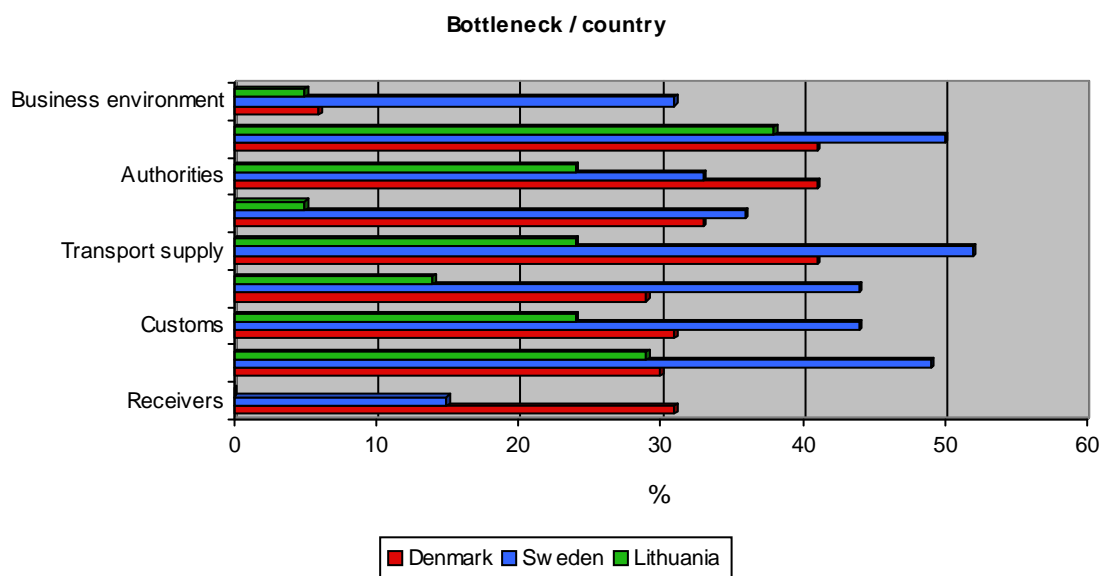


## Bottlenecks Studies in the East West Transport Corridor – final report

*Report based upon the three national reports created in Denmark, Sweden and Lithuania*



**August 2007**

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## Introduction

The main objective of this paper is to gain knowledge of the obstacles and bottlenecks that currently hinder efficient trade and utilisation along the transport corridor from Esbjerg to Vilnius via Öresund, Blekinge and Klaipeda.

## Method of research

Respondents in Denmark, Sweden, and Lithuania have been answering questions on different areas that could be regarded as obstacles for enterprises doing business along the East West Transport Corridor. The survey has been answered through a web survey, by phone interviews, or through personal interviews. The same questionnaire has been used in all three studies, and regardless how the information has been gathered this paper ties together the surveys from the three countries and discusses conclusions that could be drawn from the joint material.

Every question consists of three parts: "Do you regard this factor as a bottleneck", "Does it prevent business", and "Do you choose other routes or areas because of this"? The respondents could choose from four alternative answers on the first question. Those four answers have been given different numerical values to make a quantitative analysis possible:

"Not at all"	= 0
"To some extent"	= 1
"To a large extent"	= 2
"To a very large extent"	= 3

The answers have been weighted as a percentage of maximum possible products for each question (respondents by 3). The other two questions have "yes" or "no" alternatives. The percentages of respondents that answer "yes" on the later two questions are being presented. Finally the respondents were asked to indicate what factors in each area that is most critical.

In Denmark 18 companies was asked to answer, in Sweden 13 and in Lithuania 7. In this paper each country's survey has been given the same weight, eliminating the differences in number of respondents in different countries.

Given the fact that the number of respondents is low, the results are to be regarded as an indication and as a base for future research.

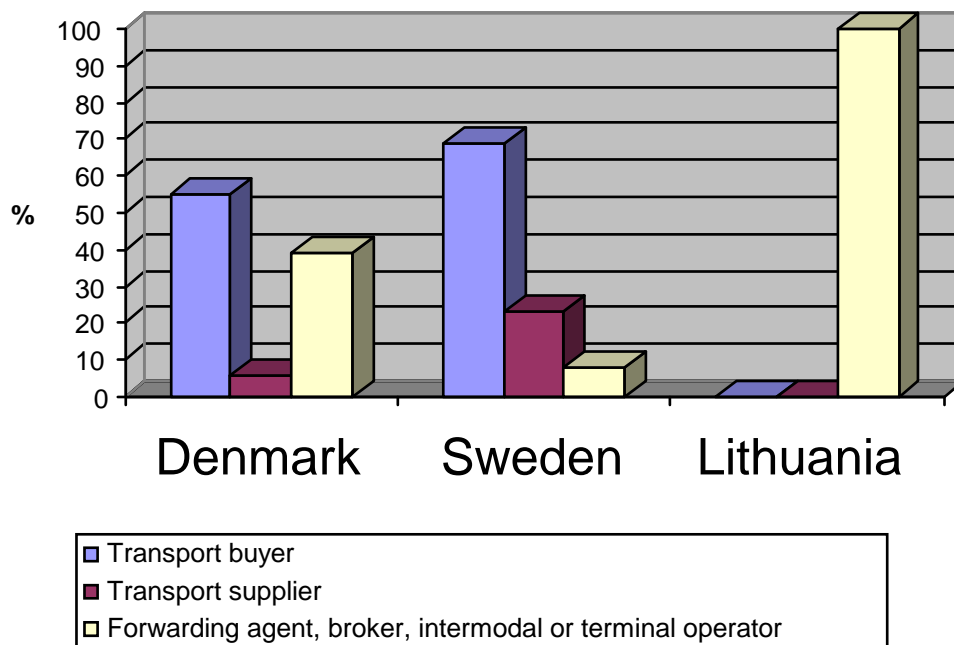
## Respondents

The distributions of respondents are different in the different country surveys. In Sweden 69% of the respondents are companies that produce goods and buy transports. In Denmark this share is 55%, while in Lithuania the share is zero.

