happen within the field of regional planning, mainly with a focus on the changes for goods transport planning, when the new structural reform is implemented in Denmark. This will among others be done by an interview analysis with a transport planner from the new region of Northern Jutland and by an interview with the chairman of the Transport Club of Northern Jutland, which is an association of companies and organisations that all have a relation to the goods transport sector.

3.1 Structure of the project

In order to supply an overview of this report an overall structure for the project is shown on figure 4. The text in each box shortly explains what will be the context of each chapter.

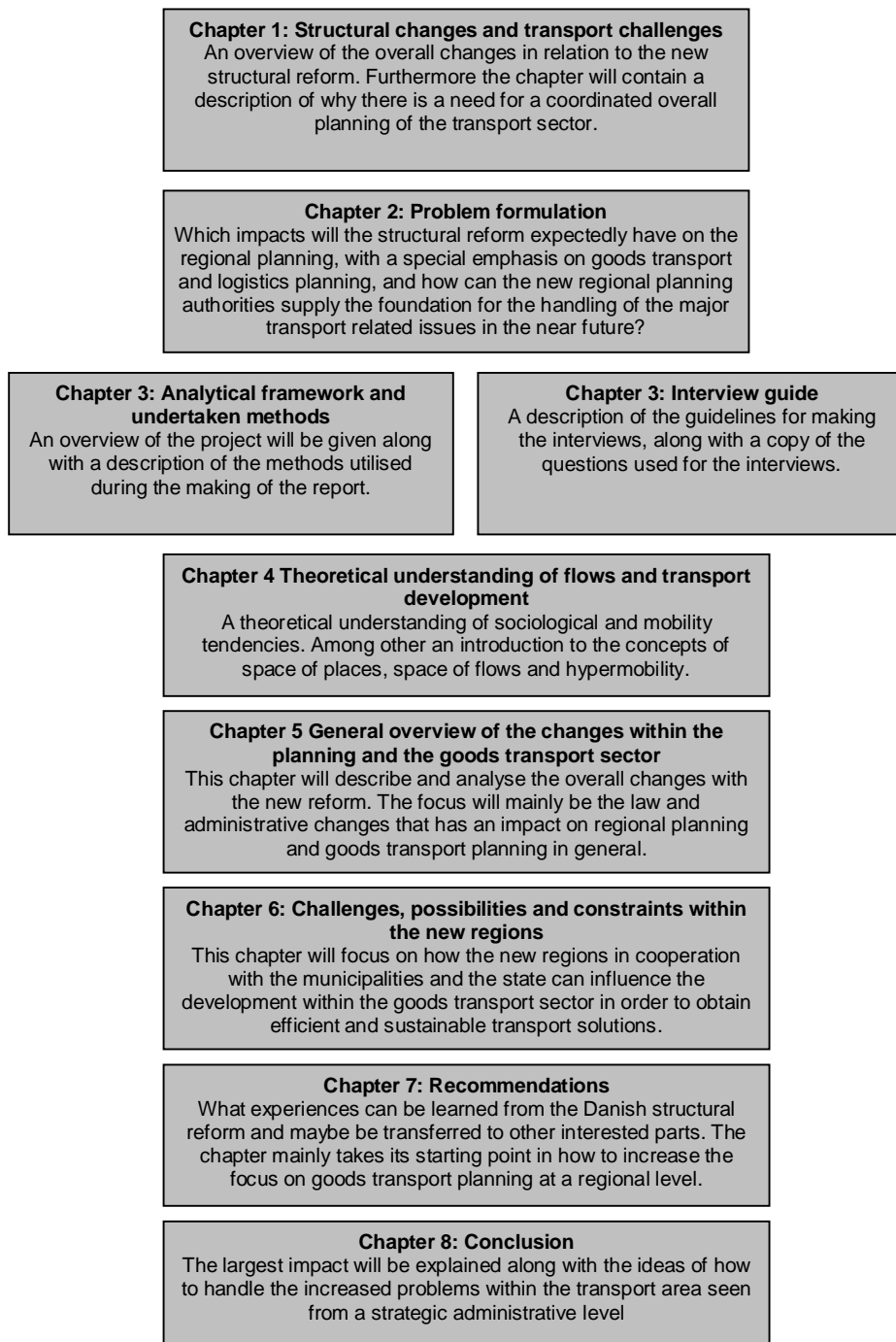


Figure 4 Structural diagram for the report.

As it can be seen from the figure the content of the report will mainly focus on the three topics of the chapters 4-6:

- Chapter 4: Theoretical understanding of flows and transport development
- Chapter 5: General overview of changes within the planning and the goods transport sector
- Chapter 6: Challenges, possibilities and constraints within the new regions

Based on these three chapters, the recommendation chapter can be written. This chapter will include recommendations that hopefully can be transferred to other regional based authorities, who are experiencing a rearrangement of their administrative structures, and therefore need advices for, how to manage the planning of the goods transport sector.

In order to supply the grand overview of the report, each chapter is described more thoroughly underneath.

The first chapter basically explains the process of the structural reform from the beginning in 2002 up until present time. Furthermore this first chapter explains the link between the new administrative structure in Denmark and the regional goods transport and logistics planning seen from a mobility perspective. Finally the chapter includes a wondering about, which impacts the reform expectedly will have on the planning of goods transport seen from a regional perspective.

Based on this wondering a problem formulation is made in chapter 2. The research question is set up in order to answer how the changes within the administrative structure can make an efficient and functional framework for the handling of the goods transport related issues, which was described in chapter 1. The question of the problem formulation is as mentioned in chapter 2:

Which impacts will the structural reform expectedly have on the regional planning, with a special emphasis on goods transport and logistics planning, and how can the new regional planning authorities supply the foundation for the handling of the major transport related issues in the near future?

The third chapter is the analytical framework and methods chapter. This chapter will reflect on the work that has been conducted during the making of this contemporary report. This chapter will include a description of the report, a critical reflection on the approach

undertaken during the making of the report, the methods utilised, the data available, source criticism, etc.

So far the first three chapters have focused on the latest development within the goods transport sector, the structural reform and methods utilised for the making of this report. But in order to get a theoretical understanding of the development within the transport sector and especially the goods transport sector the fourth chapter will focus on putting theories about transport related concepts like mobility, networks, sociological tendencies within transport and accessibility issues into perspective. This is done in order to get a deeper understanding of, why the transport sector continues to grow in the modern society. The chapter should create a deeper understanding of, why it is important to make a coordinated planning within the goods transport sector and hereby being able to control the development in a sustainable direction. This theoretical understanding of goods transport is basically based on two authors and their texts concerning transportation. The first is Tore Sager's text: *Hypermobility* and the other is Manuel Castells text: *The space of flows*, found in the *Castells Reader on Cities and Social Theory*. Their stated viewpoints through these texts will be supplemented with other transport planners, among others John Urry and Mimi Sheller, who by their viewpoints describe the importance of transport in a modern society. The discussion of the theories can be found in the chapter 4.

After this theoretical understanding, the fifth chapter will focus on the specific changes that will occur with the implementation of the new administrative structure and how this will affect the regional planning. The changes will be described with the goods transport area as example. This chapter is mainly descriptive in its analysis, but to a certain extent parts of the chapter will also be prescriptive, because some of this report will be written while the reform is being finally implemented in Denmark. Therefore it will only be possible to use a prescriptive method to describe the expected impact of the structural reform.

The sixth chapter focuses on how these changes expectedly will affect the goods transport sector. Therefore an interview with the regional transport planner Tommy Tvedergaard Madsen has been conducted. To supplement the viewpoints of the regional planner with a more practically oriented perspective an interview with the Harbour Captain of Aalborg Harbour Peter J. Petersen has also been undertaken. Peter J Petersen is at the same time chairman of the Transport Club of Northern Jutland, from where he represents a large

number of companies related to the goods transport sector. Their viewpoint has been analysed taken a starting point in three different topics:

- The future role of Region Northern Jutland seen in a goods transport perspective.
- The structural reform and regional goods transport.
- Future problems within the transport sector

The conducted interview should work as an inspiration for a discussion of, in which direction the regional planning of goods transport should take in the future, based on the possibilities that are present in Northern Jutland. The overall topic of this chapter will therefore be: Challenges, possibilities and constraints within the new regions.

The recommendation chapter will give recommendations to, how lessons learned within the regional goods transport area in Denmark can be transferred to other countries, which in the near future expectedly will undertake a structural reform of their administrative sector, and hereby also of their goods transport sector. Such countries could for instance encompass the other Nordic countries of Norway, Sweden and Finland.

The conclusion will give the answer to the problem formulation. By this conclusion the changes as well as the possibilities within the goods transport area, should be described and analysed.

3.2 Utilised methods during the making of the report

During the making of this contemporary report different approaches and methods has been utilised. The following will focus on seven different approaches that are normally considered during the making of a report. The methods included in this section are: Qualitative/Quantitative methods, Descriptive/Prescriptive methods, Inductive/Deductive methods and Retroduction also known as Abduction.

Basically the data collection for the report is based on qualitative data, mainly because most of the data has been collected from reports, homepages, books and interviews with experts within the goods transport area. For the interviews the qualitative methods offer the opportunity to investigate different issues and gain in-depth information about them, particularly in situations where the range of possible

answers is not known beforehand. Unlike the quantitative data collection methods, qualitative approaches do not require a large number of responses for their results to be useful, provided you could be sure that the respondents are sufficiently insightful in the investigated topic. (Andersen et al. 1994)

As touched upon earlier, this report will include both descriptive and prescriptive methods. The analysis of the changes will to a certain degree have a prescriptive characteristic, since some of the changes have not occurred yet, or first are about to be effectuated during the coming years. The same goes for the challenges the possibilities and the constraints. In overall this means that in each section, it are the expected impacts that are analysed, therefore it will be a prescription of what expectedly will happen with the new reform. And still it could be argued that many of the effects of the structural reform are already known, because it in overall will be the same challenges and constraints within both the planning sector and the goods transport sector that should be dealt with. This is what can be expected when the *in media res* approach is used for the analysis.

Another approach, which has been undertaken during the making of this contemporary report, is retroduction. Retroduction means the movement of knowledge of one issue to knowledge of something else. In other words retroduction is about having knowledge of a concept or issue, and then be able to transfer this knowledge to another topic. (Danermark et al. 1997, p. 96) This approach is among others utilised during chapter 4 where theory about metropolitan networks are used to get an understanding about transport networks.

By using interview as a method of getting information there is used an inductive method where the opinion of the interviewed person to a certain degree is generalised to the institution he or she represent. At the same time a deductive method is used when homepages of different institutions and authorities are used, because the statements on their homepages outwardly are common for the institution. The homepages therefore to some degree represent what an interview expectedly could have shown, just often without the same insight into the statements, because the lacking possibility of asking supplementary questions.

3.3 Source criticism

The reporting of this report has been based on the four different sources, which can be seen in Table 1.

