discussion paper

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The Incorporation of the Environmental Dimension into the Transport Policies in the EU - Short Version of the EU-Study

EURES discussion paper dp-50
ISSN 0938-1805

1996

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This discussion paper was written within the framework of the research project "The Incorporation of the Environmental Dimension into Freight Transport Policies. A comparision of six countries and the EU". It was carried out by the EURES-Institute for regional studies in Europe (Freiburg/ Germany), by CE (Centre for Energy Conservation, Delft/ Netherlands), AKF (Institute of Local Government Studies, Kopenhagen/ Denmark), IEEP (Institute for European Environmental Policy, London/ UK), SRS (Studio Ricerche Sociali, Firenze/ Italy), INFRAS (Zürich/ Switzerland). The project was coordinated by the EURES-Institute.

The project was sponsored by the research programme "SEERS" of the Commission of the European Union (GD XII, Brussels), by the Swiss, German, Dutch and Danish governments and the Tuskany Region.

This paper is the Summary of the EU-study of the above mentioned project. It is a revised paper that was first presented to the Workshop "New Nordic Member States and the Impact on EU Environmental Policy" in Sandbjerg, 6-8 April 1995.

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Content

List of Tables

1 Introduction

This paper is a summary of the EU-Study, whithin a wider research project entitled “The incorporation of the environmental dimension into freight transport policies“. This is a comparative policy analysis of six countries and the EU. The fundamental objectives of the project are to analyze the dynamics and to identify success factors and barriers to the integration of the environmental dimension. Findings of the EU case study are presented, as well as recommendations for future strategies.

Integration is the process of reconciling and mutually-adjusting the objectives of any policy (in this instance, transport and environmental policies). It implies procedures for coordination and consultation, evaluation methods, and political decisions on priorities. Its objective is to achieve compatibility between environmental and sectoral targets (OECD 1991p: 5).

Technical standards for vehicles are sometimes considered to be part of incorporation - and they are important to protect the environment. Yet the focus of this study is on transport policy changes due to environmental considerations.

Many analysts argue that the improvement of technical standards may not be sufficient to reconcile economic and environmental objectives in the transport sector and in other sectors (i.e., Samaras 1994 for the EU; Hailbronner 1993; Höpfner u.a. 1992; Hopf u.a. 1994).[1] Therefore, the focus of this analysis is set on the wider aspects of transport policy changes.

In the context of this paper, integration affects the traditional hierarchy of objectives. Traditionally, the transport sector has played a subordinate role to economic goals (Hopf et al. 1994; Weber 1958: 354; OECD 1991p: 8). Likewise, environmental objectives are subordinate to the objectives of the transport sector. Many trade-offs and synergies exist among environmental objectives and traditional economic targets. This paper focuses on how and to what degree the EU attempts to resolve conflicts and identify synergies between transport and environment objectives. Similarly, it traces some historical, economic, and political pre-conditions that mark this transistion from the dominant paradigm

[1] The OECD environmental ministers (1991p: 3) argue: "Conventional" environmental policy instruments" ... "are totally insufficient ot arrest and reverse adverse environemntal trends".

towards the process of integration. Lastly, it provides a preliminary analysis on how the new New Nordic members may impact transport policies.

2 EURES

2 Methodology

The methodology of this research project attempts to identify, analyze, and evaluate integration based on eight variables and three types of criteria. Focus of the study is to evaluate the “effectiveness” of the environmental changes in the transport sector and to identify opportunities and constraints for the integration of the environmental dimension in the EU.

Integration has been measured by eight subjects. They are:

1 legal requirements

2 organization

3 procedures

4 targets (strategic)

5 targets (quantitative)

6 infrastructure policies

7 taxation

8 competition, deregulation, and privatization

Three criteria of integration are described and analyzed in this project. They are:

- depth of integration,
- vertical comprehensiveness,
- horizontal comprehensiveness.

The first evaluation criterion, which is known as **depth of integration**, identifies main political levels, and distinguishes whether integration belongs to either transport or to environment strategies. According to existing stage models of transport, politics can differentiate among four major categories.

The "business-as-usual-strategy" is characterized by the traditional economic rationale that prevails in current transport policies. Major modifications of the traditional road-biased and growth-oriented strategies do not appear to be of high priority for decision-makers. Policy-makers may be hesitant to change the status quo. Taking political risks to change existing trends is unlikely since they rely upon positive environmental side-effects of traditional policies. It is assumed by some

that anti-congestion policies reduce pollution, or that liberalization reduces freight being transported with empty loads in one or both directions.

An additive and capacity-oriented strategy accepts that there is a need for policy-driven changes in past market trends. Its strategic rationale is that existing trends of road transport growth meet both economic and environmental constraints. It combines the overlapping fields of strategic interest - adapting to transport growth - but at lower environmental costs than previously. It is more efficient and redistributes transport growth to all modes. A capacity-oriented strategy is a conflict avoiding strategy. Its instruments are directed to strengthen environmentally-friendly modes without discriminating against the others.

A policy directed towards structural change should set priorities for the environmental rationale while respecting the needs of growing transport demand. This policy not only tries to change the composition of transport demand growth, but it also attempts to shift transport demand. Thus, the same instruments may be applied as in the previous strategy, however the intensity would be much stronger. The strategy would imply more conflicts since the market share of the dominant road transport would be reduced. This would imply losers and winners.

Finally, a demand-side oriented strategy follows the new economic philosophy of sustainability. It tries to promote environmentally-friendlier modes of transport, as well as a transport-efficient economy, which, in turn, decouples economic growth from transport growth. The demand-side oriented approach assumes that technical and modal oriented strategies may be appropriate, yet not sufficient enough to meet sustainability criteria.