When it comes to transport suppliers, 23% of the Swedish respondents fall into this category. In Denmark the share is 6% and in Lithuania zero.

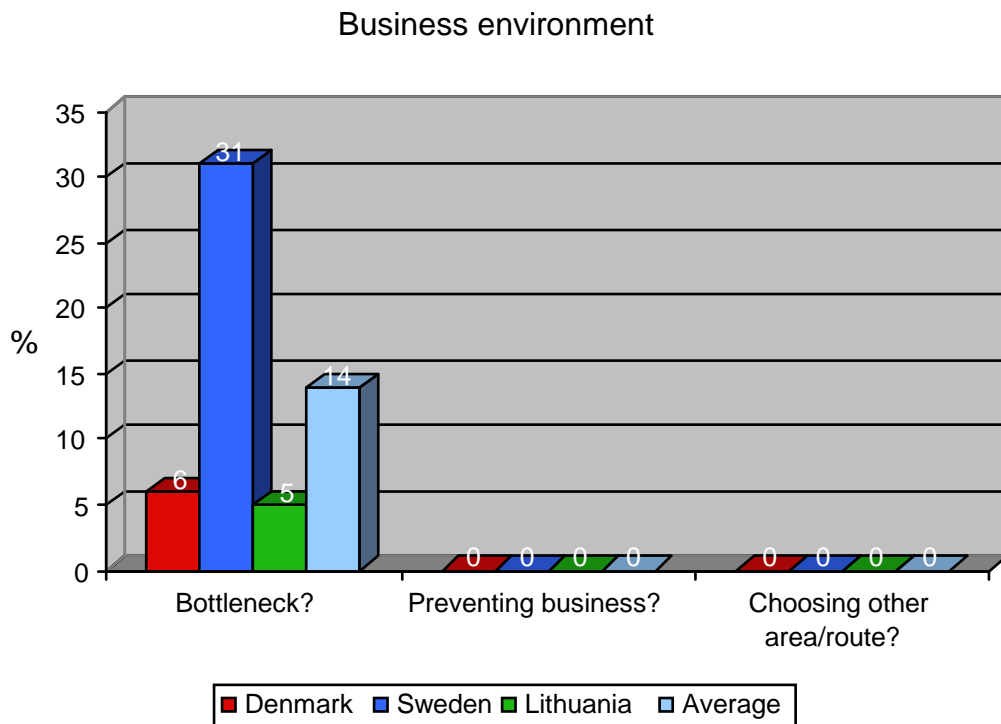
The third category, forwarding agent, broker, intermodal or terminal operator, makes up 100% of the Lithuanian respondents, 39% of the Danish but only 8% of the Swedish. These differences in respondent categories might have an impact on the answers. However, no matter the role in the logistics chain the respondent plays, it's the same chain being scrutinized by the respondents. If information is being distributed efficiently, obstacles and bottlenecks should be observed by goods owners as well as those companies involved in the handling and transport of the goods.

**Distribution of respondents**



## Business environment

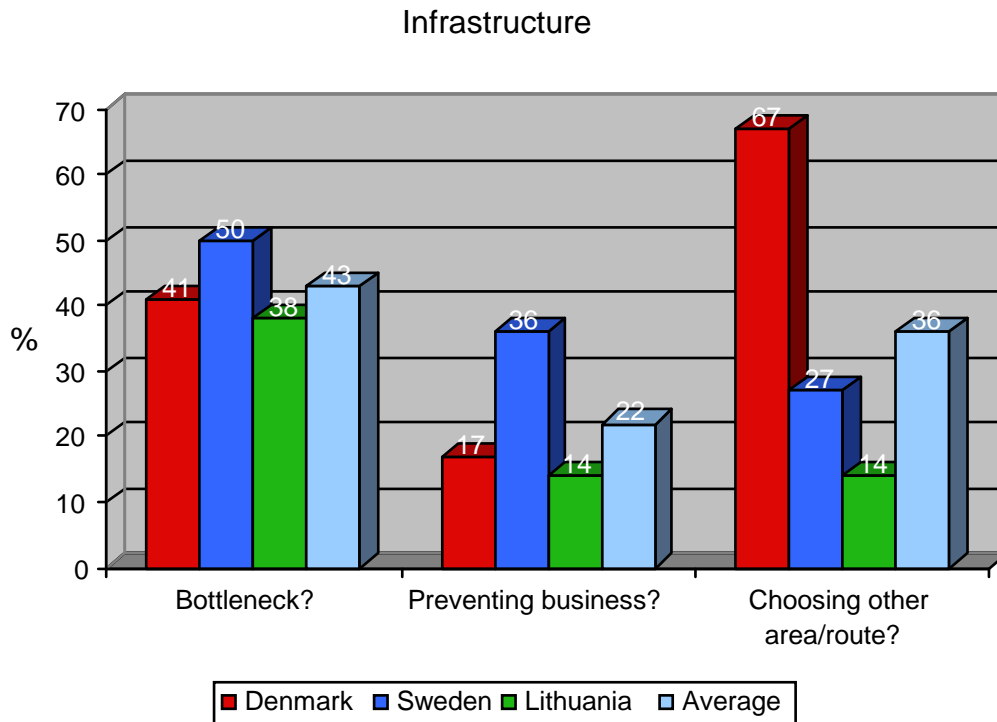
Question: Are the cultural differences bottlenecks for your company when it comes to doing business along the East West Transport Corridor?



The business environment and the culture is not preventing trade or causing companies to choose other areas or routes. The Swedish respondents regard different culture as much more of a bottleneck than the Danish and the Lithuanian respondents, but none of the respondents says it is preventing trade or forcing them to act in a different region or to chose a different route.

## 1. Infrastructure

Question: Is the infrastructure along the East West Transport Corridor a bottleneck in your business today?



Infrastructure is a major bottleneck in the East West Transport Corridor. In all three countries this is one of the top three factors studied, and it is top three in all three subparts of the question: it is a bottleneck, it is preventing trade and it makes companies chose other areas or routes. Looking at the average columns, this factor is number one in all the sub-questions.

