

**Summary:**

# **Evaluation of the Strategic Transport Planning Process in Sweden**

The Swedish Institute for Transport and Communications Analysis (SIKA) and the four national Swedish transport authorities (the Railway Track Authority, the Road Authority, the Civil Aviation Authority and the Sea Transport Authority), were by Government Decision of 6 May 1999 directed to jointly carry out a national strategic analysis. This analysis shall provide the background for the Government's proposal to Parliament on strategies for development of transport infrastructure for the period 2002-2011.

The said analysis shall investigate three different strategic development options (strategic alternatives): The Socio-economic (most efficient) Alternative, The Road Safety and Environment Alternative and The Regional Development Alternative. In addition, analyses of 12 specific strategic areas shall be carried out. The results of the latter analyses shall provide the background for development of the three national strategic development options.

The various country authorities were simultaneously directed to develop regional development packages of transport measures aimed at promoting development of local and regional industries. These packages shall again provide the building blocks for the above national strategic option called The Regional Development Alternative.

The Norwegian Institute of Transport Economics (TØI) has under a contract with SIKA carried out an evaluation of the strategic analysis as undertaken by SIKA and the four national transport authorities. The evaluation includes three components, of which one is documented in this report. The two others are reported separately.

## **Main areas of investigation**

The evaluation of the planning process focuses on three main areas:

1. Is the planning process *organised* in such way that it promotes comprehensive planning and assessment across the transport modes, and does the *contents* of the process facilitate achievement of the goals and objectives of the transport policy?
2. To which degree are the results of the analyses of the 12 specific strategic areas used when developing the three national strategic options and designing the measures included in these?
3. To which degree are the policy differences between the three strategic options reflected in the measures selected, and how has socio-economic efficiency been taken into account when designing measures?

## **Methodological approach**

The evaluation of the planning process is based on semi-structured interviews of 22 selected central and regional participants in the planning process. We describe how these participants perceive the process. Each and every action in the planning process can be perceived and interpreted differently by the various participants. We do, however, not focus on identification of “rights or wrongs” in the various planning situations, but rather on identifying and describing a pattern in the answers given by the participants. Our overall aim is, against this pattern, to identify and explain which factors have contributed to and characterise the actual planning process.

## **Conclusions**

### **Does the organisation and contents of the planning process promote comprehensiveness?**

We have based our assessment of comprehensiveness of the planning process on an analysis based on four possible and increasingly ambitious levels for comprehensiveness and cross-sectoral planning.

#### *Participation in the planning process*

All four national transport authorities have participated. Two of them - the Civil Aviation Authority and the Sea Transport Authority - have, however, only been lightly involved and have mainly focused on that their areas of responsibility have been treated correctly in the text of the planning report.

The planning process at the central level is not perceived as comprehensive or cross-sectoral. The work is instead characterised by bilateral discussions, mainly between the Railway Track Authority and SIKa or the Road Authority and SIKa. All transport authorities consider that SIKa has the main responsibility for the planning process. SIKa is also predominant in respect of report writing.

#### *Cross-sectoral evaluations*

Application of transport demand models and socio-economic analyses should in principle enable evaluation of measures across the transport modes against each other. The demand models were, however, not fully developed and operational as scheduled and socio-economic analyses of investment projects could therefore not be completed within the time limit. No corridor analyses were carried out.

#### *Cross-sectoral prioritisation*

It was intended to allocate the financial frame for investment projects to rail and road based on marginal cost principles. Due to the above delay in model development, such calculations could not be undertaken. The overall allocation to

rail and road investments was instead based on a negotiation approach, which lead to a result very close to the present allocations to the two modes. Prioritisation between modes was therefore not based on an analytical approach as intended.

*System approach including both investments and other measures*

The planning report includes various general cross-sectoral analyses. The national analysis and the development of the three strategic development options are, however, mainly limited to projects and measures which are controlled by the transport authorities. Subsidies to public transport as a measure, which can reduce the need for investment in infrastructure projects, have not been considered when designing the three strategic development options. This measure has, however, been discussed in general for urban areas in one of the analyses of specific strategic areas.

*Work at the regional level*

The planning process at the regional level has a somewhat different character. It is more geographically specific and more problem-oriented. The approach has to some extent looked into transport corridors and major projects. It appears as a somewhat more comprehensive process than the process at the national level but is less analytical and less focused on strategic considerations.

**Are the results of the analyses of the 12 specific strategic areas used when developing the three national strategic options and identifying measures?**

We have established three criteria related to the functioning of the strategic areas:

- (i) That they are carried out jointly by representatives from more than one transport authority;
- (ii) Conclusions must to a reasonable degree be agreed between the parties and accepted as a basis for developing the national strategic options;
- (iii) Conclusions have had an impact on the development of the strategic options.

