## Is het Europese transportbeleid succesvol?

De tussentijdse evaluatie van het Europese Witboek "European Transport Policy for 2010: Time to Decide"

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### Samenvatting

Is het Europese transportbeleid succesvol? De tussentijdse evaluatie van het Europese Witboek "European Transport Policy for 2010: Time to Decide"

Op 12 september 2001, is het witboek "European transport policy for 2010: time to decide" uitgekomen. Dit is een soort nota Mobiliteit op Europees niveau. De kern van het Witboek zijn voorstellen om de relatie tussen mobiliteitsgroei en economische groei te ontkoppelen, met name door de modal split te wijzigen ten gunste van rail en transport over water. In 2005 vindt er een tussentijdse evaluatie van de White Paper plaats waarbij gekeken wordt of de doelen nog haalbaar zijn. Dit paper beschrijft de doelen van de White Paper, de beoordelingsmethode die gebruikt wordt tijdens de tussentijdse evaluatie en het geeft enkele eerste resultaten. Tijdens de presentatie in november tijdens het CVS zullen alle resultaten van de studie gepresenteerd worden omdat dan de resultaten openbaar zijn.

#### Summary

Is the European transport policy successful? The mid-term evaluation of the White Paper "European Transport Policy for 2010: Time to Decide"

On 12 September 2001, the European Commission adopted a White Paper "European transport policy for 2010: time to decide". The backbone of the approach was to gradually break the link between transport growth and economic growth (decoupling), most importantly by changing the modal split in the long term. In 2005 the White Paper undergoes an overall assessment concerning the implementation of the measures it advocates and to check whether its targets - for example, on modal split or road safety - and objectives are being attained or whether adjustments are needed. This paper describes the objectives of the White Paper, the method applied during the mid-term assessment and outlines some first preliminary results. During the presentation in November the results will be presented, since by that time the results of the mid term assessment will be public.

# 1 Introduction

On 12 September 2001, the European Commission adopted a White Paper "European transport policy for 2010: time to decide" proposing a new programme for the development of the Common Transport Policy. The White Paper drew largely upon the conclusions of the European Councils of Lisbon and Gothenburg to guide its proposals.

Congestion, accidents and climate change were the main challenges the Commission's transport White Paper of 2001 tried to tackle. Congestion costs amount to more than 0.5% of GDP, CO<sub>2</sub> pollution adds to the warming of the atmosphere, while road accidents take away some 50.000 human lives every year in the EU25. The White Paper included a programme with more than 60 measures that at the time was largely endorsed by the Parliament, and backed by the Council for a significant number of measures.

The backbone of the approach was to gradually breaking the link between transport growth and economic growth (decoupling), principally in three ways: changing the modal split in the long term, clearing infrastructure bottlenecks and placing safety and quality at the heart of the transport policy.

In 2005 the White Paper is scheduled to undergo an overall assessment concerning the implementation of the measures it advocates and to check whether its targets - for example, on modal split or road safety - and objectives are being attained or whether adjustments are needed. This 2005 mid-term assessment will take account of the economic, social and environmental consequences of the proposed measures and their contribution to sustainable development objectives. It will also be based on a detailed analysis of those effects of enlargement likely to affect the structure and performance of the EU transport system.

TNO is partner in a consortium of companies that will provide technical support to the Commission services for the mid-term assessment of the White Paper by assessing the implementation and impacts of the TEN and other transport policy measures on European Transport. This ASSESS project started 28 December 2004 and will end 28 October 2005.

### Scope of the paper

Since the results of the study are not yet public at the time of the writing of this paper, this paper puts the focus on ambitions of the white paper, the possibilities to assess comprehensive strategic policy packages at the European level and the methodology applied during the midterm assessment. At the end some conclusions are drawn with regard to strategic sustainability assessments. During the CVS the presentation will focus on the results of the assessment, answering the question mentioned in the title of this paper. Is the EU transport policy successful?