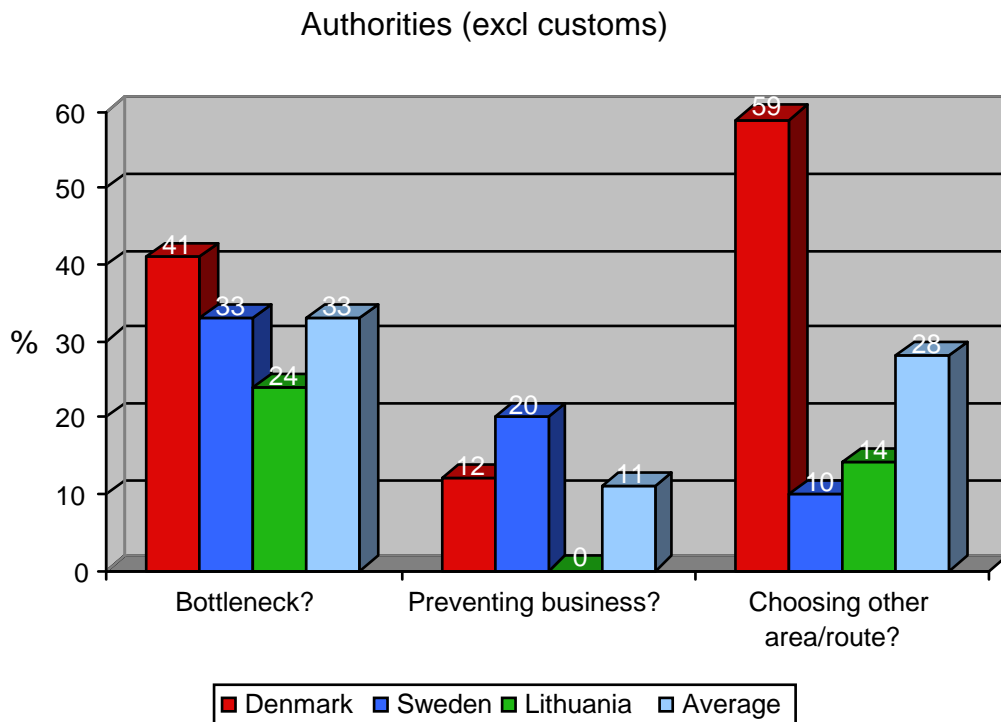
In Denmark key issues are 1) the closing of minor railroads (one of them to Esbjerg), 2) special demand when transporting oversized cargo, and 3) differences in railroad systems in different countries.

In Sweden roads both in Sweden and east of the Baltic are regarded as a bottleneck, as well as the limited intermodal possibilities and different rail gauges in different countries.

In Lithuania the main factors mentioned are 1) the weak or defective accesses to terminal and ports, 2) motorways and railway connections to TEN-T, and 3) the differences in rail gauges.

## 2. Authorities (excl. customs)

Question: Are legislation and authorities along the East West Transport Corridor a bottleneck in your operations today?



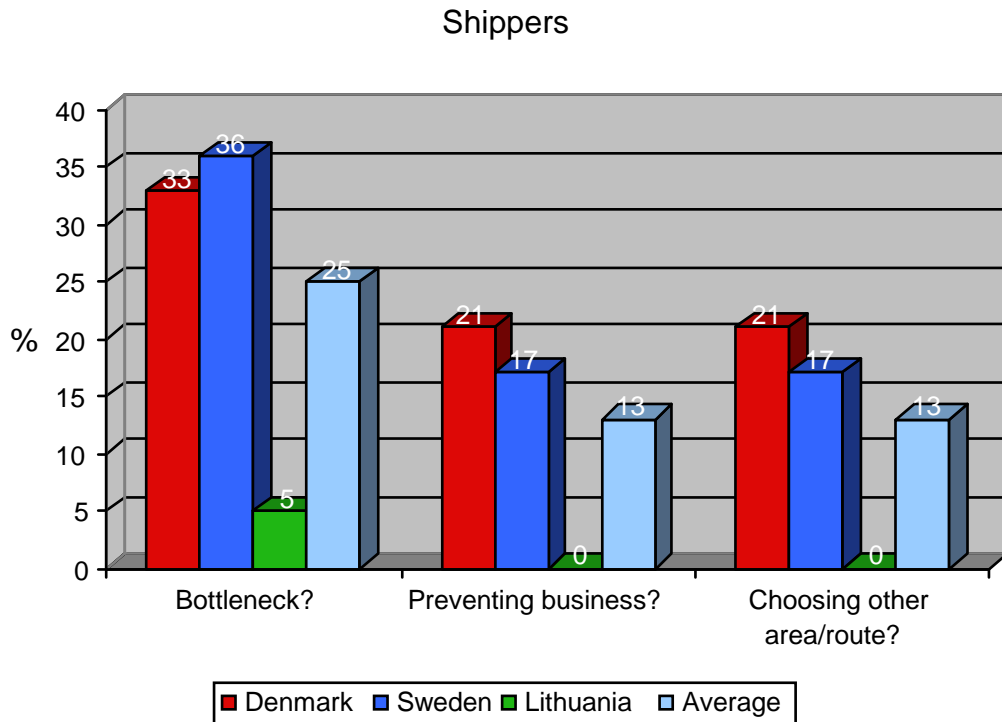
Authorities (customs excluded) are regarded as a bottleneck of medium importance. In Denmark this factor is one of top three. The reasons for this are: 1) Russian authorities causing problem, 2) closing of minor railroads in Denmark, and 3) the stiff rules of driving hours for truck drivers. 59% of the Danish respondents say they are choosing other routes because of this.

In Sweden the different weight limitations for trucks is mentioned as a bottleneck. In Sweden 60 tonnes gross weight is the maximum, while Denmark accepts 48 tonnes and most other countries 40 tonnes or less than that.

In Lithuania authorities aren't regarded as an important bottleneck. Factors mentioned though are rules that prevent fast transportation and bureaucracy, commissions and restrictions.