Table 1 Strengths and weaknesses of different data collection methods.
Based on (Yin, 2003, p. 86)

	Strengths	Weaknesses
Documentation	Stable – can be reviewed repeatedly Unobtrusive – not created as a result of the case study Exact – contains exact names, references, and details of an event Broad coverage – long span of time, many events, and many settings	Retrievability – can be low Biased selectivity, if collections is incomplete Reporting bias – reflects (unknown) bias of author Access – may be deliberately blocked
Archival records	Same as for documentation Precise and quantitative	Same as for documentation Accessibility due to private reasons
Direct observation	Reality – Covers event in real time Contextual – covers context of event	Time consuming Selectivity – unless broad coverage Reflexivity - event may proceed differently because it is being observed Cost – hours needed by human observers
Interviews	Targeted – focuses directly on case study topic Insightful – provides perceived causal effects	Bias due to poorly constructed questions Response bias Inaccuracies due to poor recall Reflexivity – The interviewed gives what interviewer wants to hear

The sources of documentation and archival records have been used throughout the whole report. Mainly in form of material from books, brochures, reports and homepages on the Internet. The direct observations have taken place during different meetings where the topic to some extent have been the impacts of the structural reform, but the topic could might as well have been the goods transport sector seen from a regional perspective. In this way many of the aspects touched upon in this report, have been analysed both from a literature view and from a participation view. To some degree it can therefore be argued that the investigation, where possible, has undertaken a form of phenomenological approach, by being able to participate in conferences and meetings about the topics and with the people involved in the topics.

The fourth approach, the interviews, has given a clear insight into the working day of both a regional goods transport planner and a managing director of a large company involved in the transportation of goods. Both interviews will mainly be used in chapter 5 and 6, but the interview guide was made in a way, so the questions asked could supplement all of the report, and not only the specific chapters, for which the interviews where mainly conducted for. When using interviews as a source it is very important to control the reliability of the interviewed persons. In this case this reliability should not be a problem, since both of them where recommended by other people also within the goods transport sector.

3.4 Interview guidelines

The interviews are based on a qualitative interview guideline developed by Steiner Kvale. The guide is a seven point step-by-step template for preparing, carrying out and analysing an interview in a structured way (Kvale, 1997, p. 94). The seven steps encompass the following:

1. **Categorisation** - Before starting the interview the aim of the interview should be formulated and the subject should be investigated. In this way the structure of the survey is clarified, before deciding which questions to ask.
2. **Design** - Take all seven points into consideration before conducting the interview. The overall design of the interview should be done with the goal of achieving the intended knowledge.

3. **Interview** - Carry out the interviews based on the prepared interview guide.
4. **Transcription** – To use the interview in an analysis it is often necessary to make a transcription.
5. **Analysis** – Decide which methods of analysis there will be most useful.
6. **Verification** – Look through the interview and see how consistent the results are and whether the interview can be used to the purpose, which it was intended. You also have to see on the possibility to generalise from the interview.
7. **Report** – Control whether the results of the interview is satisfying the scientific criteria and if the product is reliable. (Kvale, 1997, p. 95)

The interviews can be found in a transcribed version at the enclosed CD, but they are only available in Danish. Below is shown the interview guide for the different interviews

After a brief introduction to the project, the respondents where asked to tell a bit about them selves and their job function. This was done in order to start the interview in a more soft way. After this introduction the questions were as follows:

First section: The role of region Northern Jutland

- What are the biggest challenges for the goods transport area in the new Region Northern Jutland?
- Which perspectives for development do you see for the future transport of goods in Denmark and specifically in Northern Jutland?
 - What are the strong sides of the future Region Northern Jutland?
 - What are the weak sides of the future Region Northern Jutland?
- Does the relative small size of the new region mean anything for the possibilities of attracting new investments to the region, seen in the perspective of the competition with the other regions?
- Is there a risk that Northern Jutland becomes a thoroughfare area for transports to larger city areas like Hamburg and Copenhagen?
 - If yes how is this then reflected?

- It is a known phrase that mobility creates value, but who will gain benefits of a more mobile Northern Jutland? A connection has, as well known, two endpoints.

Second section: The structural reform and goods transport

- Which changes subject to the forthcoming structural reform, do you believe will have the largest impact on the transport of goods seen from a regional perspective?
 - Can you come up with examples of this?
- How can it be secured that the new regional development plan will encompass transport and logistics conditions directly? As these issues are only touched upon as business issues in the regional development plan, and therefore not attain individual status.
- Is it correct understood that the new regional development plan do not have the right to exercise a veto over the municipal planning, but instead only is guiding?
- How would you, in the view of the above mentioned, describe the usefulness of the new regional development plan as a tool to control and plan for the transport of goods?
 - And as planning tool in general?
- How do you think it will work out that it will be the regional growth forum, which will control the distribution of funding for the regional planning?
- What do you think will happen to the regional initiatives and projects with relation to transport, which the former counties have been the team leaders and coordinators of?
 - Will it be possible to continue projects like NTN and Nordic Link in their present form?
- Is it possible to secure an efficient coordination between the different administrative levels in the Danish planning system in the future, with regard to transport planning?
- Should the regional plans give inputs to planning on the municipal level, the state level or to the both of them?
- If you could change one thing in connection to the new reform and goods transport, what should it then be?
- Was it a reasonable decision to remove the counties administration of parts of the roads, and in this way let the decision be taken respectively closer to or farther from the public?
- Do you think that transport issue have been a large enough part of the discussions of the structural reform?

- What could if necessary be changed during the process?

Third section: Transport issues to handle in the future

- What are the largest challenges on the goods transport area in the forthcoming years?
 - Especially with focus on regional problem areas?
- What would you in relation to this put emphasis on, if you was a part of the newly established Commission on Infrastructure, and in this way could make your influence come into play?
- Would road pricing for heavy vehicles be an alternative to introduce? For instance in the four largest cities?
 - If yes. Why is this then a solution?
- Could you come up with other potential methods, which you think could secure a more efficient goods transport sector?
- How do you see the role of the transport and logistics centres, in connection with the creation of a competitive region on the goods transport area?
- Is it a possibility that many new municipalities would like to develop a transport and logistics centre after the amalgamation?
 - Which impacts will this possible have?
- Do you think it is possible to maintain or improve the present standard on the area of goods transport planning in the lights of the structural reform?

4 THEORETICAL UNDERSTANDING OF FLOWS AND TRANSPORT DEVELOPMENT

This chapter will focus on concepts like space of places, space of flows and hypermobility, and why these concepts are important seen from a goods transport perspective. This is done in order to get a deeper understanding of, why the transportation sector continues to grow in the modern society, and why it therefore is important to make a coordinated planning within the goods transport sector for hereby being able to control the development in a sustainable direction, despite the increasing amounts of goods.

The goods transport work on the roads and on the sea has increased significantly at a European level. Figure 5 shows the European development in million tonnes kilometres for different transport modes during the last three decades.



Figure 5 Development in the goods transport work in EU divided on different modes of transport: 1970-2000, 1000 million tkm. Based on (The Ministry of Transport and Energy, 2003, p. 23)

Even though Figure 5 does not show a capacity border for the transportation of goods on the different modes, there is especially for the goods transported by road, associated different transport related

problems, which for the moment is seen in the bigger cities all over the world. When talking about a capacity border it is especially in relation to congestion that this concept is interesting. Because of congested roads near the larger cities, people spend much time in queues each day, and hereby lose time that normally could have been used for work or leisure activities. In addition to this come the problems of noise pollution, air pollution, road accidents and land consumption for new infrastructure. The same problems cannot be found for the other modes of transport, even though the short sea shipping transport also is experiencing the same increased growth as the road transport. As it also can be seen on Figure 5 it is especially within the transport modes of road transport and short sea shipping that a big increase had happened. Much of this increase in transport results from cargo flows between the larger metropolitan areas in the world. Because of the time-space compression in the globalized world, time is reorganised in such a way that it reduces the constraints of space. This has furthermore a positive impact on the transport cost, which hereby is decreasing, because the time-space compression facilitates a shortening of time and a shrinking of space. (Harvey, 1989)

An example of a case where the transportation over long distances is in focus is the transportation of fresh salmon from Norway to Japan. These salmon are transported from Norway via Denmark, Germany or France to Japan within 36 hours and is during these 36 hours transported by ferry, truck and airplane. (Drewes Nielsen, 2004) Because of the low transport cost the world is becoming more and more accessible, and goods can be transferred all over the globe within a very short time period. The travel speed will of course depend on the willingness of the buyers to pay for a fast delivery of the goods, but if there are buyers there are also suppliers. This is also seen by the increased use of the just-in-time concept, which reduces the inventory use (Urry and Sheller, 2004). Hereby the customers receive the delivery at the specific time they deem most appropriate. (Transport Studier, 2006).

This increase in kilometres travelled and goods transported enhances the need for coordinated transport policies in order to secure an efficient transport of goods, not only on a worldwide level, but also on a national and regional level. Because of this development, with the high increase in the amount of road transport, the European Commission have made a report called "White paper - European Transport Policy for 2010 – Time to Decide" which among many topics

put an emphasis on multimodal transports⁴ in the future transport planning of European networks. (European Commission, 2001)

During the next sections different approaches to why this increase in transport is occurring, are being described. The different approaches mainly focus on theories developed by two researchers. The first, Manuel Castells (Castells, 1996), is Professor of Sociology and Professor of City and Regional Planning at the University of California, Berkeley. The second, Tore Sager (Sager, 2005), is professor at the Norwegian University of Science and Technology - Department of Civil and Transport Engineering. Their description of mobility tendencies are, where applicable, transferred into a goods transport perspective and supplemented with the viewpoints of other transport planners and sociologist who among others has studied mobility, accessibility and spatial planning. After the two sections, perspectives to regional development and regional goods transport and infrastructure planning will be made.

4.1 Space of Places and Space of Flows

Castells book: "The Castells Reader on Cities and Social Theory" is based on three major parts: Part I: A Theoretical Approach to the City in Advanced Capitalism, Part II: Social Movements and Urban Culture and Part III: The City in the Information Age. This contemporary analysis of Manuel Castells ideas and concepts is mainly focusing on the third part. In this Manuel Castells have made two concepts visible within sociological research: "The space of flows and the space of places". Castells bases his ideas on the fact that today's world is build upon a network of large metropolitan areas, some of these areas can be characterised as mega cities with more than 10 million inhabitants. In these metropolitan areas the development in form of economical and technological investments will take place. These mega cities are the nodal points in today's Information Age and power, skills, capital and knowledge will therefore be concentrated in these mega cities. (Castells, 1996, pp. 316, 343)

The major cities are development engines, which seen from a transport perspective creates so large flow of persons, information's

⁴ Multimodal transports are transports where at least to different modes of transport are used. This could for instance be road and rail or road and waterway.

and goods that all cities in a specific geographical region to some extent are linked to these mega cities or metropolitan areas, either by physical infrastructure or by infrastructure in form of telecommunication and cyber space (Castells, 1996, p 343)

Regions and networks are to some degree the new poles in the information age. Often each region is searching for its own capabilities and tries in this way to create an image of, what the strong sides of the specific region is. Hereby regions with different capabilities can create a network where people and companies from the different regions, can benefit of each others strong sides and forces, and hereby exchange goods, information's and other services (Gordon 1994 in (Castells, 1996, p. 328)) Because these cities do not create all of the wealth by them selves, it is through the networks with other city centres that the innovation and added value is created.

The flow of information's, which happens between these major cities, is what Castells describe as the space of flows. Castells states that our contemporary society is constructed upon a space of flows, flows of capital, information, technology, interaction, images sounds, symbols and goods, which are distributed all over the world by the use of ICT (Information and Communication Technologies). These flows are not part of the other concept, which he describes as the space of places. The space of places is the physical networks in from of physical infrastructure such as roads, railways, waterways and airways in addition the space of places could also be places, where the space of flows is less prevalent. A fifth element to the space of places could be added. This is the use of the before mentioned ICT. In this way the space of flows and space of places is interrelated, because parts of the space of flows become a part of the space of places, and vice versa. (Muhammad, 2003) Figure 6 shows how the concepts of space of flows and space of places are interrelated.