## 2 The ambitions of the White Paper on Transport

The core of the White Paper consists of four chapters that each introduce one action priority of the Commission. The following four action priorities are distinguished. The first action priority aims to shift the balance between modes of transport. The White Paper argues that increasing success of road and air transport is resulting in ever worsening congestion, while, paradoxically, failure to exploit the full potential of rail and short-sea shipping is impeding the development of real alternatives to road haulage. This persisting situation is leading to an uneven distribution of traffic generating increasing congestion, particularly on the main trans-European corridors and in towns and cities. To solve this problem, the White Paper aims to firstly regulate competition between modes and secondly link the modes of transport. To achieve the general objective of shifting the balance between the modes of transport the Commission introduced a number of policy guidelines. These policy guidelines are in fact lower level objectives which incorporate a number of more concrete objectives (the guidelines are also phrased like an objective). The policy guidelines belonging to the first action priority are:

- 1 Improving quality in the road transport sector, mainly by securing social rights of workings in road haulage..
- 2 *Revitalizing the railways, mainly by opening up the rail markets*
- 3 Controlling the growth in air transport, mainly by reorganisation of Europe's sky
- 4 *Promoting transport by sea and inland waterway*, mainly by investing in safety and technical requirements.

# 5 *Turning intermodality into reality, mainly* by providing technical harmonisation and interoperability between systems

The second priority is eliminating bottlenecks at the European network. The White Paper argues that unless infrastructure is interconnected and free of bottlenecks, to allow the physical movement of goods and persons, the internal market and the territorial cohesion of the Union will not be fully realised. Therefore the White Paper aims to unblock the major routes, among others by mobilizing enough capital. The related policy guideline mentioned in the White Paper is:

• *Building the trans-European transport network, mainly by* removing the bottlenecks in the railway network, completing the routes identified as the priorities for absorbing the traffic flows generated by enlargement and improving access to outlying areas. Priority is given to freight and a high-speed network for passengers. The main obstacle to carrying out infrastructure projects, apart from technical or environmental considerations, remains the difficulty of mobilising capital. To overcome this problem, the White Paper argues that innovative methods of public-private funding must be applied.

The third action priority 3 aims at placing users at the heart of transport policy. The White Paper puts the emphasis on, what is argued to be the users' prime concern, road safety. Furthermore the paper mentions users' costs, user rights and obligations and clean (public) transport accessibility. The policy guidelines belonging to this action priority are:

- Improving road safety, mainly by applying stricter road safety measures.
- Adopting a policy on effective charging for transport, first and foremost in the freight sector.
- Recognising the rights and obligations of users,
- *Developing high quality urban transport.* Given the constraints of the principle of subsidiarity, the Commission intends essentially to encourage the exchange of good practice and taking regulatory initiatives to encourage the diversified energy in transport.

• *Putting research and technology at the service of clean, efficient transport.* Adoption of stricter standards for noise, safety and emissions. And secondly integrating intelligent systems in all modes to make for efficient infrastructure management.

The fourth action priority aims at managing the globalization of transport and is primarily focussed on reinforcing the position of the Community in international organisations in order to safeguard Europe's interests at world level. The White Paper puts emphasis on achieving independence in the field of satellite radio navigation (the Galileo project).

Table 1: Main goals of the White Paper on transport: time to decide

### Action priority 1: Shifting the balance between modes of transport

What: Breaking the link between the growth of car transport and economic growth: road haulage +35% instead of predicted 50%, passenger car transport +21% against a rise in GDP of 43% (p16). How: realising a modal shift from road and air to rail and water by providing fair competition between modes and link-up modes for successful intermodality.

Action priority 2: Eliminating bottlenecks

What: Creating the internal market and improving the territorial cohesion of the Union by allowing the physical movement of goods and persons.

How: by the provision of an cross-European infrastructure network that is interconnected and free of bottlenecks.

### Action priority 3: Placing users at the heart of transport policy

What: Reducing the (human) costs of traffic accident. Reducing the number of deaths on the road with 50%. (p19, 66/67) and internalisation of external costs (congestion, emissions) by gradually replacement of existing transport taxes with infrastructure charges and fuel taxes How: European safety program and European legislation on pricing measures.