### 3. Shippers

Question: Are the shippers along the Corridor a bottleneck in your operations today (e.g. less than critical volumes, imbalances in cargo flows, etc.)?

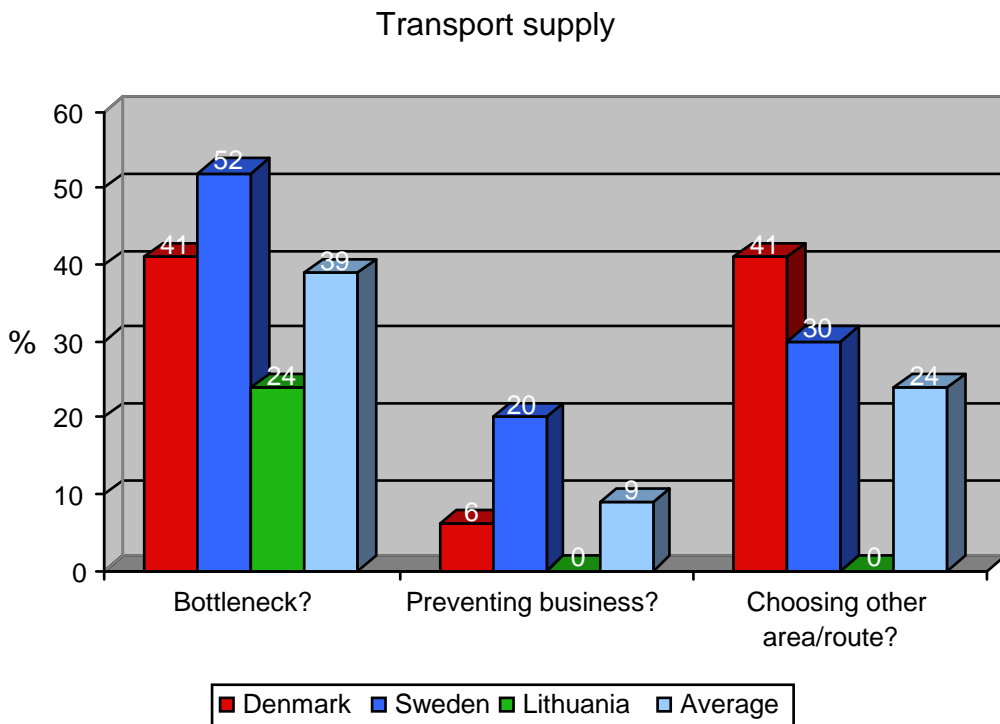


Shippers as a bottleneck has a medium importance, but it's significantly higher in Sweden and Denmark. In Sweden the lack of critical volumes for different services are mentioned as a bottleneck.

In Denmark a misunderstanding has increased the rating for this question. Shippers have been mixed up with transport suppliers. In Lithuania this is one of the least important factors. Shippers are not a key bottleneck in the East West Transport Corridor.

#### 4. Transport supply

Question: Are the transport suppliers along the Corridor a bottleneck in your operations today (e.g. capacity, frequency, quality, etc.)?

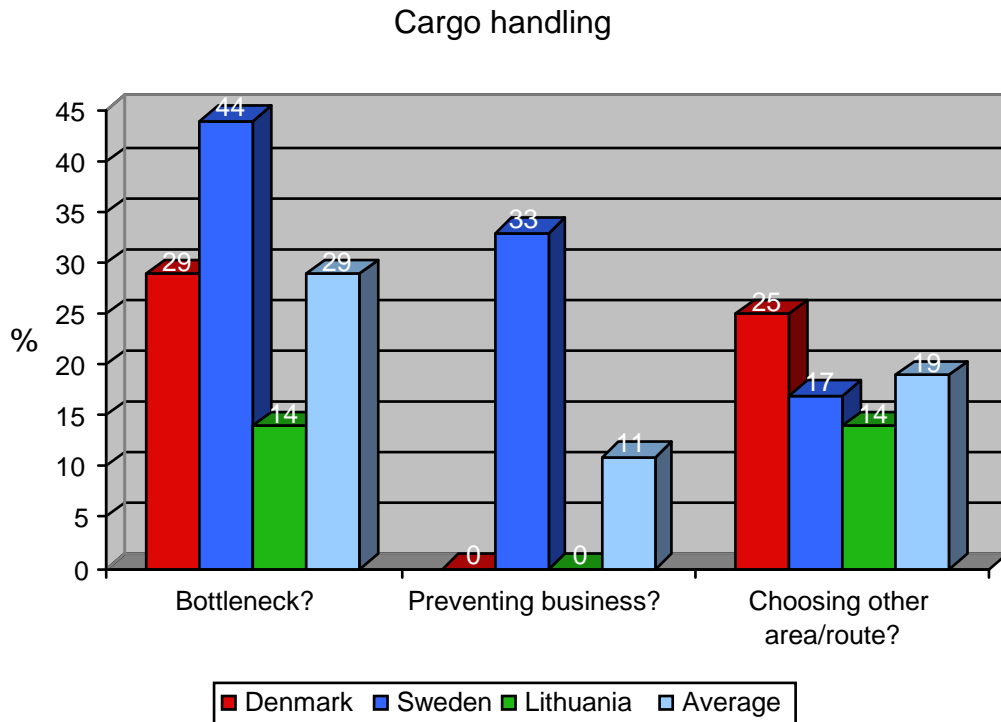


Transport supply is the second most important bottleneck in the East West Transport Corridor, in Sweden even the most important. The time for the surveys coincides with lack of transport capacity. For the first time in decades transport capacity isn't an endless resource. All different transport modes are mentioned and the answers from different countries are very similar. Factors are for example: lack of truck drivers, trucks, trailer, ro-ro-capacity, rail wagons and frequency of rail services.

Significant difference though is that the Lithuanian respondents don't see that this is preventing business or making them chose other routes.