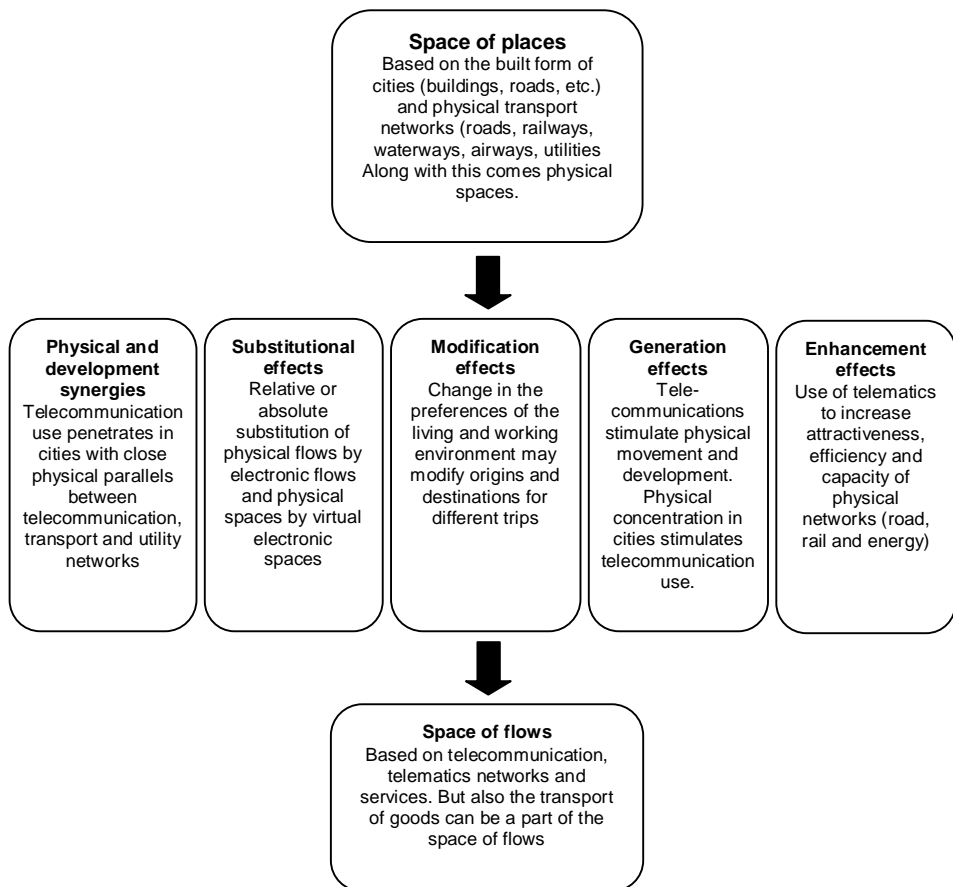


Figure 6 Relation between physical spaces (space of places) and virtual spaces (space of flows) and how use of ICT influences this. Own model based on (Gepts, 2002 in (Muhammad, 2003))

The effect of the use of ICT is that it has changed the concepts of space and time, because the technology has made it possible to make social practices and business agreements, without being in a physical proximity of each other. Today all places are from a virtual aspect more accessible than earlier, because of the space of flows. Therefore the space of flows becomes more and more prevalent in today's society.

The backbone of the network society is, seen from Castells point of view, the space of flows. According to Manuel Castells three layers can describe the space of flows.

- The first layer is a circuit of electronic changes.
- The second layer is constituted by its nodes and hubs.
- The third layer refers to the spatial organisation of the dominant, managerial elites. (Castells, 1996, pp. 344-347)

First layer: Circuit of electronic changes

The circuit of electronic changes encompass telecommunications, computer processing, broadcasting systems and high-speed transportation. These kinds of networks form the material basis for the flow of information, which is crucial in the network society. Because without the possibility of using these networks the interaction in the society would be at a more local level, compared to the system we are a part of today, where it is just as easy to make contact to a person or a company on the other side of the earth, as it is to make contact to a company in your home country. Of course there will be some differences in the delivery time of a product, but this delivery time is decreasing each year. The easiness of contacting specific companies all around the world by using ICT have also had the impact that Internet commerce (E-commerce) is expanding significantly on a worldwide basis. With the present development E-commerce will be a driving force for the future economic growth worldwide. Especially the developing countries will experience a high growth in E-commerce. (Regan, 2001) In a new report from the research company IDC it has been calculated that money spent on E-commerce will grow nearly 15-fold to \$5 trillion by the end of 2005. Nearly 1 billion people or approximately the same as 15% of the world population will use E-commerce for the buying or trading of things. Seen from a development perspective this is the same as an annual growth rate of 70% in Internet spending since the year 2000, where the amount of money spent was 354 billion (IDC, 2005)

In other words it can be said that the technical networks are the foundation for the society today, as well as railways formed the "economic regions" and "national markets" in the industrial economy (Castells, 1996, p. 345). Because of the flows of information's, capital, knowledge etc. there is also an increased need for the space of places in the form of physical infrastructures, which is a vital part for making the physical transport of the things (goods), which has been bought or traded via the Internet. The transport flows in physical form will also to a large extent be concentrated around the larger metropolitan areas, and will in this way create a need for transportation of goods to and from these areas, which again creates a need for well-developed physical infrastructures. All things cannot be transferred by cyber space even though more and more working processes as well as buying, trading and communication in general is done over the Internet.

Castells therefore also emphasises the idea of working from your home address, also called telecommuting, as an important issue in

today's network society. New information technologies have made this telecommuting possible and an increasing number of telecommuters in the metropolitan areas are working from their home. (Castells, 1996, p. 332) That an increasing number of people work from home, does however not mean the end of the living city, as we know it today. Still the largest part of workplaces, schools, stadiums, recreational areas, shopping streets as well as shopping centres will be located in the inner city, while the more dense industry hereunder the transport related companies are located in the fringe areas of the city, where they often have the most beneficiary location seen from both transportation and environmental viewpoints. See Pacione's trade of model for urban land use in chapter 1 for more details about land use. The concentration of working force and knowledge based companies in the business districts create a new way of planning both for urban and for transport planners, because many people are going in the same direction at the same time of the day. This creates the need for an authority in charge of overall transport planning, and still the challenges will vary from city to city and region to region due to historical, territorial and institutional reasons (Castells, 1996, p. 332). This coordination could for instance be done on a regional level.

The concentration of working places and other functions in the city centres opens up for a new issue, which is the use of city distribution schemes for urban freight systems. A well-coordinated use of smaller vehicles for delivering goods to the city centres becomes more and more important and can, if managed right, contribute to benefits for both the traffic flow as well as for environmental issues. Often urban freight transports schemes will often work most efficiently in connection with an environmental zone in the inner city. In such a zone different rules and regulations can be applied for the vehicles, which enter the zone. (Andersen, 2006)

Second layer: Nodes and hubs

The second layer of the space of flows is constituted by its nodes and hubs. The electronic network is not placeless even though its structural logic is based upon a placeless system. The network links up to specific places, which are characterised by their social, cultural, physical as well as functional characteristics. Some places are hubs playing a role in the coordination for the interaction in the network these hubs can be regarded as smaller concentrations of knowledge, wealth and power. Other places are the nodes of the network, which Castells describe as: The location of strategically important functions

that build a series of locality based activities and organisations around a key function in the network” These hubs and nodes are often the most important locations in the network. Some times a place is switched of the network. In worst-case scenario this can affect an economic, social and physical deterioration for the entire region, which the location represents. (Castells, 1996, p. 345)

The larger metropolitan areas are the most obvious hubs and nodes. But each region small or large can, because of ICT have a specific role in the network. The networks link up different places and assign to each of them a specific characteristic, which to some extent make the place special. The mobilities paradigm emphasises that all places are at least tight up to a thin network of connections, and therefore no places can be regarded as islands in the network society. (Urry and Sheller, 2004, p. 209) There will of course be places, which are higher or lower in the network hierarchy, but the fact that a region is linked to a larger network creates the possibility for wealth generation, information processing and power as well as knowledge making.

The same goes for transport flows seen in a physical perspective. The more contacts and arrangements a region has with other regions, the more there will be a possibility to create wealth, knowledge etc. With the new Danish structural reform it is therefore very important that the regions develop a strategy for, how to be a part of this information/network society in order to be able to get their share of the development. More about this will come in the chapters five and six

Third Layer: The spatial organization of the dominant, managerial elites.

The dominant elites of our society have often the characteristic that they are cosmopolitan, compared to an ordinary person, who Castells characterises as locally bound. Power, wealth and knowledge are distributed and utilised all over the world by using the Internet and/or other telecommunications, while people’s life and experiences are rooted in places, history and cultures. The more these social bound relations are split up, the larger possibility there will be, for new regions to grow into development centres, because new regions can gain from the development of other regions, as the information and wealth often follow the persons, who are not bound to a specific place. (Castells, 1996, p. 348) This does however not mean that people should not have a place they call home, but because of the information flows in the network society the information’s are easier to carry with you to a new

place. The managerial elites are to some extent build upon micro networks, which makes the agenda for the macro networks.

As a final comment to Castells theories it should be emphasised that even though, it is through the space of flows that power, knowledge wealth and information in our society is generated, it is still through the physical network in form of infrastructures of road, rails, waterways and air routes that the result of the virtual transactions are transported via. And these physical infrastructures will be even more important with the growth in E-commerce and trading in cyber space, in general because it will be easier for all people to get access to goods, machines etc. from all over the world. It will therefore be very important for the new Danish regions to be a part of this development and hereby to attract different kinds of development in the form of capital, power, knowledge etc. to the different regions, in order for them to create a regional hub or node in the network society. More reflections on Castells concepts will follow in section 4.3.

4.2 Hypermobility

Another concept, which is interesting to investigate, is Tore Sager's idea of Hypermobility, which Sager describes in the paper: *Hypermobility and the Planning of Society*. The main concern in his text is what to expect, if the physical space becomes networked and frictionless like cyber space. Due to globalisation, increased use of ICT, high migration, expanding markets and well functioning physical infrastructure networks a high increase in mobility have occurred, and will continue to occur in the future. (Sager, 2005, p. 2) Therefore he states the hypothesis that in a frictionless society where time-space compression and time-space convergence is prevalent, the high mobility, which often will follow as a result of all the above-mentioned concepts, will undermine the possibility for transport planners and decision-makers to ground their planning on impact assessments and traffic forecasting, which much transport planning in western democracies is based on today. Therefore he sees this hypermobility as a treat to transport planning in the modern society, as planning and governance has always been a quest for control, and planners do not have the control of peoples transport behaviour in the frictionless society. (Sager, 2005, pp. 2-4, 17)

Before digging deeper into the topic, the term mobility will be defined. In the following *mobility measures the ability of human beings*

to make something overcome distance in space. This something can be people, goods, capital, information etc. (Sager, 2005, p. 4) Mobility can either be actual or potential, while the potential mobility not necessarily is shown by transport from one destination to another, the actual transport is carried out in reality. Therefore mobility is defined as the capacity to overcome distance in space. (Sager, 2005, p. 4) Often people have a need for feeling mobile without carrying out the transport in reality. This need is due to the fact that mobility gives a feeling of being able to travel everywhere you like at every time you like. (Oldrup, 2001)

It is most unlikely that a high potential for transport can be upheld, without the actual transport also being high. Tore Sager gives a good example of this. Sager states that: *It is hard to imagine responsible politicians wanting to maximize the realized transport, considering the likely levels of social and environmental degradation bound up with it. However it is easy to think of a politician who would like to increase the mobility for a specific social group or for the society in general.* By running through almost every municipal plan in Denmark, you will find statements, which focuses on to increase the mobility within the municipality. An example is from the municipality of Aalborg, where it is stated in the municipality plan: *It is the vision of the city council that a well-developed infrastructure should secure high accessibility and high mobility.* Although it is also stated in the plan that: *The mobility should be increased bearing in mind the wish for a decrease in the environmental impacts, which results from the traffic* (Aalborg Kommune, 2004). Therefore it is a fine act of balance, given that on the one hand increased mobility means increased possibility of wealth and knowledge generation, and on the other hand increased mobility in a physical perspective often has negative impacts on other areas, such as the environment. It is here that urban and transport planning comes to its right, because it still is possible to plan for increasing mobility without impacting the environment and contributing to congestion.⁵

At one point the mobility for one person in society cannot increase any more without decreasing the mobility for others. This point, where no such changes can happen without affecting others, is also called the Pareto optimum, named after the Italian economist Vilfredo Pareto⁶.