A second criterion evaluates the comprehensiveness of integration. This may have either a vertical or a horizontal dimension. The criterion of **vertical comprehensiveness** looks at how far a policy has been developed. For instance, many policies do not reach beyond the initiation phase, or remain in the beginning stages. This includes formulating principles, holding meetings, and then creating White Papers or action programmes. Integration is seen as being vertically comprehensive when such principles and ideas are actually implemented and/or re-evaluated.

In contrast, **horizontal comprehensiveness** relates to the policy fields that are inquired. Integration is considered horizontally comprehensive when all policy fields are re-evaluated according to environmental criteria. This study will discover a structure where integration can be stronger in some policy fields than in others. Moreover, it will discover a typical profile of integration that gives some indications where integration is most likely to achieve or fail.

Finally, this research project examines the structure of **types of integration**. This study defines three types of integration - active, defensive, and indirect. This profile provides information on the types of integration which have the best chances, and the type which encounters the most problems.

First, **defensive integration** evaluates and/or modifies transport policies initiated by policy-makers who typically follow the current rationale in economic and transport policies. Transport policies are checked for their environmental risks, and measures are developed to limit possible negative side-effects.

Secondly, a special type of unplanned integration is known as **"indirect integration".** It infers that there are motives for modifications and rationale which are not environmental, but may have a positive impact on the environment.

The third type is **active integration**, which starts with specifically-defined environmental targets and objectives. At this time, these environmental objectives are so ambitious that it would be difficult to implement by technical measures alone. They require modifications in the organizational structure, as well as the composition and growth rates of transport. Active integration is a planned top-down process, which defines a set of policies and instruments for the achievement of environmental targets.

The line of arguments

The principal finding of this analysis is that the dominant strategy of the EU has gradually become "capacity-oriented" since 1990, and that more far-reaching attempts have met considerable resistance in the early phases. There has been a considerable delay between the dynamics of the emerging Common Transport Policies and the delayed dynamics of common policy initiatives towards integration. This explains why "indirect integration" - the politics of positive, sometimes even unintended side-effects of other policies - is still the dominant form of integration. Meanwhile, both defensive and active integration are still in their initial stages mainly because member states cannot reach consensus for sustainable development. Clearly, this cannot be overcome by institutional reform alone.

The new European level playing field creates a new dilemma: (environmental) problem-solving capacity at the European level does not increase as quickly as the national capacity decreases (Scharpf 1994: 131). Some different options found in this study to overcome this dilemma are: the strict application of subsidiarity to transport policies; the strengthened formation of community-wide networks of the environmental administration in member states; the regional cooperation of the countries interested in improving integration of the environmental dimension; and the wider application of the territoriality principle in transport policies.

Next, this argument will be developed in following chapters. The third chapter provides a short overview on the EU’s emerging role in transport policies. The fourth chapter reviews some EU strategic documents, and identifies the official definitions of integration. The fifth chapter analyzes past and future policies. The

sixth chapter examines some of the most important variables explaining the gap between philosophy and action. The potential impact of the new Nordic members will be evaluated in Chapter 7. The final chapter provides some conclusions and recommendations.

3 The Emerging Role of the EU in Transport Policies

Transport policy is part of the Treaty of Rome (1957). Nevertheless little progress could be made for decades (Erdmenger 1981; Mc Kay 1987). During the 1980's, a Common Transport Policy emerged rapidly. This can only be understood in the framework of a wider strategic setting of transport policies for European integration. Transport is a strategic, yet subordinate element of European integration.

From 1985 to 1994, European integration made tremendous progress. The dynamics of the Common Transport Policies (CTP) may be seen as a "spill-over effect" from progress of European integration. Many of the “package-deals” that took place to promote European integration had a major impact on transport policies. Some examples are:

- a spill-over effect from the internal market programme to the liberalization of the transport markets and the Trans-European infrastructure networks. The nationally-regulated transport sector was liberalized to complete the internal market, and a Trans-European transport infrastructure network became a pre-requisite for the functioning of the internal market.
- the first package deal between the peripheral and the central regions in 1987 to compensate for the negative economic impact of the internal market by increased financial assistance to the peripheral regions. The improvement of the transport infrastructure was a strategic element to improve competitiveness of the peripheral regions;
- a second package-deal (1992/1993) between similar actors on the European Monetary System, whereas additional funds were mobilized to compensate for or to prevent economic disadvantages for the peripheral countries by the system of fixed currencies and the strict stabilization criteria.

Due to these three factors, the EU achieved legitimacy with setting infrastructure, taxation, and deregulation policies. They explain furthermore the subordination of transport policies under the wider objectives of European integration.

4 Policy Thinking and Targets

Incorporation in the EU has several points of reference. It is a requirement of the European Treaty since 1987. Furthermore, a number of documents discuss the relevance of incorporation in general since the early 1970's. In 1992 a strategic paper that focused on transport and the environment was published by the Commission. These strategic papers documented a strategic policy shift since the late-1980's toward a new approach: (1) from end-of-pipe orientation towards structural change; and (2) from a command-and-control approach towards an incentive and market-oriented regulatory approach (Jachtenfuchs u.a. 1993; Wynne 1993; Hey 1994b).

Incorporation is required in Article 130r (2), which states: "Environmental protection requirements must be integrated into the definition and implementation of other Community Policies." This means that the environmental dimension must be integrated throughout the life cycle of every Community policy - from the definition of targets and instruments in the early stages of policy formulation to implementation. Interpretations of this controversial article have been discussed throughout the literature.[2] In summarizing this debate, one can conclude that the minimum requirement - which is stated in the treaty - is defensive incorporation. It requires procedures for Strategic Environmental Impact Assessments (SEIA) to be developed, as well as consultation-mechanisms between the Directorate General XI (Environment) and other directorates. Article 130r (2), however, lacks preciseness on the definition of "environmental requirements," and how priorities are actually set. This depends upon political decisions. Compared to the multi-dimensional and well-defined set of objectives for transport policies, the legal requirements for incorporation are seen as weak - even though some type of action for evaluation is required by Art. 130r.