## 5. Cargo handling

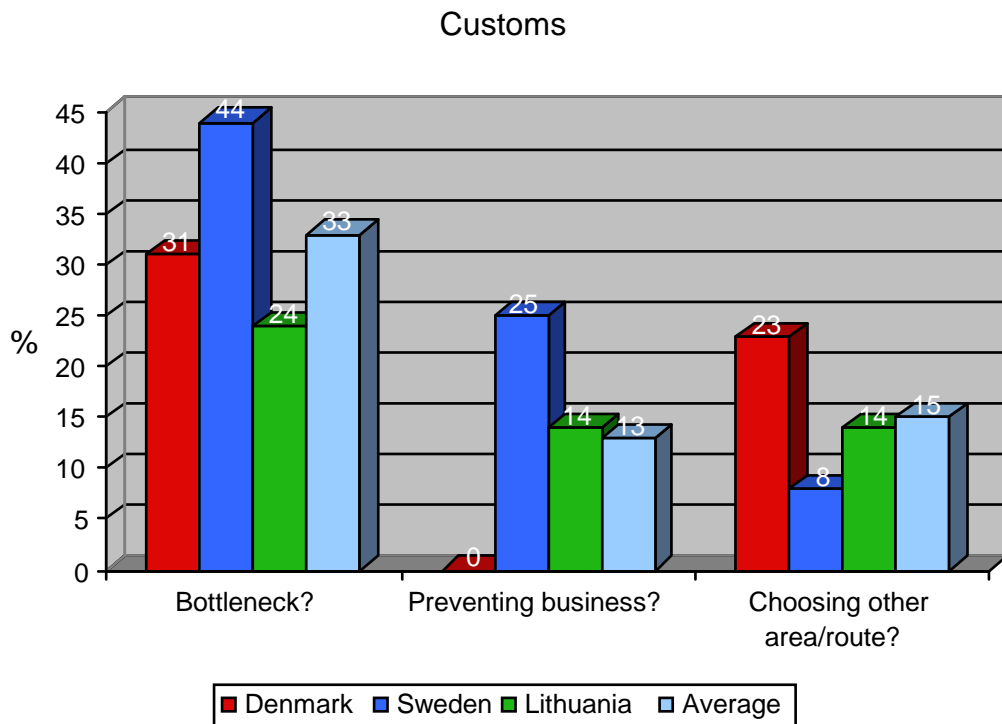
Question: Is the handling of cargo along the corridor (e.g. suitable containers, container chassis, trailers, rail wagons, cranes and handling equipment in ports and terminals, etc) a bottleneck in your operations today?



Cargo handling is regarded as a bottleneck of medium importance. Especially the Swedish respondents see it as a factor that prevents business, while none of the others see it this way. However, a problem for the corridor is that cargo handling is forcing companies to choose other routes. Key factors mentioned to cause problems are 1) lack of container handling equipment, 2) lack of efficient container transport possibilities, and 3) waiting time in the Eastern part of the corridor caused by inefficient cargo handling equipment.

## 6. Customs

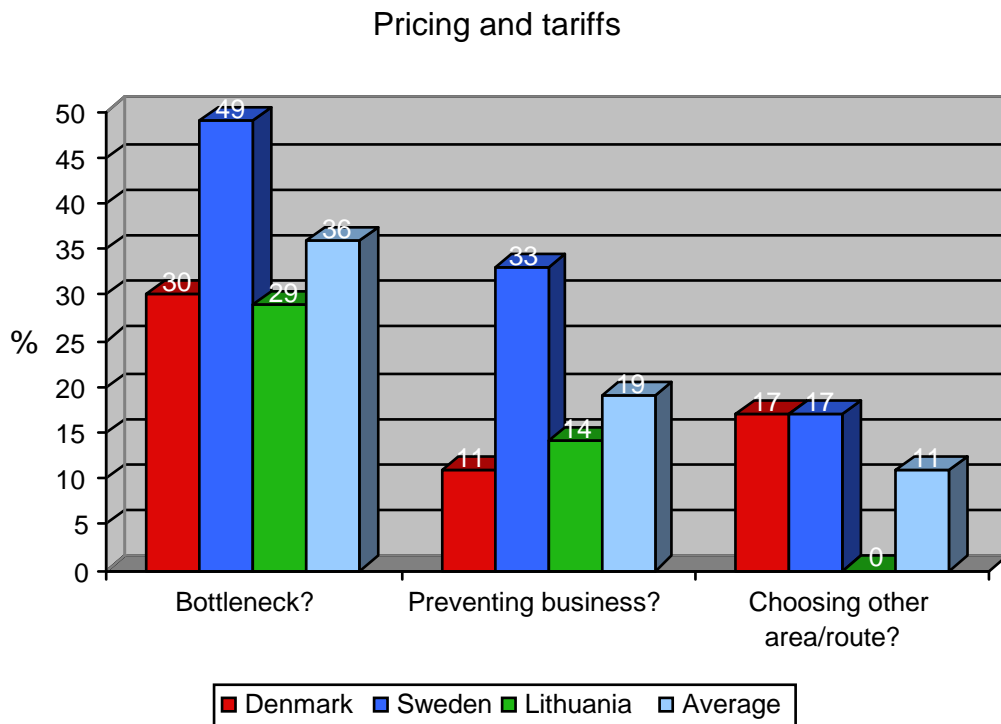
Question: Is customs (e.g. border crossings, export/import clearance, documents, bonded zones, bonded transport, etc) a bottleneck in your operations today?



Overall, the fourth most important bottleneck is customs authorities. When it comes to preventing business, it's said to be one of the top three factors. One of the Swedish respondents said: "Many new and ongoing businesses has been terminated due to inefficient customs authorities". Most of the problems are identified east of EU, in Russia, Belarus, etc. Also inside EU local customs officers have their own procedures and interpretation of EU regulations.