⁵ One possibility could be to plan for more public transport, and still it would not be sure that people would use the public transport to a greater extent than today. But this is a discussion, which not will be opened up in this report.

⁶ Pareto optimality: An allocation of resources is Pareto optimal when no further improvements can be made, without making any other individual worse off.

This point is not yet reached within the transport area, but in some major cities around the world, there is not much more space for traffic, before the system will be unable to create a flow of vehicles. Therefore there is an urgent need for transport planning and forecasting to control the transport flows, as everything seems to be on the move. (Urry and Sheller, 2004, pp. 207, 221) The next sections will explain why hypermobility undermines social predictions and forecasting in relation to transport planning, and why other methods for planning are therefore needed.

4.2.1 Hypermobility means unpredictability

The starting point for this discussion of hypermobility is that in every society individuals has information about their personal transport behaviour and possibilities. To a certain level the transport planners will also have some information about peoples travel behaviour, but the sum of the individuals knowledge about travel behaviour, will always be larger than the sum of the transport planner's knowledge about travel behaviour. A mathematical equation can in this case be made ($\text{Knowledge}_{\text{Individuals}} - \text{Knowledge}_{\text{Planners}} > 0$). In a situation where mobility is significantly increased for almost all individuals in society, the information gap, between the individuals and the planners with regards to travel behaviour, will increase, and a society based on hypermobility is approaching. (Sager, 2005, p. 7) In this situation the transport planner has less possibilities of predicting the transport patterns of the individuals and therefore it will be a hard task to make transport planning, because the consequences of a certain initiative within the transport sector will hard to prescribe.

Today the cost-benefit analysis is an utilised method in transport planning, given that it is a method to predict the consequences of a given project, and hereby being able to judge the attractiveness of the project compared to other projects. But it will be very difficult for the users of the cost-benefit analysis to assess the future impacts in a scenario, where there is almost no opportunity to predict and assess the transport amount in different alternatives, as people have a very high level of mobility and can go almost every where they like (Urry, 2002 in (Sager, 2005)).

According to Sager the consequence based planning in the hypermobility society is therefore exhausted. One of the new approaches for planning in the hyper mobile society could therefore be

found in the non-consequentialist deontology⁷. The deontology approach builds on appropriateness, defined independently of the impacts. This approach is also known from the deliberative democracy where decisions are based on the best and most reasoned arguments. (Folkevalg.dk, 2006) Sager mentions three aspects to take into consideration as a part of the non-consequentialist deontology:

1. The question of recognition: What kind of situation is this?
2. The question of identity: What kind of person am I, or what kind of organisation is this?
3. The question of rules: What does a person such as me, or an organisation such as this, in a situation such as this? (March, 1994 in (Sager, 2005))

The idea of the non-consequentialist deontology is to establish identities and match rules to recognised situations. (Sager, 2005) In this way decision in almost every situation should be possible based on a codex of ethical rules and stated laws.

In general the message in Tore Sager's text is that maximum hypermobility cause's unpredictability, as planners cannot forecast individual travel behaviour and therefore have more difficulties in designing rules or laws for controlling the amount of transport in a sustainable direction. This hypermobility further means the abolishment of many of the impact assessment-based planning methods, which are used for transport planning in today's society. The new approach for planning could then be based on rule following and rituals based on ethical aspects and concepts. (Sager, 2005, p. 15, 17)

Our modern society cannot function without mobility, but too much mobility will also create problems far different than the already known problems of environmental impacts, accidents, congestion and land consumption.

4.3 Reflection of the two texts in connection with goods transport and regional planning.

If the idea of the space of flows and space of places are transferred to a regional planning perspective, it can be stated that for a region it is very important to be a part of a network in order to obtain the advantages of being a hub or a node, and hereby have access to the

⁷ Deontology is learning about what is right seen from an ethical viewpoint.

flow of information's, transactions, knowledge etc. Most regions, which are experiencing a high development, have a location (city), which is the dynamo for the region, and the higher status this location has in the network, the more added value is possible to create in the area. Many regions, also smaller regions, have their own nodes, which connect to the global network. (Castells, 1996, p. 346) For the new Region of Northern Jutland it will be beneficiary to be a part of the global network and hereby a part of the space of flows. As it is right now it can be argued that Northern Jutland is characterized under the space of places. Much of the goods handled in Northern Jutland are for companies, shops and private households within the boundaries of Northern Jutland. (Madsen, 2006) That is not a bad issue in itself. But in order to develop the new Region of Northern Jutland further, it will be a good idea to be a part of the space of flows, for instance by having a city or a metropolitan area, which on a regional basis is the hub for the flows. Such a city the region to some degree has in Aalborg, with its University and its companies and industries. The deal for the urban and transport planners must be to increase the size of this hub in order to obtain a more influential status in the space of flows. Other examples of small hubs are the harbours of Northern Jutland. These harbours are important entries and exit points for the transport in the region, but they are also important for transports between Norway/ Sweden and Central Europe. (Johannsen et al. 2006)

There are many possible ways of increasing the knowledge and wealth of a region. Some of the possibilities are described in Richard Florida's book (Florida, 2002) *The Rise of the Creative Class*, which for many urban planners, sociologist, economist and officials has been an inspiration for their work. As stated during the analysis of the texts, it is important for a region to part of the network. There is therefore need for a coordinated planning on either a regional level or between the municipalities, in order to enter the global network.

An example from the transport sector of how a hub is created could be when Maersk decided to use Aarhus harbour as a part of their harbour network. The fact that this large company is present at the harbour could mean that other investments are attracted to the harbour area. Suddenly Aarhus is a part of a larger network, because Maersk has decided to call Aarhus Harbour with a few ships each week. In many cases the settlement of a large cooperation in a city, has attracted other institutions within culture, arts and entertainment. In this case just a few calls from Maersk ships each week, can mean many working places for the area. Because, along with Maersk settlement

comes also an expertise in how to handle the transport flows. In this way Aarhus becomes both a space of place and a space of flow within the sea based containerised transport sector. During the last 15 years Aarhus Harbour has doubled its turnover of goods from 6 million ton per year to 12 million ton per year. During the same period Aalborg Harbour has stand idle on 3 million tons per year. (Petersen, 2006)

Taking into consideration the text of Tore Sager also this text shows, that it, seen from a regional perspective, is important to plan for the transport sector, in order to avoid the hypermobility scenario, which he describes. Sager also shows that there are other possible ways of planning than the traditional cost benefit analysis.

The fact that the amount of transport is increasing, possess an element of risk at a local level. In connection to goods transport, the time-space compression has, as already explained with the salmon example, meant that the possibility of achieving goods from all over the world is increasing each year. By this there is a treat that some regions will just become transit corridors for transports to and from the larger hubs and nodes, or in other words just be regarded as areas with infrastructure for the larger cities, mega cities and metropolitan areas. Such a risk is to some extent what the region of Northern Jutland is facing for the moment. This has not changed with the structural reform, but compared to the other new regions, the population of Region Northern Jutland is only half the size, and the region is considered as a fringe area in a Danish context. But then the region has some other advantages in the near connection to Norway and Sweden, which could be beneficiary for the regional development. In the worst case scenario the region of Northern Jutland will be a part of the space of flows, but only as infrastructure, not as a hub or node. The region will therefore not have the same possibilities of being a wealth creating area, as the places that are linked to the space of flows as hubs or nodes. Therefore it is important for the region to find an interest area, which can secure that the region is linked to the network as more infrastructure.

If some of these concepts of nodes, hubs and networks are compared to goods transport, it is worth mentioning that the European Union is working with two different concepts, which are called transport corridors and transport hubs. These terms can to some degree be transferable to the concepts of networks and of course hubs from Castells text. Transport corridors are in the view of the European Union first and foremost seen as physical infrastructure as for instance roads and rails, which has a high capacity. In the latest years corridors for

sea and air transport are also named transport corridors. (Johannsen et al, 2006)

An example of the increased interest in corridors is the increased focus on concepts like Motorways of the Sea. According to the European Commission the only freight mode that offers a realistic prospect of substantial modal shift from road to other means of transport, is the transfer of transports to sea-based transport. In addition sea transport can help improving competitiveness, reduce environmental damage, and help to create new networks in an enlarged EU. Furthermore Short Sea Shipping is also regarded by the Commission as the only transport mode, which has been capable of keeping up with the rapid economic growth of the EU. This in large part explains the strong emphasis by the EU in developing its new *Motorways of the Sea policy*, and hereby transferring goods to sea based transport. (SUTRANET, 2006)

The concepts of transport corridors is to a large extent connected to the supply side of transport, but also to certain infrastructure lines with a high capacity. Often such infrastructures have a high capacity, because of the high demand for using them. The connection between supply and demand are in this case essential for the use of the corridor thinking, because the demand side often initiate the supply side and in this way the corridor concept is created. (Johannsen et al. 2006)

Many regions see it as a valuable thing to be a part of a transport corridor, or in other words part of a network. One of the benefits is that in this way the region becomes a part of a larger network, and even though it might not have a big impact on the regional economy, it will often make it easier to get goods to and from the region along with the fact that it can create working places and new possibilities for the goods handling sector. (Petersen, 2006) Therefore being a part of the network is in general regarded as beneficiary.

In connection with the corridor concept is also the transport hub concept. A transport hub is regarded as a concentration of important activities and functions with relation to the transport sector. By concentrating regional or local transport related activities in one place, it will often be easier to support a modal shift between different modes of transport and it could also have the effect that the capacities of the transports become more efficiently used. (Johannsen et al. 2006) One important concept when talking about transport hubs is logistics centres. A logistics centre is defined as:

A Logistics Centre is a centre in a defined area within which all activities relating to transport, logistics and the distribution of goods – both for national and international transit, are carried out by various operators on a commercial basis.

The operators can either be owners or tenants of buildings and facilities (warehouses, distribution centres, storage areas, offices, truck services etc.), which have been built there. In order to comply with free competition rules, a Logistics Centre must be open to allow access to all companies involved in the activities set out above.