[2] These different interpretations are:

- a strong interpretation saying that this requirement is "singular" in the Treaty, and therefore gives high priority to environmental objectives (i.e., Breier/Jahns-Böhm 1992; Hailbronner 1989; Scheuing 1989; Grabitz/Zacker 1989),
- a more cautious interpretation - referring to the lack of preciseness of the Art. 130r, especially concerning the way in which priorities should be set (Rengeling 1990; Kersten/Körte 1991; Hailbronner 1993; Krämer 1993),
- and a very cautious interpretation (Krämer 1989 and 1991) argues that the requirement does not reach beyond existing environmental legislation.

Incorporation also was first mentioned since the First and Second Environmental Action Programmes of the EC (Baldock u.a. 1992). From the beginning it has been an essential element of a preventive environmental policy approach.

In the course of the past 20 years, the concept of "incorporation" has become more ambitious. Moreover, objectives and arguments for incorporation have become more clearly defined.[3]

Earlier concepts have only looked for consistency between environmental legislation and economic targets. The latest concepts now try to reconcile the requirements of sustainability with traditional economic values. This is considerably different than in the past when legislation only provided small incentives for incorporation. Hence, sustainability cannot be achieved without significant transport policy changes. The basic philosophy of incorporation can be described as a process to reconcile economic and environmental objectives. At the same time, instruments for incorporation have shifted from evaluation to control. Consequently, it has moved from defensive incorporation to active incorporation with a broad set of instruments. This may been seen both in terms of procedures and of policies. The concept of "incorporation" in the most recent Commission documents assumes a wide potential for harmony between sustainability objectives and traditional economic objectives.

As to transport and the environment the Commission has formulated its targets in the White Paper on the "Future of the Common Transport Policy" (EG-Kommission 1992m) and a more recent Action Programme (EG-Kommission 1995g).

The White Paper contends that transport policies should promote a more efficient transport system by liberalization and more competition between the modes. This implies that non-discriminatory taxation and subvention practices will exist. It emphasizes the need to extend infrastructure capacities to meet growing transport demand. New infrastructures and the better use of the existing ones are the two elements of this capacity-oriented strategy. Furthermore, the Common Transport Policy should principally promote economic integration of the EU, especially to improve the functioning of the internal market. The environmental dimension of future road transport growth is perceived as an important constraint for transport, but not as an objective in itself (Bail 1993).

The "White Paper" (EG-Kommission 1992m) negates trade-offs between economic and environmental targets. It fundamentally relies upon the positive side-effects of the traditional transport policies. Economic efficiency of the transport system promoted by liberalization and infrastructure policies will have

[3] A number of documents, such as the five environmental action programmes, the Task Force Report on the Internal Market and the Environment, Green and White Papers on Transport and the Environment, and a recent publication on "Economic growth and the Environment" (EG-Kommission 1994c, Com (94) 465:9) are milestones in the process of a definition of incorporation.

positive environmental side-effects (EG-Kommission 1992m: 62). The overuse of existing road infrastructure capacities and the underuse of other infrastructures leads to environmental damage (p. 35). As mentioned in the White Paper, the market-oriented regulatory framework may lead to an adjustment of over- and under capacities to demand and vice versa.

The need to internalize external costs from freight transport and Strategic Environmental Impact Assessments for the Transeuropean Networks were the most important single instruments for incorporation, mentioned in the White Paper. But unlike the previous documents, the White Paper does not define any priorities in favour of the environmentally-friendly modes. It emphasizes the need to expand infrastructures and to increase infrastructure investments (p. 56). The only approach, which has positive side-effects for the more environmentally friendly land-modes is the promotion of intermodal cooperation and compatibility. Since the Commission only plays the role as a coordinator to guarantee the compatibility and interoperability of the national plans (p. 55f), it is reluctant to formulate substantial criteria for priorities.

The more recent Transport Policy Action Programme (EU Kommission 1995g) is more explicit on the need, to strengthen the role of the environmentally friendly modes. In this sense it proposes a strategy which has some elements of “structural change orientation”.

Nevertheless the general strategy, as discussed at the EU level, can be best qualified as congestion, or capacity-oriented. Its basic rationale is to ensure the conditions for efficient transport growth by the investment into new infrastructures, and incentives for the better use of existing infrastructure capacities.

5 The respect of the Environmental Dimension in Practice

This study found that in terms of eight subjects, incorporation was evaluated according to varying levels.

On the level of **“targets”** one can observe an “capacity-oriented” approach. Legal requirements - both in the framework of primary and secondary law - create few incentives for incorporation. The primary law does not define environmental requirements” or precedures, on how environmental and other objectives may be accomodated. Nevertheless it has been an important point of reference of a number of strategic policy documents further elaborating the idea of incorporation. In the EU context incorporation is defined as an efficiency oriented systematic search for the synergies between policy objectives. The environmental impact assessment directive does not define substantial safeguards or criteria, it relies on the "soft instrument" of "informed decisions. The habitat directive has formulated the relatively strictest substantial criteria for nature protection. Yet nature protection goals may be subordinated to prioritarian public interest. A project belonging to the TEN´s is justified by such a prioritarian interest. In total, legal requirements are low to middle.