### Action priority 4: Managing the globalization of transport

The European Commission aims to reinforce its role international organisations

The White Paper on transport also impacts on the more wider economic, social en environmental goals of the community. Some of these wider goals are explicitly mentioned in the White Paper such as Lisbon Strategy (2000), Gothenburg European Council (2001) and the Kyoto protocol (1997, ratification in 2002). The overall goal of the White Paper is therefore enabling the development of a sustainable transport system as defined by the European Union Council of Ministers of Transport, i.e. a transport system that "Allows the basic access and development needs of individuals, companies and society to be met safely and in a manner consistent with humans, and ecosystem health, and promotes equity within and between successive generations. Is affordable, operates fairly and efficiently, offers a choice of transport mode, and supports a competitive economy, as well as balanced regional development. Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes, while minimising the impact on the use of land and the generation of noise".

## 3 Strategic Sustainability Assessment methods

To assess whether current transport policy contributes to achieving this ambition of sustainable transport, rigorous and scientifically sound assessment methodologies are needed. There has been much advancement in the area of ex-ante and ex-post evaluation methods since the sustainability debate started in 1970s. Initially, the basic arguments in favour of infrastructure investments were economic (better infrastructure fosters the economy) and social (better infrastructure improves accessibility). Cost-Benefit Assessment (CBA) and Social Impact Assessment (SIA) methodologies were used. However, when the environmental awareness grew after the Brundlandt Report and the Rio Earth Summit, Environmental Impact Assessment techniques (EIA) were developed, to include for example emissions of  $NO_x$  and  $CO_2$ .

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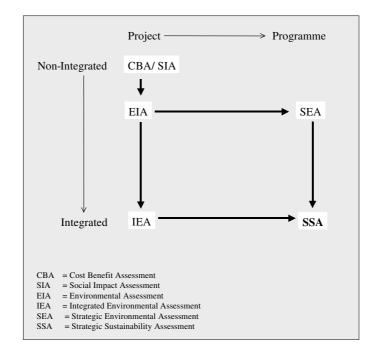


Figure 2: The development of transport impact assessment methodologies.

Starting from these EIAs, two major innovations have been made the last decade. Firstly, environmental assessment methods were developed which were able to evaluate compete policy packages (SEAs) since many environmental issues need to be tackled on higher decision-making levels than the project level. Secondly, it was tried to integrate environmental assessments with the more traditional economic and social assessment methods since decisions are not based on environmental issues only. Such an Integrated Environmental Assessment (IEA) has been developed for the project level, but recently there have been demands for closer integration of strategic environmental assessment methodologies like SEA with strategic economic and social assessments methodologies. An appropriate working title for this new assessment approach seems to be Strategic Sustainability Analysis (SSA), which stems from the OECD/ECMT conference on SEA in Warsaw 1999. The emphasis of SSA is on comprehensive transport policies, assessing policies simultaneously in order to detect possible interdependencies and cumulative impacts, handling the three basic aspects of sustainability equally (economic, social and environmental) equally.

# 4 The applied method

The assessment of the White Paper is a three-step exercise, involving:

- verification of the assumptions of the original White Paper;
- validation of its objectives;
- validation of the measures (the method) proposed in it.

This study supports the Commission in the assessment of:

- which measures have proven successful to what extent on the interim time horizon 2005,
- what their expected impact will be for the final time horizon 2010,
- what adaptations could be applied in order to ensure or speed-up the achievement of the objectives, or, if impossible, to minimize the non-attainment.

The approach chosen is based on the Strategic Sustainability Assessment method, assessing policies simultaneously in order to detect possible interdependencies and cumulative impacts, handling the three basic aspects of sustainability (economic, social and environmental) equally. It is chosen to work with policy scenarios, since it is needed to assess the expected impact in 2010. Based on the first qualitative assessment of the implementation of the White Paper four packages of measures are constructed.