A Logistics Centre must also be equipped with all the public facilities to carry out the above-mentioned operations. If possible, it should include public services for the staff and equipment of the users. In order to encourage intermodal transport for the handling of goods, a Logistics Centre should preferably be served by a multiplicity of transport modes (road, rail, deep sea, inland waterway, air).

To ensure synergy and commercial cooperation, it is important that a Logistics Centre is managed in a single and neutral legal body (preferably by a Public-Private-Partnership). Finally, a Logistics Centre must comply with European standards and quality performance to provide the framework for commercial and sustainable transport solutions.

(Bentzen, 2002)

Transport hub can be transport and logistics centres, harbours, airports, dry ports, terminals or agglomerations of transport companies in general. Common for such hubs are that they are characterised by a high demand for transport, and therefore has a central position in the distribution of goods for the area or region, which they serve. Transport corridors and transport hubs are under these circumstances seen as a concentration of traffic flows. To a certain degree it is possible to plan for such concentrations, because the location of new hubs within the transport sector is a political decision. But it is very important to remember that the most important factor for the location of the transport hubs is that, there is a demand for goods handling in the area. A hub cannot work if there is not a demand for goods handling in the area.

A fear with the new reform could be that all new municipalities would like to be a part of the transport network and therefore tries to establish a transport hub in form of a logistics centre, a harbour, a terminal etc. But with the present Danish and international demand for goods transport, there is not the basis for 98 different hubs for goods handling. This is also one of the reasons why, it is important to have an

administrative unit, which can control the transport planning in the municipalities.

Furthermore the transport flows are not always easy to change. Often the paths, which the transport companies and distributors use, are well coordinated and therefore seldom change. This furthermore makes it difficult to introduce a modal shift to more sustainable transport modes of for instance short sea shipping or rail. (Johannsen and Hansen, 2006), (Petersen, 2006)

For the Region of Northern Jutland it is important to supply the right conditions for transport companies both within road, rail, sea and air transport solutions as well as a highly developed information infrastructure for sending data via cyber space. This could for instance be coordinated at a regional level. When going deeper into the analysis of the changes with and impacts of the structural reform, it can therefore wonder, why the transport sector more or less has been left out in the discussion of the reform and afterwards only described very briefly in the sections of the Danish Planning Act, which focuses on planning on a regional level. The next two chapters will discuss this issue further.

5 GENERAL OVERVIEW OF CHANGES WITHIN THE PLANNING AND THE GOODS TRANSPORT SECTOR

This chapter will mainly focus on the changes within regional planning, but with a special focus on the topic of goods transport, and how this area is affected by the structural reform, basically seen on an administrative level. This chapter will make a descriptive analysis of the administrative changes that the structural reform expectedly will have on the transportation of goods in Denmark, but it will also focus on the effects that possible will occur for the regional development in Northern Jutland as the selected case region.

In the new administrative structure the system in Denmark will be based on a strong state that can control the authorities below it. As mentioned in chapter 1 there will be five large regions, which largest task will be to operate the health care sector, mainly with focus on the hospitals. The regions are not allowed to impose taxes and can therefore not put the same resources into the coordinating of urban, environmental and transport planning etc. as in the old system, where the regions had the responsibility of making the Regionplan, which could exercise a veto over the planning on the lower levels. Instead large parts of this responsibility will be transferred to the 98 municipalities, which will gain a large growth in their number of tasks. This means that a large part of the planning competences, which earlier was concentrated at the counties, in the new system, will be concentrated at the municipalities or at state level. In the following sections many of these changes will be described and analysed.

5.1 Law changes with an impact on the goods transportation sector

In overall the new structural reform will have an impact on 49 different laws, of these will 4 be resident under the Ministry of Transport and Energy. The names of these four laws, which are changed, can be seen underneath:

1. Suggestions for law changes of: Law about public roads, Law about private common roads, Law about land owner contribution to public roads, Law about winter maintenance and cleaning of roads plus Law about procedures at expropriation of real estate.
2. Suggestion about law changes of: Law about transport authorities (Mainly concerning public transport)
3. Suggestions for law changes of: Law about coastal protection, different laws about flood defence, Law about harbours, Law about air transport operations and Law about ferry services. (Mainly smaller changes due to the change from three to two public authorities)
4. Suggestion for law changes of: Law about promotion of saving in the energy consumption, Law about electricity conservation fund and Law about promotion of energy and water savings in buildings. (Mainly smaller changes due to the change from three to two public authorities)

Based on these law changes it can be stated that only the first law change will have a significant impact on the administration and planning of goods transport. In general the biggest change in the laws is that the phrasing county in more or less all cases are substituted with either state or municipality, every time there is a sentence about the authority in charge of the roads. Also the Danish Planning Act will be changed. This will of course have an impact on the overall planning system, but it will also have some indirect impacts on the planning of goods transport, because parts of the responsibility areas will be moved from a regional to a national or municipal level.

5.2 Overall changes of the road administration

With the new structural reform the road authority will in the future be based upon two authorities: the State and the municipalities. Up until the 1st of January 2007 the system had been build upon a system with three authorities in charge of the roads. This means that the road authority under the counties is abolished and especially the municipalities will gain an increased amount of responsibility, when it comes to the road administration. (The Danish Ministry of the Environment, 2006. p. 45), (The Danish Road Directorate, 2006, p. 74) Table 2 shows how the administration of the roads used to be divided before the reform, and how the administration will be after the implementation of the reform.

Table 2 The responsible road authorities before and after the structural reform. (Danish Road Directorate, 2006)

Administration	State	County	Municipality
Road administration before 1 st of January 2007	Motorways	County roads	Municipality roads
Road administration after 1 st of January 2007	Motorways and approximately 20% of the former county roads	No road administration	Municipality roads and approximately 80% of the former county roads
Length before the 1 st of January 2007	2.000 km (3 %)	10.000 km (14 %)	60.000 km (83 %)
Length after the 1 st of January 2007	3.800 km (5 %)	0 kilometres (0 %)	68.200 km (95 %)

The government motivate this decrease in the number of authorities with the reason that the decisions about the local roads, should be taken as close to the public as possible. At the same time the administration of the motorways and the larger road transport corridors in general, are controlled by the state. By this the government believe that the backbone of the Danish road infrastructure is controlled in the most efficient way, because it possibly will be easier to make an overall co-ordination of the road politics on a national level. Whether this change in the road administration will be an efficient and well functioning solution cannot be analysed before the new administrative structure has worked for a while. But different relations point in the direction that larger administrative units will be able to strengthen the authority's possibilities to control the development. (The Danish Ministry of the Environment, 2003, p. 85)

In the sector analysis report of the structural reforms impacts on the transport and the environmental area, it is assessed that the new structure with larger regional units will be better for controlling the traffic flows, as such flows does not follow the borders of the different municipalities, but instead often cross these borders. (The Ministry of Interior and Health, 2004(C)) In overall this change in the road administration has happened for four reasons.

- Larger connection between economical responsibility and administrative responsibility
- Efficiency through outsourcing
- The road network should become more functional across different road administrations and in an international context
- The new system should secure the mobility of the public and the businesses by supplying more efficient planning, construction and running and maintenance. (The Ministry of the Environment, 2003, p. 11)

5.3 Administrative changes

According to the final settlement⁸ between the government and the Danish Peoples Party, the regions should function as development dynamos for the respective regional areas and in this way coordinate almost all development within the region. In order for the regions to do this, they have been assigned the following tasks, which in the following will be referred to as the regions future tasks:

- The regions should develop a new type of plan, called the Regional Development Plan (RDP). This plan should be the new regions point of rotation in their role as development dynamos, and should function as a strategic planning tool, which covers general as well as superior aspects for the regional development. The development plan should constitute a source of inspiration for development initiatives in the region.
- The regional development plan should contain an overall vision for the regions development within the sector areas of:
 - Environment and nature
 - Business and trade inclusive tourism
 - Employment and education
 - Culture

Furthermore the plan should secure a development of the urban areas as well as the fringe and rural areas.

- The regional development plan should furthermore give an account of:

⁸ Agreement about the Structural Reform, June 2004

- The connection between the future development within the region and the national and municipal planning for infrastructure.
 - The connection to eventual co-operations with authorities from adjacent neighbour countries in relation to planning and development issues.
 - The actions, which the regional council will take as a follow-up on the regional development plan.
- The regional development plan can for instance include the future spatial development of the region, including a consideration to a sustainable development, regional culture and leisure activities as well as development of nature resorts for recreational purposes. In addition to this the *regional development plan should be based on business development strategies prepared by the regional growth forum.*
 - The development plan will partly be supported by the regions opportunities to take financially and strategically action, partly by the concrete competences, which can secure the management of superior regional considerations in the planning.
 - The regional council must as a part of the development plan prepare maps, which by signs and symbols indicate the areas for urban development, including both residential and business areas, special recreational facilities and infrastructure etc. This will occur as general indications of, where the development should take place and therefore *not as precise indications of the areas for the development.*
 - *The municipalities should follow these superior indications in their planning, and the regional council can raise objections against the specific municipal plan, if it is assessed to be contrary to the regional development plan.*
 - The regions will have the right to a hearing in connection with initiatives made by the state. Furthermore the regions will have the opportunity to suggest new planning initiatives for the state and the municipalities, within the boundaries of the region.
 - The regions will have a coordinating role in relation to the municipalities' proposal for national planning. The regions will have to mediate between municipalities that disagree on the planning, and the region must take the final decision in situations where an agreement cannot be reached.
 - The regional development plan must be prepared to observe the rules and frameworks, which are made by the state in form of

national planning directives and other planning decisions. (The Ministry of Interior and Health, 2004b, p. 75-76), (The Danish Parliament, 2005)

The above written is a description of the regions future tasks, as they are formulated in the final settlement between the government and Danish Peoples Party. The concrete law text regarding the regional planning area in the new Danish Planning Act is written in Appendix 1.

Based on the above written a deeper analysis of the changes will be conducted in the following section. On figure 7 is shown an overview of the new planning system.

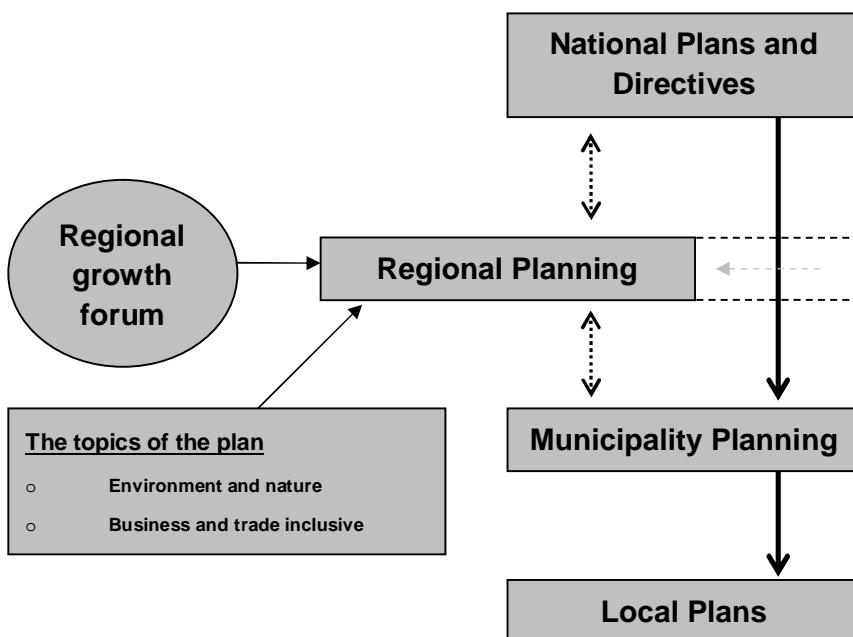


Figure 7 The new structure of the planning system in Denmark after the structural reform

As it can be seen on Figure 7 the regional level will lose much of its influence on the municipal level. At the same time the state will play a larger role in the coordination of the planning system. The regional growth forum will control the finances at regional level and furthermore make a Regional Business Development Strategy. This business strategy will be the foundation for the Regional Development Plan, and in this way the Regional Development Plan should be more focused on

development and action rather than on regulations (Vestergaard, 2006), (Madsen, 2006).