The analyses of strategic areas have to a varying degree had an impact on the actual development of national strategic options. At the regional level, knowledge about the results is very scarce.

Four analyses, which concern development scenarios for society at large, policy on CO<sub>2</sub> emissions and transport demand for passenger and freight traffic, have been important as they provide a common basis for the three national strategic options. The work has been carried out jointly, and the results are agreed. Disagreement is limited to the use of the results, notably whether a new CO<sub>2</sub>-levy on fuel shall be introduced.

In the analysis of road safety, the application of a CO<sub>2</sub>-levy and speed limitations against use of other and less controversial measures, have been discussed intensely and a common agreement in this respect has not been reached. This analysis has, however, been highly important for the design of the road safety measures used in at least two of the strategic options.

Two analysis related to railways have been carried out by the Railway Track Authority and others have only been marginally involved. The results are not commonly agreed. The analysis has been important for the railways, but it has not had a clear impact on the development of the three strategic options.

All parties are satisfied by the analysis of port structure and sea transport. It has, however, not had any notable impact on the development of the strategic options.

The analysis on maintenance of road and rail infrastructure has had a strong impact on the development design of two of the strategic options. There is, however, a general understanding of that the results as to the road maintenance level required are tentative and that further research in this respect is needed.

**To which degree are the policy differences between the three strategic options reflected in the measures selected, and how has socio-economic efficiency been taken into account?**

We have assessed the captioned questions under the four headings below.

*Application of different frameworks*

Introduction of a CO<sub>2</sub>-levy and speed limitation combined with use of shadow prizes for the road safety and environment option leads to that the measures selected for this option differ from measures selected for the “socio-economic” option.

*Selection of most efficient measures for achievement of goals*

The transport authorities have not explicitly selected investment projects that primarily contribute to achievement of the road safety and environment goals. The investment projects selected for the “socio-economic” option are mainly the same as those selected for the road safety and environment option. The regional development option is more different and has a wider range of project. These projects have, however, not been selected in such way that they clearly aim at achieving the regional development goals. The counties have to a high extent given priority to projects that also were prioritised in the previous strategic planning exercise, although the regional development goals were very different at that stage.

*Design of measures*

We have looked specifically into design of investment projects included in the three options. The project design is fixed and totally independent of which option the project is included in. There are, however, variations among options for some other measures. The size of the packages of other road safety measures is much larger for the road safety and environment option, and there is less emphasis on infrastructure maintenance in the regional development option than in the other options.

### *Socio-economic efficiency of measures*

As stated above, the delays in transport model development lead to that the socio-economic analysis of investment projects were not carried out as planned. The planned allocation of the financial frame for investment to rail and road projects based on marginal cost principles was therefore not carried out. Socio-economic analyses have not been used at the regional level.

### *Conclusions*

The above indicates that transport authorities and counties have introduced investment projects which they previously have identified and which they also under other circumstances would have given high priority. If we exclude the CO<sub>2</sub>-levy and speed limitations in the road safety and environment option, differences between options mainly consist of the size of the various packages of measures and to some extent of the order of priority for investment projects. We are therefore not far from a conclusion, which could be expressed as follows: Strategic options arrive and pass by, investment projects survive.

### **Which factors have contributed to the actual planning process?**

The Swedish guidelines for strategic transport planning, which form part of the governments transport policy paper have, obviously, had a major impact on the actual planning process. Both the guidelines and the Government Decision of 6 May 1999 open, however, for interpretations, and the main actors have expressed different views on key elements of the work.

### *Interpretation of the Government Decision and the guidelines*

The national transport authorities and SIKÅ have had extensive discussions on interpretation of the goals and objectives for the transport sector, and the relationship between operational objectives and overall goals, which have not yet been expressed in operational objectives. There has also been disagreement on how to apply the principle of socio-economic efficiency in the development of the three strategic options. This disagreement has also been reflected in the discussion on which measures to be included in the various strategic options. This applies in particular to measures aimed at achieving sustainable development and road safety.

Both the Railway Track Authority and the Road Authority have given formal written statements of their disagreement over the construction of the road safety and environment option. Some of our interviewees feel that the process rather should address problems, than focus on whether solutions are economically beneficial. The disagreement concerning goal interpretation continued throughout the work and was hardly beneficial for the planning process or for a smooth co-operation between the parties. In particular, the railway participants felt that their opinions and interests were disregarded underway.