The **strategic targets** of the Common transport policies, as documented in the White Paper, can be best described as "capacity oriented" - especially referring to the role of road pricing and taxation to reduce congestion and pollution. The overall strategic target is the improvement of the efficiency of the transport system and transport networks and operations. This means an overall increase of transport capacities to satisfy increasing transport demand. Between 1989 and 1992, an intensive strategic debate took place within the Commission, which started with relatively high aspirations towards "structural change" and ended up with a "capacity-orientation”. A policy shift towards “structural change” can be observed in a number of strategic policy documents published in 1995.

The EU has no specific, **quantitative environmental targets** for the transport sector. It has some general targets, which have some relevance for the transport-sector. From these, the CO_2-stabilization target is a major challenge for the incorporation of the environmental dimension into the transport sector, since it cannot be achieved by technical means alone.

Lastly, the three **transport policies** in general have a very low profile of incorporation.

Infrastructure policies are in general growth oriented. One can identify two major priorities of the EU: the development of High Speed Links between the major centres of the Community and investments in motorways for peripheral regions. Over 70% of the investments identified by the Christophersen Group as priority projects for the TEN in Essen in 1994 are directed towards High Speed Trains (HST). Although the development of a Transeuropean HST-net may have relative environmental benefits compared to a trend scenario, its main rationale is economic: to develop a new expanding market, based on productive and sophisticated new technologies. Motorways play a major role of the financial instruments of the Community, such as Cohesion Fund, Regional Funds and the credits of the European Investment Bank (EIB), which have a share up to 70%. CT (as the intermodal transport mode) and traditional railways play a minor role compared to the overall investments planned. The environmental potential of coastal shipping and port infrastructures has been discovered relatively late in 1995. Intermodality and Interoperability have become key words for the network philosophy of the Commission, however investment shares directed towards interfaces, nodes, and technologies are relatively low. There are strong activities towards technical harmonization of the nationally fragmented railway technology in the EU.

The basic rationale of the TENS is the improvement and acceleration of communication and trade by the reduction of spatial resistance. The promotion of CT is one of the few, but comparatively weak tools for active incorporation.

Also, "defensive" incorporation has not been developed yet. The respect of EU legislation (EIA and Habitatdirectives) is the only precisely defined safeguard, which is still not fully respected everywhere. The “environmental dimension” is mentioned in all activities, but in a very vague form. This must be interpreted as a tool, to calm down environmental concerns, while providing as much freedom as possible to the infrastructure policy networks. The vagueness of environmental safeguards minimizes outside interference and the need for coordination.

While the Community became an important player in infrastructure policies since the late eighties, incorporation is still in its initial stages. The Commission has promised to do a SEIA for the TEN´s as a whole and some corridors, which might start in 1996. There is a considerable time-lag between the dynamics of European transport infrastructure planning and the methodological and legislative development of incorporation. Due to the fragmented character of European infrastructure policies they even lack a clear aggregated reporting system on all infrastructure investment budgets of the European Union.

The actual profile of incorporation is also low in the field of **taxation.**

Since 1987 the idea to use environmental taxes in the transport sector to counterbalance the negative environmental impact of the liberalization of freight transport has been on the agenda of the Commission. The internalization of

external costs and of infrastructure costs have became a key instrument both for "active incorporation", which means achieving environmental targets, and for "defensive incorporation", or counterbalancing the negative impact of other policies. The Commission has proven its serious commitment for “fair and efficient” pricing with a “Green Paper” in 1995 and the announcement of a tax proposal in 1996.

Nevertheless a first round of decisions on taxation in 1992 and 1993 ignored the environmental dimension. The harmonization of diesel and vehicle taxation, which took place in 1992 and 1993, was a harmonization at a low common denominator. The tax compromises established a complex system of minimum and maximum harmonization for different taxes at a low level, which were exceeded by many member states.

The liberalization of the transport sector is required by the treaty. The environmental dimension was widely ignored in the case of road freight liberalization. The protagonists relied on positive environmental side-effects within the road sector, whose relevance is controversially discussed in literature.

Green taxation and subventions were instruments discussed to compensate for the negative environmental impact of liberalization to other modes. This was especially the case in the Communications of the Commission on Combined Transport, where it shared the railways companies’ arguments on distorted terms of competition between different modes (see: Com 92/230). The relationship between environment and liberalization can best be described as a form of "assymetric negative coordination". Environmental considerations should not modify the superior objective to complete the internal market for transport services. Compensatory activities, if necessary should be delegated to other policies, such as taxation or subsidies.

5.1 “Subsidiarity,” or European Integration without environmental incorporation?

There is some evidence that the dynamics of European integration creates the dilemma that the (environmental) problem-solving capacity at the European level does not increase as quickly as the national level capacity decreases (Scharpf 1994: 131).

In the case of infrastructure policies, there is a discrepancy between the dynamics that the Commission tries to assume a strategic role in financing, coordinating, managing, and initiating European transport-infrastructure policies, and the retarded European integration of an environmental strategy for the transport sector. According to interpretations within the Transport Directorate General, the

incorporation of the environmental dimension follows subsidiarity, and is a national responsibility. While effective European coordination mechanisms between infrastructure planners could be built up, environmental authorities still work within a national framework. The level of strategic decisions for infrastructure planning and the level for incorporation do not coincide - which puts the environmentalists' objectives and environmental criteria at a disadvantage.

In the case of taxation, the gradual development of the territoriality principle provides some scope for different levels of taxation and a certain degree of autonomy. The taxation compromises of 1992 and 1993, however, set formal and indirect limits to autonomous tax increases. Diesel harmonization is minimum harmonization. For example, since truckers are allowed to fill up to 200 liters while driving in any given foreign country, limits to strong differences in a mobile and competitive market are set. In the case of vehicle taxation, no maximum limits are set; however, national hauliers will lose competitiveness if national taxation becomes too high. The only tax where a non-discriminatory territorial principle may be applied is the road-user charge, where the Council has defined a maximum limit.