If the regions should be able to develop a useful tool for the planning sector in form of the regional development plan it is important that municipalities and other regional participants support the plan and commit themselves to the making of the plan. In this way it should hopefully be avoided that the Regional Development Plan becomes a continuation of the former region plan. The new plan should focus on development and initiatives that can strengthen the regions rather than regulate them. (Johannsen et al. 2006, p. 9), (The Association of Municipalities, 2006, p. 7) A possible approach for the regions could be, how to become a larger part of the space of flows.

For the regions it is important that the perspectives of the regional development plans do not stop at the borders of the region. Many tasks have a cross border perspective; protection of water steams, traffic related problems and pollution control are some of the issues that do not necessarily follow the administrative borders. But also more development focused strategies of how to link to the flows of information's, knowledge, capital and goods could be a vital part of the regional planning. On figure 8 is shown an overview of the plans, which the regions should develop. The most encompassing plan will be the regional development plan. While the other plans will relate to specific sector areas as shown on the figure.

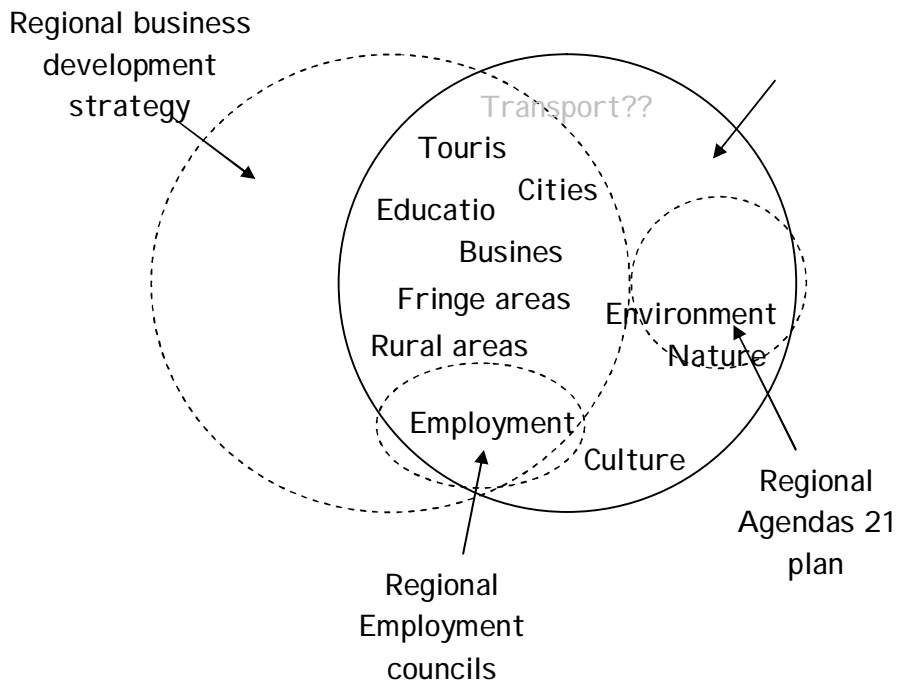


Figure 8 The responsibility areas of the new regions in form of their planning responsibility. Own drawing based on (The Association of Municipalities, 2006)

As it can be seen on Figure 8, transport planning will not automatically be incorporated in the regional planning. It is up to each of the regions how much they will focus on transport and logistics planning, and this can be rather difficult due to the decreased budgets of the regions.

Regarding the financial possibilities the new regions will receive approximately 2 billion Dkr (266 million €) that are earmarked for regional development. This money will be supplied as an annual block grant from the state on 200 million €, the municipalities will fund the rest. Of these 266 million € the main part will expectedly go to the financing of public transport and to contaminant removal. The regional development activities that should carry out the ideas of the Regional Development Plan will therefore often be financed completely or partly by the municipalities within the region. (Madsen, 2006), (The Association of Municipalities, 2006 pp. 15-16) The municipalities and regions can apply for funding from different structural funds under the European Union. In this case the Regional Growth forums will be the

coordinators of the applications for this funding. The Growth forums should at the same time as the EU application, apply to the Danish state for a permission to use the EU funds under either the Social fund or the Regional fund. The regions will only be able to co-finance business development activities, which have been regulated by the Growth forum. (The Association of Municipalities, 2006, p. 16)

The Regional Growth forum:

The Regional Growth forums consist of 20 members: 3 members are assigned on the initiative of the regional council, 6 members are assigned according to a selection of the municipalities within the region. 6 members are appointed after nomination of the business organisations within the region. 3 members are assigned from the knowledge and educational institutions on the initiative of the regional council and the last two members are assigned by employers' organisations and employees' organisations.

If the Regional Development Plan should become a success, it is, as earlier mentioned, important that the municipalities play an active role in the making of the plan. It is not beforehand given, how big a role the municipalities should play in the making of the plan. According to the Association of Municipalities the most obvious place to take a discussion of the role of the municipalities would be in the Municipal Contact Council, which is the municipalities' central meeting and contact forum within the regions. (The Association of Municipalities, 2006, p. 6) It is also important that the business organisation in the region play an active role in the making of the regional development plan as well as the regional business development strategy (Petersen, 2006).

The municipalities should along with their participation in the making of the regional development plan, make their own Municipality Plan Strategy before the end of 2007. The Municipality Plan Strategy is a political document, which describes the overall visions for the municipalities both on a local as well as on a regional level.

5.4 Reflection on the changes on regional level

After this insight into the changes on the planning area, a few things with regards to the new regional responsibility seen from a goods transport perspective will be emphasised. Below is given an overview of the topics, which will be analysed as a reaction to the new structure of the regions.

- **Little focus on the transport sector**
 - The transport sector is only mentioned very briefly in the final settlement.
- **Transnational co-operation within the goods transport sector**
 - Focus on a continuation of the cooperation with neighbouring countries.
- **Ambiguous use of information in the regions future tasks**
 - How to understand the wordings of the regional development plan

5.4.1 Little focus on the transport sector

The first topic worth noticing is that transport is not given a separate section in the Regional Development Plan. As it is put forward the transport issues should be handled under the business section of the plan. In other words the new regions can decide for them selves, how much emphasis they will put on goods transport planning. All that is mentioned specifically for the regions regarding transport is that the Regional Development Plan should give an account of: The connection between the future development within the region and the national and municipal planning for infrastructure. This means that it will be hard to plan for the goods transport area, since there is no legal provision in the Danish Planning Act, which says more than the above written about the regional goods transport planning.

In overall it could look like it will be a tough assignment to affect and plan for the goods transport sector in the future, since there is no legal background in the Danish Planning Act, which describes how the goods transport sector, should be affected by planning perspectives on a regional level. Instead the regional authorities should describe a vision for the development of the region by taking into consideration the planning on municipal and national level. Planning for topics like transport corridors, transport hubs / centres intermodality etc. should instead be included under the section of business development, and therefore not be a separate section in the regional development plan (Johannsen et al. 2006)

If the regions can find the funding for it, they have the possibility to support municipal or private development projects, which can help

realising the goals of the regional development plan. Often such funding has to be received from the European Union since the budget of the regions for planning issues is very narrow. According to transport planner at the new region of Northern Jutland, Tommy Madsen, it will hopefully be possible to receive such funding from EU and hereby support the initiatives of the plans. (Madsen, 2006)

As shown at figure 8 visions, strategies and plans from the different forums will contribute with inputs for the regional development plan. It can therefore be hard to imagine that goods transport planning will be a large part of the regional planning, since none of the forums have an explicit focus on transport. The closest you get is the regional business development forum, but it will completely be up to the different regions how much they want to focus on the parts of the transport planning that are not related to the planning for public transport.

In the case region of Northern Jutland the regional transport planners have secured that special workgroups have been established. The emphasis of one of these workgroups will be Infrastructure and ICT. One of the reasons for establishing this workgroup is that the new Region of Northern Jutland would like to supply the companies within the region with the possibility of being connected to the larger flows of goods (Madsen, 2006). This flow was in chapter four described as the space of flows. Furthermore the workgroup should secure a continuous co-operation with the working partners in the other Nordic countries. Because of the many harbours in Northern Jutland it is important to have this connection to the neighbouring countries, which handles large amount of goods to and through Northern Jutland. Often it is easier to start your business in co-operation with companies from the other Nordic countries than with companies from your own country. (Madsen, 2006) All three regions of Jutland and Funen have so far planned to have a special section about transport in their regional development plan, and the two regions on Zealand will most likely also have separate sections about transport in their Regional Development Plan. (Madsen, 2006) So despite the fact that it is not mentioned explicit under the regions future tasks in the Danish Planning Act, all regions will quite possibly implement a section about it in the Regional Development Plan. So why not make it legally binding that a transport section should be a part of the Regional Development Plan, in order to avoid further misunderstandings.

5.4.2 Transnational co-operation within the goods transport sector

The second interesting topic, which should be brought up here, is the fact that the regions so far have been development dynamos for a number of initiatives within the goods transport and logistics sector. Some of these initiatives have had a transnational perspective and furthermore they have focused on the transport corridors through the different regions. Since the regions will no longer be able to impose taxes, it can be feared that some of the focus on such areas will vanish.

Seen from the perspective of region Northern Jutland the former county had been the team leader in a number of goods transport projects with a transnational perspective. Two of them are NTN (Nordic Transportpolitical Network) and Nordic Link.

NTN: Is a regional transport political co-operation between 13 Scandinavian and 3 German regions connected in one common transport corridor. NTN is working to supply the foundation for good transport political decisions and increasing the quality of the regional transport planning. (NTN, 2006)

Nordic Link: Is a used name for the transport corridor to and from Sweden and Norway through Jutland in Denmark. But Nordic Link is more than a name it is based on physical transport networks, which covers the organisation of goods transport, economic planning and policy making as well as the financing and extension of Nordic Link in the future.

(Nordic Link, 2006)

The regional transport planners in Northern Jutland would like to continue the development of Northern Jutland as a transport hub for transport to and from Sweden, Norway and the North Atlantic, but they are aware of that the region will need funding from national programmes, as well as from the EU programmes in order to continue such projects in the same format. (Madsen, 2006)

Since the regional plans will have a higher focus on how to create growth and development via planning, instead of making planning based on restrictions, it will be essential for the regional planners to create the right framework conditions for the goods transport planning. Good framework conditions could encompass strategies for, how to use the present infrastructure more efficient by a modal shift from road to rail or sea based transport, therefore one of the regional tasks will be

to supply good infrastructure for the handling of goods. It could also be a better use of the vehicle capacity, the introduction of ICT solutions, which will make the transports more efficient, or it could be a focus on how to connect better to the space of flows. This topic will be further discussed in the next chapter.

5.4.3 Ambiguous use of information in the regions future tasks

A strange thing with the new reform is the ambiguous use of information in the description of the new regions future tasks. This is most explicit shown by the two statements below, which are taken from the final settlement between the government and Danish Peoples Party.