## 7. Pricing and tariffs

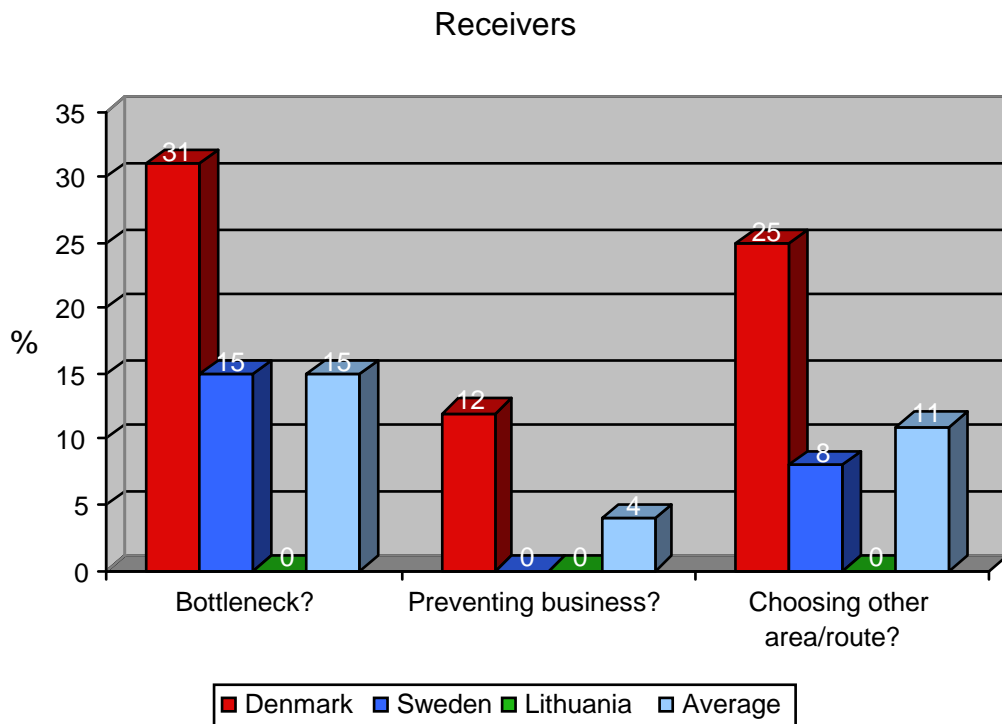
Question: Is pricing and tariffs (e.g. rail tariffs or road taxes) a bottleneck in your operations today?



Pricing and tariffs is regarded as the third most important bottleneck. When it comes to preventing business, it's the second most important factor. The most important factor seems to be the politically motivated and discriminatory railway tariffs in Russia, making any business initiative involving Russian railroad much more uncertain. Other factors mentioned are the lack of door-to-door alternatives along the corridor and further, and high cost and tariffs that might prevent business.

## 8. Receivers

Question: Are the receivers a bottleneck in your operations today (capacity, handling equipment, etc)?



The receivers along the corridor aren't a bottleneck, according to most of the respondents, and especially the Lithuanian companies that indicate a zero on all three sub-questions. The Swedish and especially the Danish respondents do, however, see the receivers as a bottleneck to some extent. The reasons are in most cases lack of handling equipment at the receiving point, causing expensive and time consuming extra handling or less efficient transports, adjusted to the handling equipment available.

## 9. Other bottlenecks

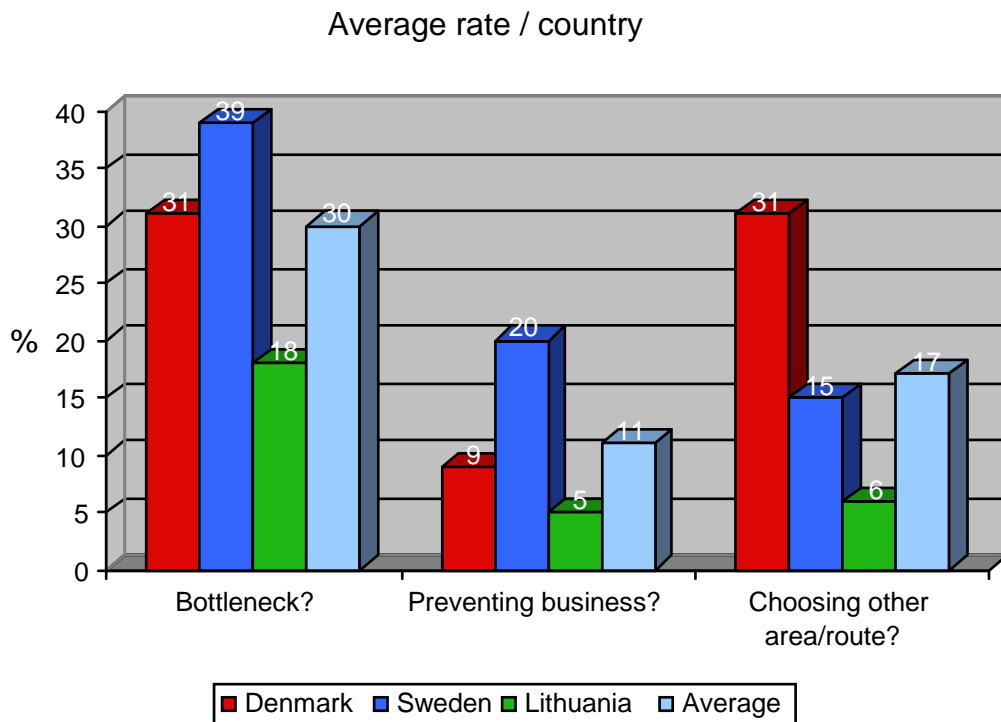
The respondents were given the possibility to name other bottlenecks along the corridor:

- Cultural differences (as addressed in question #1), mentioned by two respondents.
- High demand.
- Unbalanced traffic, handling of empty containers.
- The image of the corridor has to be improved.
- Safety of goods due to additional handling.
- The management and coordination of the corridor.