- The **reference scenario** assumes that none of the White Paper measures have been implemented, neither at the European level nor in the member states.
- The full implementation scenario is directly derived from the White Paper.
- The **partial implementation scenario** includes all follow-up activities already implemented or planned by the EC or by member states. The partial scenario is therefore derived from the policy review summary.
- The recommended scenario is an enhanced version of the partial implementation scenario. It includes, besides all measures implemented or planned now, a number of measures which are 1) crucial to achieve the objectives of the White Paper and/or which 2) can be implemented in the short term due to existing agreements among stakeholders or due to existing implementation-instruments available to the Commission (and taking into account time to impact).

The impact of each scenario on the transport sector and on the objectives of the White Paper is estimated, largely by means of forecasting models. The following models are used:

- SCENES, a network transport forecast model
- TREMOVE, a transport and environmental model
- A road safety model
- A noise model (URBIS)
- A logistics modelling tool
- CGEurope, a regional economic model

The SCENES-TREMOVE models are linked. TREMOVE uses the transport volume from SCENES, and breaks to down to further detail on e.g. costs (vehicle costs). The other models will use both our output as is, which will mainly be the Access database for TREMOVE which includes the complete demand module volumes and costs, and in some cases network data from Scenes (speeds and volumes for noise and safety assessment, maybe others). The model scope is mostly EU25, except where mentioned elsewhere. Model years are usually 2000, 2005, 2010 and 2020, again except where this is not possible within the scope of the model.

# 5 Discussion

At the time of writing this paper the results of the mid term evaluation were not ready. Some first outline of the results can however already be given, taken into account the preliminary nature of it.

It seems that the advancement of the implementation activities at the level of the EC is high. The impact of European policy initiatives on the transport system in the member states should not be underestimated. In the period 2001-2005 about sixty-five directives, regulations and decisions have been adopted by the European institutions and twenty-seven proposals of the Commission are still pending. In most of these directives it is included that member states have to change their national legislation accordingly.

At the same time, it can be concluded that the advancement of the implementation of European policies at the member state level is lacking behind. Partly, this is expected. Legislation first needs to pass the European institutions and than member states usually have 2 to 3 years before they have to adopt it in their national legislation. However, partly it is also the result of reservations at the member states. Furthermore, it seems that transport market changes slowly, even when the appropriate legislation is approved and adopted. Companies have difficulties to develop and produce new services that are in line with the new legislation or make use of new technologies.

Nevertheless, there are signs that recent developments of the transport system are in conformance with the White Paper objectives, indicating some success of the White Paper policies. Most importantly, in the freight transport sector it seems that the decline in rail transport has come to an end and the growth of road haulage is slower than the GDP growth.

Some policies within the white paper policy package appear to be conflict with each other. For example the liberalization of the air services has produced better transport services but at the same time, it has generated the low-cost companies phenomenon, strengthening the position of air transport in relation to rail transport. This reduces the market changes of high speed rails, an other top priority of European transport policy.

The biggest failure in implementation of the White Paper proposals seems to be the failure to implement appropriate Social Marginal Cost Pricing for all transport modes, in order also to deal efficiently with the environmental issues. Although the White Paper proposed only soft measures such as the development of a harmonised pricing framework, the ambitious objectives of the white paper can only be reached when pricing is implemented.

It is already clear that evaluation of comprehensive policy packages like proposed by the White Paper is hampered due to the incompleteness of the modelling tool box at the European level and due to the inadequate linkages between existing models. Therefore the DGTREN commissioned a research project to improve the indicators and tools to assess European transport policy. This so-called REFIT project will develop a Strategic Sustainability Assessment method and will produce the required toolbox that enables application of the method at the European level. The main efforts will be directed at developing modelling tools that can assess the impacts of transport policy on employment, quality of life (noise, air pollution, safety) and social equity. REFIT will start approximately in November 2005 and take 2.5 year. One of the tools that could be of help to fulfil a more integrative policy analysis is TRANS-TOOLS (see website www.tno.inro.nl/TRANS-TOOLS), which foresees in

combining different existing models, so as to broaden the policy domain that can be modelled (i.e. congestion, economic feedback from infrastructure investment, revenue use from SMCP policy). TNO is consortium leader of both the REFIT and the TRANSTOOLS project.