In the case of deregulation of international freight transport, competencies were shifted to the European level without providing for an adequate, non-discriminatory playing field for all modes in the EU.

5.2 Lack of Synchronization

Since most activities leading towards incorporation appear to be in their initial stages, they are in the "estimation phase," which leads to a lack of synchronization between polluting and protecting activities. Major transport-related activities have been prepared since the mid-1980's and decisions were made during the early 1990's; yet incorporation remains in its initial, or estimation phase. The internalization of external costs was mentioned since 1987 in official documents, however, a methodological work to calculate them has only started in 1994. Works on Strategic Environmental Impact Assessment (SEIA) for the Trans-European Networks have started in 1992. Further studies on methodological questions were commissioned in August and November 1994. The Commission started brainstorming with experts on transport demand-side management in 1994, leading to further studies on transport-efficiency and transport chain-analysis for companies, as well as on induced traffic by new infrastructures.

A political output from these initiatives cannot be expected until the late-1990's, years after the completion of the internal market for freight transport and after a number of infrastructure projects have been built.

5.3 Indirect Incorporation as the dominant type of Incorporation

As to the type of incorporation, one can observe that "indirect" and "active" incorporation are more relevant than "defensive" incorporation. A strong system for defensive incorporation, however, has not been established by the EU. For example, there are no environmental reporting and accounting systems which systematically evaluate the environmental impact of other policies. Furthermore, there are only a few legislative or informal safeguards that have been established, such as the Habitat Directive. Most documents of the Commission mention the environmental dimension, yet without formulating specific objectives. The environmental framework for transport policies (especially infrastructure policies) is open, voluntary, flexible and indicative, rather than binding and prescriptive.

"Indirect incorporation" is the most frequent form of incorporation that has been observed. It is often argued, that the development of the High-Speed Train Network or liberalization have a positive environmenal balance sheet, compared to a trend scenario. But - even if one can doubt if such arguments tell the full story - such positive impacts are just side effects of other considerations.

6 Major factors explaining Integration

This research project observed that integration is rather high in the field of decision-making styles (organization and procedures). It is lower, but still relevant in the field targets (legal requirements, and both strategic and quantitative), and it is weak in the field of policies (taxation, infrastructure, and deregulation). One fundamental explanation for this difference is policies in the EU take place in different arenas, which offer different opportunities to the incorporation of the environmental dimension. Policy initiation is led by the supranational institutions, especially the Commission, whereas decision-making is led by national governments. Policy initiation is rather problem-oriented, whereas decision-making is interest-led and characterized by bargaining (Héritier u.a. 1994). The characteristics of these two arenas and their impact on integration will be explained below.

6.1 Decision-making Styles and Targets - The Supranational World

The relatively high profile of integration in the field of decision-making styles and targets may be explained by three specific factors:

- the Commission services' strong problem perception;
- its privilege to initiate policies; and
- relatively open and pluralistic policy network characteristics in some subpolicies.

Decision-making styles and targets are restricted by "cautious anticipation," which is characteristic of the Commission's policy approach. This may explain the "cautious leadership" towards the integration into the transport sector. However, leadership relies on consensus-oriented instruments, such as discussion papers, communications, and policy plans. The symbolic use of policies (in its ambivalent sense: Prittwitz u.a. 1992; Edelman 1976) is therefore, a typical characteristic of EU policies in general, and integration specifically.

6.1.1 Perceptions of the Commission and the European Parliament (EP)

As discussed above, “integration” has had a tradition in the policy-thinking of the Commission since the beginning of environmental policies in the EC. The Commission started to initiate a more integrated and structurally-oriented environmental policy approach following the final approval of technically-oriented measures in 1989. Some authors have perceived a "paradigmatic change" of fundamental perceptions towards a broader definition of "economic efficiency" (i.e., Jachtenfuchs u.a. 1993). A new regulatory approach, which is based upon market-oriented instruments toward efficient resource use, was first tested in the areas of climate protection and energy conservation. Evaluation of corresponding measures in the transport sector are still under way.

According to KRONSELL (1995), this paradigmatic change took place under favourable external and internal conditions. She notes that different developments occurred at this time, such as heightening public expectations for environmental protection, growing criticism of the internal market because of its environmental impact, the globalization of environmental threats, and changes of the dominant regulatory philosophies (Kronsell 1995). Furthermore, the pending crisis of the transport sector coincided during the discussion on the need for a new sectoral environmental policy approach (i.e., the Task Force Report 1989, or the State of the Environment Report 1992). Long-term scenarios and prospective reports (i.e., Gruppe Transport 2000, Cellule de Prospective 1990) also alerted the Commission to the economic risk of continued road transport growth. In the early-1990s, there was a strong feeling that these trends should be changed, which was documented in the Green Paper on Transport and Environment (1992).

The European Parliament (EP) holds positions which are oriented towards structural change and demand-side management. Traditionally, the EP has a minority friendly, relatively pro-environmental, and pro-integration role among the EU institutions. This relatively “progressive” position may be explained by the weak power of the EP in the EU’s institutional system. Therefore, the EP could play a progressive role without affecting national or private interests. This could change if the EP becomes a powerful player in the institutional system.

6.1.2 The privilege to initiate policies

The EU Commission is not a traditional administration with basic executive functions. Its central role is to initiate policies. One of the privileges of the Commission is its "monopoly to initiate policies". This right is referred to the Commission in the treaty (Art. 155, 3), although in practice the Commission frequently reacts on national request (Schmitt von Sydow 1980: 187ff; Ludlow 1991: 103). The original intention of this fundamental right is to have a strong institution promoting European integration (Kösters 1994: 73). The Commission

is supposed to play a "proactive" role, and function as the producer of new ideas, strategies, and programmes (Ludlow 1991: 97).