### Overall view of the results

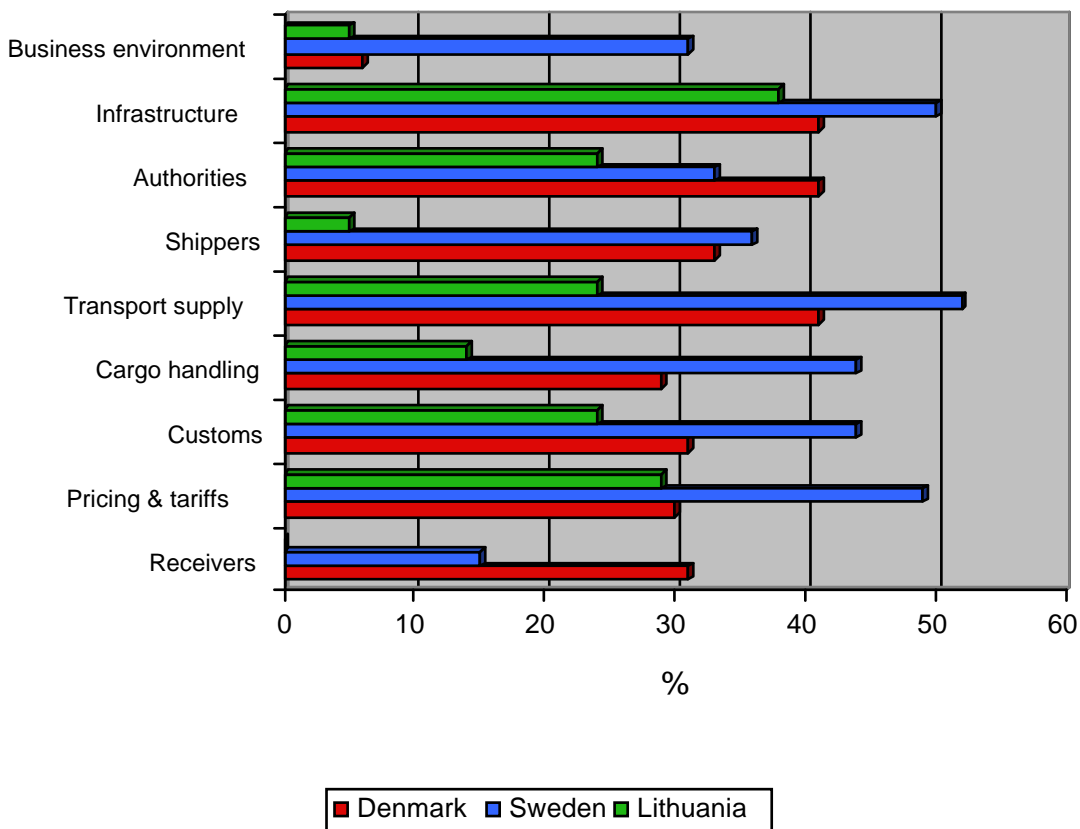
As said before, the number of respondents is quite limited, and because of this we can only use the results as an indication of where to look for the largest possible improvements in the function of the corridor. This final report is based on the reports from three countries. We have chosen to give the three reports the same weight, even though the number of respondents differs between the countries.

We would like to rule out the least important bottlenecks and to focus on the most important. Doing this we want to keep an eye on the results of each country-wise survey, and monitor the differences and similarities.



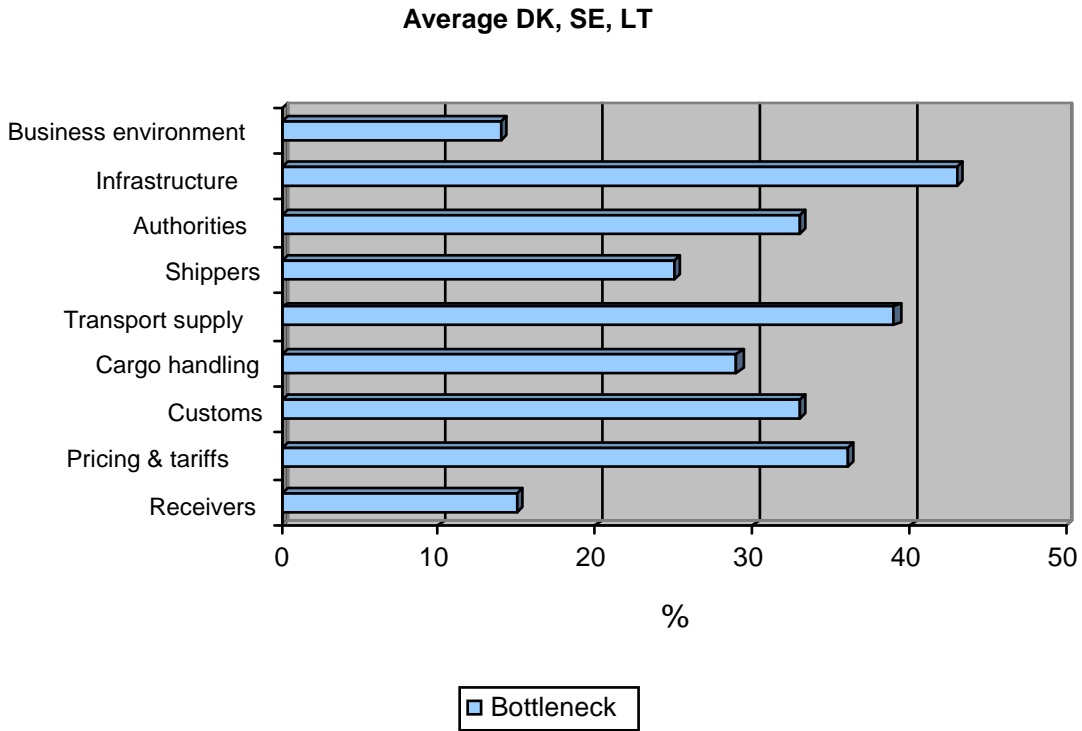
Looking at the average answer on each of the questions from each country, we do notice that the Swedish respondents see more of bottlenecks than the Danish, and to a larger extent, the Lithuanians. The same pattern is valid when we look at the sub-question whether or not it is preventing business. On the other hand, the Danish respondents are choosing alternative routes or areas to a higher grade than their Swedish and Lithuanian counterparts. The reasons for these findings could be that most problems seem to increase the further to the east you go. To handle those problems might be part of the "business plan" for the Lithuanian companies, something the Swedish companies has to deal with, while the Danish companies, sited further to the west, might have larger possibilities to choose other areas to focus on or other routes to reach the market.