### *The knowledge basis*

In parallel with the analyses of specific strategic areas, an extensive work on development of transport demand models linked to tools for impact analysis went ahead. The results of the two parallel activities should provide a strong professional knowledge basis for the development of the three strategic options. The model development was, however, not completed in time for active use in this respect.

A number of interviewees emphasise that the model development work diverted the focus from other planning approaches, which would have been more relevant for the strategic analysis. It is also a paradox that economic analyses related to investment projects were emphasised parallel to the analysis of maintenance need, which revealed serious shortcomings as to the professional basis for the conclusions related to the far more important package of maintenance measures.

### *Organisation of the planning process*

The work has been carried out in a short period of time compared to the high professional ambitions. Several of the analyses of strategic areas were completed only just before the completion of the final planning report, and most were carried out in parallel to the development of the strategic options. The development of the models was not completed before submitting of the final report. It is likely that more time would have made it easier to reach agreements on the various controversial matters. Beyond this, we do not see other *formal* organisational aspects causing serious problems for the planning process.

All parties involved perceive the process and the results as “owned “ by SIKa. SIKa has been the driving force in the process, has written the report and has partially assisted by the Ministry acted as a “referee” with respect to the various disagreements along the way.

SIK a and the national transport authorities seem to have chosen somewhat different approaches and roles in the process:

- The Civil Aviation Authority and the Sea Transport Authority have in several respects been on the sideline. Their ambition was to ensure the transport modes of their responsibility being correctly and sufficiently described. These two authorities find other decision-making arenas - as the local object planning process - more important. They ask whether their participation in the national planning process is too resource demanding in view of its usefulness.
- The Railway Track Authority holds a position of defence. It has seldom taken the initiative – as how the other participants look upon it. The Authority itself feels their point of views have not been taken into account. It has not been able to deliver all the contributions it was asked to make. The involvement of the leadership is low. They have had the largest problems with the way the strategic analysis has been designed and also with the transport models. They have not been able to make the other participants agree upon their alternative way of designing the analysis.

- The Road Authority has participated in a “bureaucratic correct” manner, delivering the contributions it was asked to do, having fewer conflicts with SIKA and with more involvement from the leadership, compared with the Railway Track Authority. Also the Road Authority has had some problems with respect to the design of the national strategic options – especially the Road Safety and Environment Alternative – but to a less extent than the Railway Track Authority. In addition, the Road Authority did expect the strategic analysis to be to their benefit compared with the Railway Track Authority.
- SIKA has been looking upon its own role as the one of scrutinising the policies and priorities of the transport authorities. Accordingly this role will be in conflict with the interests of the other participants.

### *Features of the institutional participants*

We are not able to explain in full the different ways of how the participants have acted. However, some features of the actors might help explaining their role interpretations:

- Different economic framework: The Civil Aviation Authority and the Sea Transport Authority are so called self-financed. Consequently their investment projects or other activities are not dependent on the strategic planning process. In this sense their interests are not at stake.
- Different competence: The Railway Track Authority and its employees are less experienced with this form of strategic planning. Their planning staff has had a high turnover while that of the Road Authority has been quite stable.
- Different organisation structure and culture: The Road Authority is a larger organisation and the whole organisation is more focused on planning than the Railway Track Authority’s. The Road Authority has a tradition of leadership involvement in national planning. This might have given the Road Authority more power in negotiations.
- Different views on their political surroundings. The Road Authority has an impression of their political surroundings as somewhat critical. In this respect the strategic analysis might have been looked upon as an appropriate arena to defend their core interests and area of responsibility. With this interpretation it is natural that the Road Authority have put emphasis to the strategic analysis. The Railway Track Authority seems to be more political comfortable with their political surroundings and over some years growing budgets. In this respect they may have looked upon the strategic analysis as less crucial for their interests.

## **The planning process at the regional level**

The responsibility for the planning process was given to the county authorities alone. The other participants looked upon themselves as contributors, emphasising a good relationship with the planners in charge. On the other hand, all the regional

participants stress their ownership of the process and its results. It is the Road Authority and the Railway Track Authority who have participated most actively in the process. The Civil Aviation Authority and the Sea Transport Authority have not been actively involved, but nevertheless, the planners have been preoccupied with the role of these transport modes in the planning process.

The regional process is described as a harmonious one without serious disputes. The local planning authorities have defined the goal of the Regional Development Alternative in a way that might have merged a joint goal approach and understanding of the regional transport challenges. The relatively generous financial planning frame of the two counties in question did not necessitate giving a strict priority to different measures. The planners have mostly done what they are used to do. Even though the goal of the Regional Development Alternative has changed since last time, the content of the plan has not changed substantially.