The overall role of the Commission may explain its "capacities for strategic foresightedness." Strategic policy-thinking, therefore, is one of the Commission's strengths. Thus, long-term and global environmental impacts, as well as the politically-destabilizing potential of an internal market without a strong environmental component, were perceived soon. The tradition for "integrated policies" is closely related to this strategic policy orientation of many Commission services. However, the Commission has weak capacities for implementation and control (compare: Grote 1990: 238).

Compared to administrations at the national level, the Commission has stronger legislative functions and weaker executive functions. Compared to an international organization, the "supranational character" as an autonomous corporate actor is most striking (Gehring 1994; Héritier 1994: 177). The EP has traditionally played a similar role. Furthermore, both institutions the EP and the Commission are relatively open to "new actors," such as environmental groups. They are responsive to new trends in member states. This may explain the advanced level of strategic thinking, which was observed in previous chapters. It also explains why the official political debate in Brussels is normally more progressive than the political output.

6.1.3 The Commission as marketplace for innovative ideas

HERITIER (1994) introduced the concept of "regulatory competition" to explain the dynamics of environmental policies in the EU. According to this concept, national administrations tend to export their experiences to the European level for two reasons: first, they seek to avoid national adjustment costs from imported EU legislation; and second, they try to avoid disadvantages for their national industries. The Commission supports such policy initiatives.

As such, the Commission becomes a marketplace, as well as a forum for innovations at the national levels. Because of the heterogeneity of twelve (since 1995: fifteen) national backgrounds, various arguments and ideas represent a broad spectrum of opinions and positions (Mazey/Richardson 1993: 22). For example, "integration" is a policy concept deeply-rooted in Dutch and Danish environmental policies, and also finds some support in the United Kingdom (Janse u.a. 1995; Togeby 1995; Fergusson 1995).

In this sense, the Commission often assumes a leadership role for other countries. Innovative ideas may infiltrate into the Commission, who is actively diffusing policy innovations to other member states.

6.1.4 Interest Groups and Policy Networks

At the EU level, a pluralistic system of lobbying groups has emerged that represents different perceptions of integration. Several environmental organizations have asked for integration at a high level. There are strong intermediate positions. For instance, the railways, the shipping, and umbrella organizations for Combined Transport represent intermediate positions in favour of environmentally-friendly modes. In contrast, the European Roundtable of Industrialists (ERT) formulates intermediate positions in favour of an efficient and capacity-oriented strategy. Lastly, industry and road-hauliers federations represent business-as-usual strategies.

Nevertheless, major differences in terms of influence and power persist among the interests, which block integration and hinder those promoting integration.

All interest groups have developed the ability to present their arguments by using scientifically-based arguments. Nevertheless, there is a considerable gap between the authority and the resources the different groups can mobilize. The strategic thinking of the ERT has had the strongest impact on the policy approaches of the Commission. Other industrial groups seem to find selective acceptance in different policy fields. Environmental groups have relatively little influence - with the exception of recent initiatives for environmental taxation. One factor is the recent formation of specialized interest groups and other organizations for transport and environment.

From the network-analysis one can conclude that on an aggregate level the risk of "agency capture" in the transport sector by some interest groups is not very high at the EU level. However, at the level of specialized policy fields one can observe segmented policy networks. For instance, there is a railway network, a motorway network, or a telematics network. Social representation in those networks is not pluralistic. The most probable output from such exclusive and specialized networks are additive policy proposals, which are offering special "carrots" to each specialized modal interests without setting priorities. The environmental impact fare better with the capacity-oriented strategies than in the case of business-as-usual strategies; but integration beyond growth-oriented strategies will meet the resistance of some of the specialized networks.

6.1.5 Success-oriented Anticipation

The limited power of the Commission in the decision-making process requires anticipating the chances for a policy to be successfully initiated. When the possibilities for an initative are high, the Commission may fully exploit its “process-power” and influence political output. As seen below, the possibilities for integration are low in the Council.

The Commission has been responsive to political changes. Since 1992, the "roll-back" of environmental policies has been observed (see: Hey 1994; Hey/Brendle 1994b). This responsiveness explains why specific proposals for the integration of the environmental dimension was not proposed until the end of 1994. Since environmental policies came under pressure, the Commission has become more cautious with far-reaching projects. Success-oriented anticipation may explain why integration is the “iceberg under the surface” rather than a political event.

6.2 Policies - the World of the Council

Policy-making at EU level is basically international politics. The EU should not be thought of as a homogeneous space with defined environmental problems or economic capacities. A fundamental characteristic of the EU is the difference of underlying economic and political structures and preferences. Therefore, one fundamental problem of European integration is to find consensus and to solve problems as a whole while respecting individual national structures and priorities (Scharpf 1992; Lepsius 1992). The unequal distribution of benefits and costs of a policy is a major challenge for European integration.

Four aspects contribute to the low profile of integration in the decision-making process: different national preferences; unclear and fragmented policy competencies and institutional settings; status quo-oriented decision-making rules; and the weakness of democratic participation.