**Bottleneck / country**



The diagram above shows the response from respondents in different countries and tries to highlight similarities and differences between the three studies. Looking at the top three and top five factors for each country could be a method indicating similarities and differences.

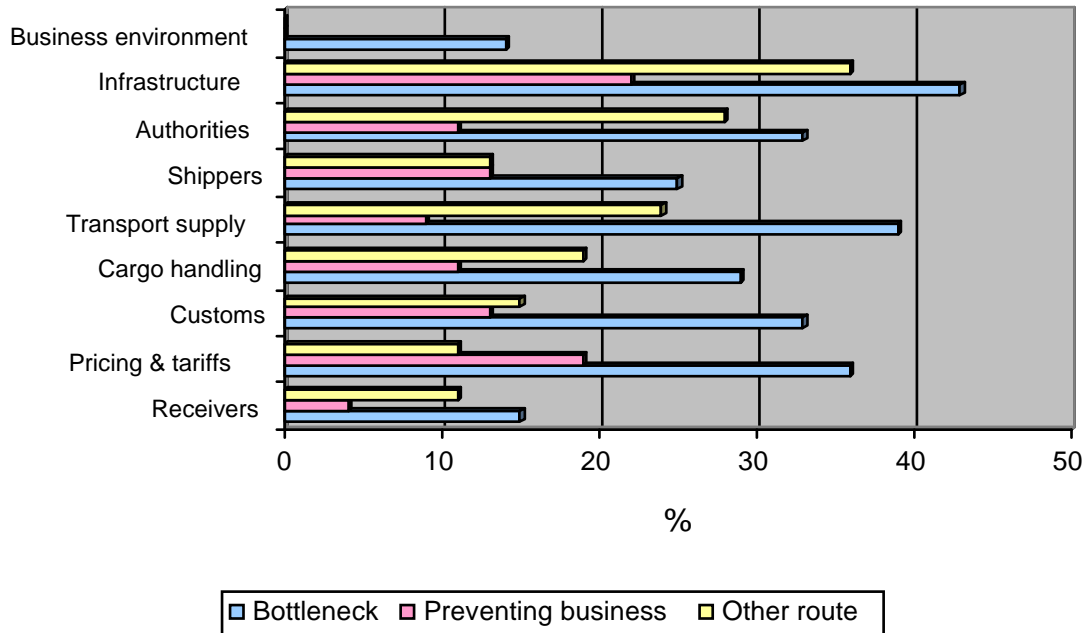
Another analysis is to calculate the average rate from all three surveys for each factor. This shows that Infrastructure, Transport supply and Pricing & tariffs are regarded as the most severe bottleneck in the corridor. Authorities and Customs come in as 4<sup>th</sup> and 5<sup>th</sup>.



A third way to improve the analysis is to add the average ratings from the two last sub-questions, to see the impact on business and choice of area and route. If a factor is regarded as an important bottleneck and at the same time is preventing business and/or forces companies to choose other routes or areas, the expected impact from that factor would be larger.

These analyses lead us to the following conclusions.

Average DK, SE, LT



### Most important factors

There are many indications that Infrastructure is one of the most important bottlenecks in the East West Transport Corridor. The factor is one of the top three factors in all three countries; it is also the factor that gets the highest rating preventing business and causes the most alternative routes or areas.

Transport supply is also a severe bottleneck. This factor is also on of top three in all country studies. For the first time in decades it's been shown that transportation isn't an infinite resource. This, for many people, new perspective might have increased the rating for the factor, but nevertheless, not being able to deliver is a severe obstacle. The question is for how long the situation will last or if the transport companies will be able to increase their capacity, or if the demand will decrease after a period of strong growth?

The third factor, when looking at average rating, is Prices and tariffs. This factor is top three in two of the countries. The main concern in this area is the railroad tariffs in Russia, while also general concern about raising road taxes, etc, do play a role. The factor does prevent business but due to few alternatives it does not cause changing to alternative routes.

### **Medium important factors**

Authorities, Customs, and Cargo handling are bottlenecks of medium importance. The first two factors are mainly decided by the political part of the society, while the last to a large extent is a question for private enterprises to solve. Many of the possibilities to decrease the impact of those bottlenecks are situated east of EU or in the collaboration between EU and other countries.

### **Factors of least impact**

Business environment, Receivers and Shippers are the three factors with least importance as bottlenecks. A multicultural business environment is at hand in the East West Transport Corridor and its extension to the east and to the west. It is more complicated to do business in such an environment but the companies say they are prepared to deal with it. It's a bottleneck but it's being addressed.

Receivers sometimes do not have suitable equipment, staff or competence to handle the goods they are to receive. This is not a big issue, and it is being addressed by the development within the companies and the economy.

Shippers, or the lack of them and volumes to be transported, might be a bottleneck. If the volumes does not reach critical levels efficient transport services could not be offered to the market. Also, as in the Asia traffic, the traffic is extremely unbalanced causing low efficiency in the transport system. Increased trade and economic growth would probably in the long run take care of most of these problems.

### **Conclusions**

The bottleneck studies show that there are reasons both for actions and for further research. Some factors that aren't important as bottlenecks could be put aside, while focusing on the most and medium important factors. This conclusion goes for both actions taken by enterprises and politicians, as well as research conducted by the academy.

If the East West Transport Corridor is to be established as an attractive, efficient, and sustainable intermodal corridor, the bottlenecks have to be addressed. Many of the decisions lie in the hand of politicians. It's an important task to give them the best possible foundation for knowledgeable decisions.

Another task is to make it easy and efficient for the companies, producers and receivers, transport suppliers and coordinators, to use the corridor. This is not only a matter of hard facts but also a matter of how the impression of the corridor lives in the mind of different people. Reducing the bottlenecks will increase the value of the corridor.