- The regional council must as a part of the development plan prepare maps, which by signs and symbols indicate the areas for urban development, including both residential and business areas, special recreational facilities and infrastructure etc. This will occur as general indications of, where the development should take place and therefore *not as precise indications of the areas for the development*.
- *The municipalities should follow these superior indications in their planning*, and the regional council can raise objections against the specific municipal plan, if it is assessed to be contrary to the Regional Development Plan. (The Ministry of Interior and Health, 2004b, p. 75-76)

One can wonder how it will be possible for a region to raise an objection to a municipality, which are not following a "Not precise indication of the areas for development" in their municipal planning. This ambiguous use of words has created much debate during the last year. For the defence of the government it should be stated, that in the new Danish Planning Act under the paragraph concerning the regional development plan, it is only stated that:

§ 10A Clause 5. The regional development plan should include an appendix with maps showing superior, but not precise, illustrations of where the development mentioned in clause 3 should take place.

The second part about how the municipalities should follow the superior indications is left out of the law section concerning regional

planning. This only leads to another question. What is the use of a plan, which can only describe, but not decide where the development should take place? The wordings of this section in the Danish Planning Act could have been clearer in order to avoid misunderstandings and twists about how to interpret the guidelines of the regional plan. But as long as the wordings of the regional development plan is stated in a clearly way, it will hopefully not be a problem for the municipalities to follow the guidelines.

In this case it is very important that the municipalities participate in the making of the regional plan and in this way can contribute to the making of a plan, which actually will have an effect on the municipal and local planning.

5.5 Summary

This chapter has described the overall of changes for the regional planning in Denmark after the structural reform. During the chapter it has been emphasised that the goods transport sector has not become a very vital part of the new planning responsibility for the regions. According to transport planner Tommy Madsen this will not be a critical issue because the former counties did not have a large administrative responsibility area with regard to goods transport planning, but at least there was a small responsibility in form of infrastructure planning and overall planning for the development in the regions. (Madsen, 2006). This means that if the counties succeed in continuing at the same planning level, with regard to goods transport planning, as before the reform, then there will hopefully not be so many negative effects of the reform, but in stead the result will be a more development oriented planning in connection with the larger municipalities.

As a reaction to the decreased focus on transport planning the regional Council of Northern Jutland has decided to establish a working group, which has the focus to include a separate section in the regional development plan, which will focus on infrastructure and ICT. What the result of the work of this group will be and how useful the regional development plan can be, without the right to control the development in the municipalities, cannot yet be analysed.

One thing which can be concluded after this chapter is that it would be a very good idea for the municipalities to be a part of the planning of the new regional development plan, if the plan should include applicable measures to make use of in the municipal planning. If this is

not the case there will be a risk that the municipalities will not follow the guiding lines of the regional plans, as the regions has no legal background to control the development of the different municipalities.

6 CHALLENGES, POSSIBILITIES AND CONSTRAINTS WITHIN THE NEW REGIONS

This chapter will further analyse some of the possibilities, which will be opened with the new reform. What is possible and what is not? What will be the challenges, and how can these challenges be handled at a regional level in cooperation with the other authorities at state and municipal level. The focus of this discussion will mainly be the goods transport sector. Furthermore this chapter will include some of the possible measures for controlling the transport development in a sustainable direction.

6.1 Future challenges for the regional authorities with relation to planning

The reform will as shown in chapter 5 mean a large restructuring of tasks with relation to regional planning, hereunder tasks with relation to goods transport planning on the regional level. In the coming structure the regions in overall will be in charge of the following planning tasks:

- The Regional Development Plan
- Control the Growth forum
- Funding for business development (Controlled by the Growth forum)
- Strategy for sustainable development (Regional Agenda 21)
- Coordinate different educations
- Regional public transport
- Employment councils
- The hospitals
- Soil pollution and minerals. Based on (Vestergaard, 2006)

In order for these tasks to be successfully undertaken, it is important that the regions play a proactive role in the making of the plans. By involving organisations and authorities as well as the local businesses in the planning, it will hopefully be possible to make an overall regional planning, which all involved parts can support. (Johannsen and

Hansen, 2006), (Madsen, 2006) The plans should as mentioned earlier be based on development initiatives rather than regulations and therefore it can be hard to imagine municipalities, which will go against the ideas of the regional development plan, since these ideas for development will be described from an overall perspective. (Madsen, 2006)

One important challenge in the planning system in the forthcoming years will be to specify the regions role in the planning system. This could encompass the question of how detailed the new regional development plans should be, in order to create the right foundation for future development in all regions of Denmark. At municipality and state level some changes will occur, but the overall administrative structure at these levels will not change that much. For the municipalities one large challenge will be to dismiss the thought of prioritising local interest in their planning and instead think systemic. The reason for this change in municipal thinking is that the municipalities to a certain degree have gained a larger responsibility area, now that the regions only to a limited degree can control their planning. The proponents of the new system hope it will work in a successful way, because there will be less administrative units in charge of the planning. Furthermore they believe the system will be easier for the public to understand, because there will only be two entrances to the public system instead of three. The opponents fear a laissez faire planning system, where each municipality tries to create development for them selves, without thinking on its neighbours or the environment. (The Ministry of Interior and Health, 2004b), (Winther, 2005)

Seen from a transport perspective the regions has a large role in making the right framework conditions for the use of intermodal transports, since such transports can help achieving the goal of disconnecting the growth in transport from the growth in environmental impacts. (European Commission, 2001)

The Ministry of Transport and Energy has an overall policy, which they hope will secure that multimodal transports of goods are used in the cases where it can create an added value for the transport chain. The Ministry of Transport and Energy has three goals for obtaining this use of multimodal transports within the goods transport sector:

- Denmark should have a good and effective transport infrastructure network between its five regions and between Denmark and its neighbouring countries.

- A good regulatory framework for a continuously development of each of the transport modes road, rail, sea and air should be given by the authorities.
- Finally the government wishes a further development of efficient transport and logistics centres and they see great possibilities in a good collaboration between the different transport modes. (Bruun, 2006, p. 4)

The regional Infrastructure and ICT forum could be the place where interested partners meet and discuss the possibilities for promoting Northern Jutland as a well functioning transport corridor with possibilities for intermodal transports (Petersen, 2006). Especially the focus on improving Northern Jutland's role as an international transport corridor is an important task for the coming regions. It will furthermore be the task of the new regions to include the thoughts of the regional transport forum into the regional development plan as well as the regional business development plan, and in this way being able to make a coordinated strategy for the regional transport and logistics sector, because the transport corridor through Northern Jutland is only one of many transport corridors in Scandinavia. (Johannsen and Hansen, 2006) The regional councils should in addition to the above mentioned, proceed to the national and municipal planning in their making of the regional plans. But the regional plans can also work as an inspiration for plans on the other two administrative levels. (Vestergaard, 2006)

For all regions one of the future challenges will be to avoid congestion on the roads. It is estimated that traffic congestion each day causes about 100.000 hours of delay in the Greater Copenhagen Area (Tækker, 2004). Traffic congestion is therefore not only a personal transport problem of each driver, but also a problem for the whole society (Pacione, 2005, p. 668). Since the regions do not any longer have the possibility to initiate initiatives, which should make the traffic flow more efficient, it will in stead be their role to draw the attention to the fact that there in some regions, and especially near the larger cities, are a need for overall measures to control the traffic flows. (Madsen, 2006) This measure could for instance be the introduction of road pricing in the larger cities, as it is known in London, Oslo and Stockholm. Another possibility with regard to road pricing could be to introduce it for heavy vehicles, as it is known in Germany. After some start up difficulties the system in Germany seems to work well. Not all interest organisations are positive of introducing road pricing in

Denmark, even though it among many experts is regarded as a solution, which could decrease the congestion on the roads. (Ildensborg-Hansen and Kildebogaard, 2001) The regional growth forums could in this case play an active role in the investigation phase of the development possibilities for road pricing in the different regions. As it is for the moment the need for such traffic regulation are larger in the Greater Copenhagen Area than in Northern or Western Jutland and this is of course important to integrate in the discussion of, which model of road pricing to implement, if this is the needed solution.

6.1.1 Future possibilities and constraints for the regional authorities with relation to transport planning

Without the possibility to impose taxes the regions should put their trust on getting funding from national programmes and the European Union. As some parts of Denmark can be characterized as fringe areas, it should be possible to apply for funds from for instance the regional development funds under EU. If the regions succeed in this, the different regions will most likely be able to continue development programmes like NTN and Nordic Link. (Madsen, 2006) If not, many of the initiatives will be very hard to continue in the same form. (Petersen, 2006)

Seen from the constraint side, the fringe location of Northern Jutland is a large challenge for the transport companies. This location means that the companies in Northern Jutland have to supply a better service for the transport based customers, in order to being able to compete with the other regions of Denmark, when it comes to attracting investments. In this regard the harbours play an active role. (Petersen, 2006) Since Railion⁹ stopped its rail transport services North of Aarhus, there are no longer any rail operators for goods transport in Northern Jutland. This means that Northern Jutland in stead has to focus on other transport means with regard to goods transport, as for instance the harbour area and short sea shipping. Therefore it could be a good idea for the regional development plan to include on overall planning, which will secure that the harbours and hereunder the logistics centres are supplied with the right framework conditions, so they can continue to develop and promote themselves and hereby

⁹ The largest Danish rail operator, which took over after DSB goods in 2001. Railion is owned by the German DB Logistics. (Railion, 2006)

increase their market share. A promotion of the harbours would also be a valuable step for the interest of multimodal transports. According to Peter J. Petersen the strategy for the harbours and the regional transport planners, should be to attract as much goods as possible to the harbours in Northern Jutland, and in this way avoid that the goods are transported from for example Bremerhaven or Hamburg to Northern Jutland or maybe further on to Norway and Sweden by heavy vehicles. (Petersen, 2006)

The more investments and export and import the companies in Northern Jutland are able to attract, the more will the transport related businesses grow, and the more there will be a need for an overall coordinated goods transport planning which can supply the right framework for the transports and control the development in a sustainable direction. This system can be regarded as a circle. Therefore it is also important that goods transport is a part of the regional growth strategy as well as the regional business development strategy.

A possible approach to attract more investments to Northern Jutland could be to find an area or a form of cluster, which the region could promote. The regional council has already found four different areas where they believe Northern Jutland has a competitive advantage. These areas are.

- ICT
- Medico
- Building materials
- Food products. (Vestergaard, 2006)

These areas could be a vital part of the new regional planning, and could under the right circumstances promote that more investments are attracted to Northern Jutland. This will furthermore have a positive impact on the transportation sector and could assist that new markets are opened up for companies from Northern Jutland to penetrate. Such new markets could for instance be the Baltic States and the other new Member States of the European Union.