6.2.1 National Preferences: Fragmented Alliances for Incorporation

The following synthesis of the constellations in the Council tries to identify countries into three groups: (1) those advancing the environmental dimension into transport policies; (2) intermediate forces; and (3) blocking forces. From the reconstruction of national preferences by an indicator analysis, one can assume that “integration” in the EU probably will be “piecemeal.” One cannot identify stable coalitions of countries, which would on the basis of joint interests promote specific instruments or types of integration. As shown, national preferences have not been static over the review period. Some countries made considerable strategic reorientations. In a dynamic perspective one can observe a certain trend of convergence between the early antagonists of transport policies: Germany and the Netherlands. This may open new opportunities for incorporation in the future. Germany has shifted from a very regulatory to a more market-oriented transport policy approach, while in the Netherlands the environmental dimension became relatively stronger compared to the still dominant role of road freight transport. Considerable increases of taxes and railway investments may illustrate this

policy shift. Public attention for the environmental impact of transport considerably increased in the U.K. recently and contributed to the revisal of the motorways programme as well as to gradual tax increases on the top of a relatively high baseline.

In the past however the national support for incorporation was weak.

In general, countries that might promote integration are in a minority position and are often divided over their policy approaches. In principle, the demand for environmental policies and the general debate over the need for integration is sufficiently strong in only four or five European countries. Even if there are overlapping environmental preferences in those countries, environmental policy styles and the transport policy agenda are different. Policy styles are more participatory in the Netherlands and in Denmark, and are more "technocratic and formalistic" in Germany. In the U.K., they are more informal.

Germany, Belgium, and more recently the Netherlands are the only countries where relatively high environmental preferences overlap with certain transport policy activities. They can be characterized as "capacity-oriented" in order to modify the modal split of transport growth. However, Germany had a rather defensive position towards EU transport policies to safeguard its national policy type. The Netherlands is internally split between its highly profiled environmental agenda and its strong national transport lobbying groups. Due to a lack of capacities for modal shift, demand-side management plays a relatively stronger role in political thinking (less in practice) than in the other countries, such as Denmark and the U.K.

Potential alliances in the field of transport policy do not overlap with those in environmental policies. This applies especially for those countries which might take over the lead for environmental policies. Geographical, historical, and political reasons contribute to the fact that national preferences for certain modes and regulatory approaches are different.

Geographically, there is a center-periphery conflict. Countries with major industrial centers are more concerned with the consequences of transit traffic and congestion, whereas countries in the peripheral regions are more concerned with market accessibility to metropolitan areas (Woelker 1985: 40; Nijkamp u.a. 1994: 38f). The latter have a preference for road transport since their capacity for railway linkages is limited (ibid.). Geographical reasons also play a certain role for modal preferences. Continental countries (especially Germany and France) tend to prefer railways as the dominant environmentally-friendly transportation mode, while coastal countries (especially the U.K., Denmark, the Netherlands, Ireland, and Portugal) tend to prefer shipping as the dominant environmentally-friendly transportation mode (Elshols 1994: 8; Bellers 1992: 186f).

This structure is reinforced by historical reasons. Those countries with an early industrialization (except the U.K.) have a strong railway network system since the

19th and early 20th centuries. Railways were the most appropriate mode for the mass goods and basic material-oriented industrialization phase of this period. Since high road-infrastructure investments took place after 1930, those countries have a dense, multi-modal infrastructure network. Industrial latecomers, especially the peripheral countries have a mono-modal, road-biased transport system (Elshols 1994: 2f; Button 1992a: 36; Bellers 1992: 186f), which was a more flexible type of industrialization in recent decades.

Finally, one distinguishes between the "Anglo-Saxon" and the "continental" regulatory philosophy of transport policies (Button/Pitfield 1991: 7; Button 1992a: 35). The first approach is more efficient and market-oriented, whereas the second perceives transport in a wider social context and assumes market failure as a fundamental characteristic of the transport system. While Germany is the strongest protagonist of the continental approach (Bellers 1992: 185), the Netherlands and the U.K. belong to the more liberal countries.

A rough overview of the constellation of preferences in the different policy fields is presented in the following table:

Policy Field	Potential Leaders	Intermediate	Laggards
Environment/ Clean Air/ Habitat Protection	B, DK, G, NL, (UK)	F, I, L	E, GR, IR, P
Taxation	G, I, IR, UK	B, (DK), L, (NL)	(DK), E, F, GR, P
Infrastructure	B, NL	G, F, DK, I	E, GR, IR, P, UK
Ecologically qualified liberalization of road	G	B, E, F, I, P	DK, GR, IR, L, NL, UK
Growth oriented railway reform	G; NL, (F)	I, B, E, L, IR, P, GR	UK

Table 1 Constellation of National Preferences on “Integration”

Policy initiatives towards integration, in form of discussion-papers and draft Council resolutions, have been made by Denmark and Germany. Environmental ministers supported setting environmental targets for the transport sector. Some type of impact assessment for the Trans-European Networks was perceived to be necessary. An analysis of the state of methodology on environmental impact assessments for road transport however shows that a consensus might only be found at the local and regional levels, based upon a “distribution oriented and anthropocentric” philosophy (EURET 1994).

A broader coalition to raise diesel taxation may emerge, since most countries have raised autonomously their diesel taxes beyond EU harmonization levels.

In the field of infrastructure policies, there is a major consensus to promote High-Speed linkages and Combined Transport (within limits). Only a few countries have actually invested in revitalizing conventional railway systems. There has been no consensus to redirect investment priorities. For example, a broad coalition of peripheral and some large countries intend to invest in large-scale motorway programmes in the future.

Deregulation has been characterized as a general trend, which was followed by most countries. As to road freight Germany was the only country, which tried to link road freight liberalization to flanking measures to maintain and improve the competitivity of railways. But its opposition gradually became weaker and finally collapsed. A growth oriented railway reform which defines preconditions for a growth oriented renaissance of railways finds strong support in Germany and the Netherlands - most other countries are more conservative in their privatization strategy. Only one country, the UK, promotes a radical privatization strategy, leaving the future of railways to the uncertain outcome of market forces.