Another possibility which the new regions also should focus on is the use of ITS (Intelligent Transport Systems), to some degree ITS is resident under ICT. Denmark has for long time trailed the ITS development in other countries, which Denmark normally is compared to. This can wonder since the use of ITS according to different experts can decrease the congestion by up to 10-15 %, it can shorten the travel time for commuters, it can decrease fuel consumption and it can

decrease the number of persons injured or killed in traffic. (Marfelt, 2006b) The Danish Minister of Transport and Energy Flemming Hansen has recently stated that he will make sure that the possibilities of introducing ITS in Denmark will be investigated to a wider extent. This could for instance be done by following up on all the regional initiatives, which has been conducted in the former counties. In the same article Svend Tøfting, chairman for the Association for ITS Denmark, and regional planner at region Northern Jutland, is glad to hear that the minister is positive of the idea. But there will be need for funding in order to continue the already made projects and to initiate new pilot projects. (Tøfting in (Marfelt, 2006b)) New technologies in connection with the needed administrative and structural changes could contribute to a faster and more efficient transportation of goods where multimodal transports are integrated better in the transport chains. Also the municipalities can play an active role in the promotion of ITS solutions, because the municipalities get a more specialised road administration. (Rørbech, 2005, pp. 17, 23) This also means that the municipalities in cooperation with the counties can promote other initiatives such as city access schemes or road pricing scenarios as touched upon in section 6.1. In Northern Jutland the debate about ITS development has led to the establishment of CITS - Centre for Intelligent Transport Systems at Aalborg University and the association ITS-Denmark (Region Northern Jutland, 2007). No matter where the responsibility is placed, there will be a need for further investigations on the area of ITS and other solutions, in order to be able to implement sustainable transport solution, both for transportation of persons and of goods. For this planning the government has established an Infrastructure Commission, which should investigate the transport sector and make an overall strategy for the development of it.

6.2 The infrastructure commission: An idea for development

The government has as mentioned above established a Commission on Infrastructure which has the overall purpose to make an overall strategy for the transport sector until 2030. This commission should secure a coherent planning for the transport sector, which should analyse the future transport need, and come up with suggestions for a sustainable planning, with regard to demography, urbanisation, commuting and trading. The reporting of the commission should support the overall national planning decision on the transportation

area. (The Commission on Infrastructure, 2006) The reason why the new structural reform is important in connection with this is that the new administrative authorities, which will be effectuated after the 1st of January 2007, are the foundations for a large part of the future transport planning. (Bjerremand, 2006) Regarding the strategy for the transport of goods on the roads, the government has furthermore established a commission, which has the purpose to make an overall strategy for the transport area. This strategy will hopefully be ready in the beginning of January 2007 (Bruun, 2006)

Before the structural reform is finally effectuated and implemented, there are still many road construction projects under the present structure, which are not finally completed or even started yet. With the new traffic agreement from October 2006 between the Government, The Danish Peoples part and the Social Liberals Party it has been agreed that these project should be fulfilled and furthermore there has been consensus about initiating more road projects. (Transporttidende, 2006, p.4)

6.3 Summary

This chapter has explained some of the challenges, possibilities and constraints, which the new administrative units are facing with regard to transportation of goods. Some of the issue which the regions could participate in the handling of, could be to promote a modal shift for goods transports, so intermodal transports receives a larger share of the goods transport. Furthermore there lies san effort in making the goods transport by heavy vehicles becomes more sustainable. For this there are many different measures, some of them are increased use of ICT and ITS, another could be to make different scenarios with regard to city logistics and/or road pricing. An idea for how to structure this transport development will be given by the Commission on Infrastructure in the near future. At that time it will also be easier to make assessment of the first concrete result of the new administrative structure and hereby see how they have handled the transport planning at the different authority levels.

7 RECOMMENDATIONS

This chapter will give recommendations to, how the Danish experiences of carrying out a structural reform of the administrative sector can be transferred to other countries in the same situation as Denmark. The focus in this chapter will, as well as the rest of the report, be on regional planning with a special focus on goods transport planning. Therefore this chapter will also give recommendations to, how to include goods transport planning in the regional planning.

A strategy or plan will often be much better if there is an ownership interest in the plan from the people and the authorities who are obliged to follow the plan. It will therefore be of much importance that the regions make an active effort to include the affected interest parts in the making of both the regional plan and the overall visions and development perspectives for the region. These interest parts include municipalities, local businesses, local companies, institutions for education etc.

A critical point in the Danish structural reform has been that the transport sector has not been a large part in the making of the reform. Whether this has been the intention of the government, or it just was a question of coincidences can be hard to investigate, but a recommendation, which could be transferred to other countries and especially the transportation sector in other countries, is that it would be an idea to make a more specific effort to make transport issues a part of the agenda during the making of the reform. As it has been seen during this report, the lacking focus on transportation has maybe meant that transport is not an obliged part of the regional planning, as it is not mentioned specifically in the modified Danish Planning Act. Instead transport issues should be seen as part of the regional business strategy, which also could work fine, as long as transport is a part of the planning and not left out since it is not a legally bound part of the regional plan.

An idea for including transport and logistics in the planning could be to establish small workgroups, as it is known in Region Northern Jutland. Hopefully this new ICT and Logistics group consisting of members from the regions as well as from the municipalities and the local businesses can create a coordinated and development oriented

planning for the transport sector, and in this way avoid that transportation is sidelined in the regional planning. One approach to follow could be that the new working group focuses on the implementation of multimodal solutions along with ICT and ITS, which in cooperation can create the basis for more efficient and sustainable transports.

Another recommendation for the new regions in their planning is that they should make an effort to make their region a part of the space of flows. As it was seen in chapter four, much of the development in the coming years will be focused on the metropolitan areas which are a part of an international network, in this occasion named the space of flows. Some regions are more naturally connected to this large network than others. For those regions, which are not a natural part of the space of flows it is important to find some business areas or skill competence area, where the inhabitants of the region have a knowledge, which can secure the development, also in the forthcoming years. As mentioned earlier, one of these competences could in Northern Jutland be, to focus on ICT and ITS. A good idea could in this case be to investigate the market by making focus group interviews and by discussing the development perspectives with interested partners and companies that have expertise within the field of ICT and ITS. Because of the University in Aalborg, Northern Jutland also has a competitive advantage, which could help create innovation for instance with regard to Intelligent Transport Solutions.

In overall the following recommendations can be transferred to other countries that are about to undertake a restructuring of their administrative sector:

- Be sure that all sectors are heard during the initiating phase of making the structural reform. In this way it will be possible to create the same framework conditions for the planning sector.
- Implicate municipalities and local businesses in the making of plans on a regional level.
- Make sure that transport issue are a legally based part of the regional planning. In this way it will be secured that issue is not neglected in the planning.
- The municipalities should think more on the common development, than on how to create development within its own borders.
- The regions should put emphasis on making the right framework conditions for transport corridors and hubs in order to be a part of the global network.

- The regions should find a branch of knowledge where the region has a special advantage, and try to promote this advantage through the planning.
- The regions should be in contact with companies that have an expertise within the chosen branch. In this way they region can participate in market analyses of different potential branches.
- The regions and the municipalities should promote intermodal transport in an attempt to disconnect the growth in environmental problems from the growth in traffic.

By following some of these recommendations the first step to a sustainable and development oriented planning has been taken. Some of the recommendations would maybe look different in a year, when the first concrete results of the structural reform can be analysed further. Then it would also be possible to analyse whether the sizes of both municipalities and regions has been the right in order to make a development oriented planning.

8 CONCLUSION

In chapter two the problem formulation for this report was set up. The question was as follows:

Which impacts will the structural reform expectedly have on the regional planning, with a special emphasis on goods transport and logistics planning, and how can the new regional planning authorities supply the foundation for the handling of the major transport related issues in the near future?

In order to answer this question the expected impacts on the structural reform has been described and analysed. In overall the largest changes in the new planning system are that it in many occasions will be other/new authorities, which are in charge of the planning. This means that a large part of the planning, which earlier was made in the regions, will be transferred either to the municipalities, which hereby will get a high increase in their planning responsibility, or to the state, which hereby gets a larger role as facilitator and administrator of new planning related initiatives. This also means that the regions lose much of their responsibility among others their right to impose taxes, since large parts of the regions responsibility is transferred to other authorities. In overall the new regions will have a budget of 2 billion Danish kroner (266 million €) to support and plan for regional development. The impact for the regions will therefore in many connections be that the regions need to get co-financing from National or EU programmes in order to continue their initiatives with the same detail level as in the former system. If the regions succeed in this, large parts of the initiatives, which are known in the former structure, can continue in the new structure.

During the analysis it has been described how the regions have a new and more development oriented profile with regard to the making of new plans. Instead of the former regional plan, which mainly had its focus on regulations, the regions should in the new structure develop 3 different plans that mainly focus on development. These plans are: The Regional Development Plan, The Regional Business Development Strategy and The Regional Agenda 21. In addition the regions should coordinate the regional employment, the regional public transport, the hospitals and a couple of smaller assignments.

The transport planning concerning goods has not been a large part of the making of the reform, this has maybe had the effect that goods transport planning did not become a vital part of the new responsibility areas for the regions, at least not seen from a legally based perspective. In stead goods transport planning should be seen under the overall planning for business development in the region. A couple of the new Danish regions have as a result of this lacking focus on goods transport planning made smaller workgroups, which focuses more specifically on goods transport planning, infrastructure and participation in transnational working groups and initiatives, some of them with focus on transport corridors and transport hubs. So even though goods transport planning has not been a vital part of the reform, it seems like the regions, to a certain degree, has found a solution to include it separately in their planning. But still it would be a good idea to include a separate section in the Danish Planning Act, where it is stated more explicit, how and to which degree goods transport planning should be a part of the Regional Development Plan or the Regional Business Development Strategy. By including such a legal framework it would also be easier for the regions to rise the funding for the cooperation and for initiatives with municipalities and local businesses concerning their participation in the making of the Regional Development Plan and the Regional Business Development Strategy

If the regions succeed in making development plans, which has been made together with other interest parts, it will furthermore be easier to coordinate new initiatives, which should help decreasing the problems that are related to transportation. As mentioned in chapter seven such initiatives could be to promote multimodal transports, ICT and ITS. Development oriented strategies and initiatives within these areas could make the transport sector go in a more sustainable direction, and the new regions are in this connection an obvious alternative as lead partners for such initiatives, as some of them already have been in the former system. Hopefully many of the initiatives, which have been taken in the former planning system, can continue in the new system, with the regions as promoter for the strategies. One of the initiatives, which might be on the agenda in the coming years, will be the introduction of road pricing. Also here could the counties play a coordinating role in the investigation of different road pricing scenarios.

How all the changes of the new planning system will affect the planning in general and the area of good transport planning will be interesting to analyse when the first concrete results of the new reform are available during 2007.

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APPENDIX 1

»Regional development planning«

In chapter 3 §§ 5g-10 are cancelled and substituted by:

»§ 10 a. For every new region there should be a regional development plan, which is made by the regional council

Clause 2. The regional development plan must not contradict to rules or decisions in § 3

Clause 3. The regional development plan should based on a large scale assessment describe the future vision for the development of cities of the region, the rural areas as well as fringe areas. Plus for:

- 1) Nature and environment, hereunder recreational purposes
- 2) Business hereunder tourism
- 3) Employment
- 4) Education and
- 5) Culture.

Clause 4. The regional development plan should describe:

- 1) The connection between the future development and the national and municipal planning for infrastructure.
- 2) The connection to the regions eventual cooperation with authorities of adjacent countries regarding planning and development issues.
- 3) The actions, which the region council will take as a follow up on the regional development plan.

Clause 5. The regional development plan should include an appendix with maps showing superior, but not precise, illustrations of where the development mentioned in clause 3 should take place.

Clause 6. To the extent it is possible due to other laws, the regions can make financial support to municipal and private projects, which can help realising the superior goals of the regional development plan

Clause 7. The region council can make proposals for the municipal councils planning on municipal and local level.

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