This analysis suggests that presently there is no clear indication for “environmental leadership” from member states in the field of transportation. Cost internalization, improved supply side conditions for railways and higher investmentshares for railways find some but limited support by a broader coalition of countries.

On the other side a business-as-usual strategy finds strong support in most peripheral countries. Also the majorities for deregulation tend to reinforce market trends at the expense of the environmentally friendly modes. Majorities for clear modal priorities at the expense of road infrastructures cannot be found. An additive infrastructure policy fits best into the preference structure of member states.

6.2.2 EU Competences for Transport and Environment

In terms of competencies, most policies in the field of transport and environment are "mixed policies," with responsibilities shared between national governments and the Community. Mixed policies may pose several problems because they take place in different arenas and, therefore, may follow different rationalities. This is the case when “preference divergence” prevails. Due to policy interdependence, the scope for a specific national policy may become restricted, while consensus at the European level may be difficult to find. The "policy window" may become relatively small where "national autonomy" is compatible with the requirements of the "internal market" (Scharpf 1994). Therefore, a comprehensive set of "active incorporation" may find considerable difficulties.

Another characteristic of mixed policies is the lack of clear competencies, leadership, and responsibilities. This allows the shifting of responsibilities to other levels, and consequently, legitimation becomes difficult (Zimmermann/ Kahlenborn 1994: 248). There is no center of authority to direct demands and requests. Control from the outside becomes difficult. One of the basic characteristics of incorporation described previously was "shifting of responsibilities," which has especially been applied in the field of "infrastructure policies." The EU has won considerable competencies in this policy field, while the integration of the environmental dimension was delegated to the national levels according to the subsidiarity principle.

Network characteristics influence the opportunites for the shifting of responsibilities. Closed and highly selective networks may reject environmental demands and shift responsibilities for action to other arenas and political levels more easily than open networks.

During the research some indications found that the intergovernmental transport policy networks are more closed than those Commission services working on transport-related issues. There is a considerable risk of "vertical pillarization" by sectoral alliances, as observed in the case of road infrastructure planning in federalist countries (Reh 1988). The selective character of the intergovernmental networks may be an important factor as well for the low-level of defensive integration in infrastructure planning.

In theory, the EU has some competencies to re-direct transport policies. It has a large infrastructure budget, which theoretically could be used to influence national priorities with infrastructure policies. It has competencies over taxation policies and the liberalization of the transport markets. The use of such competencies for integration, however, would require a shift and convergence of national preferences.

6.2.3 The Institutional Setting

Integration takes place in a number of different institutional settings with different decision-making procedures and different rules for the participation in the European Parliament. In this respect, transport policies, in general and the integration of the environmental dimension take place in a extremely fragmented institutional environment.

Our comparative overview of the impact of different institutional settings on integration in the transport sector concluded that the position of the European Parliament (EP) in the decision-making process is vital. This study found that it was easier for the Council to ignore the environmental dimension in the cases where the EP was weak, than in the cases where the EP could influence the decision-making process. Positive examples have been the reform of the Structural Funds, the Habitat Directive or the recent conflicts on the principles for

the Trans-European Networks. The profile of integration is weaker in the cases where the EP has a weak position, such as in the field of taxation. In addition, the position of the Commission in the institutional setting makes a difference. In the cases where the Commission had a relatively strong negotiation position vis a vis peripheral countries, it could sometimes influence the dimension (but not the priorities) of infrastructure projects.

The choice between unanimity voting and qualified majority voting so far has made little difference for the incorporation of the environmental dimension into transport policies. National preferences have changed so dynamically that this is a stronger explanation than the decision-making rules. In the case of taxation, unanimity voting contributed to a "pareto-optimal solution", which partially respected the vital interests of the countries with higher tax levels. But with active incorporation, raising tax levels would not be possible under the "unanimity regime." In the case of deregulation, a qualified majority sometimes weakened the position of the country, which was pressing for a link between deregulation and harmonization. Sometimes it could find sufficient allied countries. In this sense, one can observe a slight bias of decision-making rules at the expense of active incorporation.

6.2.4 Multi-level Policy-making

European policy-making is characterized by issue linkages. Special sectoral problems are often linked to wider questions of European Integration (Schumann 1993). Package deals and sectoral issues often take place.

Major steps towards European integration had a significantly direct impact on transport and hence an indirect impact on the environment. Yet environmental interests did not play a role when the package deals for the major moves towards European integration were formulated. In this sense, new infrastructure funds as well as the deregulation of transport-services were part of package-deals and spill-over effects from the wider dynamics of European integration. Now they are important constraints for incorporation. For instance an ecological requalification of infrastructure policies would affect vital interests of peripheral countries, which were compensated for the negative economic impact of the internal market and the European Montary Union by the new cohesion instruments.

Multi-level policy-making may have a positive impact on incorporation if the environmental interests are represented during negotiations on questions related to European integration. While this has not been the case in the member states, it has been for non-member states, such as Switzerland and Austria. Since the early 80's, both Switzerland and Austria have shown considerable interest to join the European Community. However, Alpine transit and its impact on the environment and the local population became one of the most difficult issues during the negotiatons between the EU and those countries.

The agreements contain some safeguards against unrestricted road transport. In Austria an “Eco-point” system was introduced, to reduce NO_x-emissions from heavy vehicles by officially 60% and due to manipulations in the reference case actually by ca. 30%. Switzerland achieved a commitment from the EU, to achieve full cost internalization for road transport. Both countries agreed to extend their transalpine railway infrastructures, so that a (yet not fully effective) push-and-pull system for the environmentally friendly modes could be established.

These political results can only be understood in the context of strong popular pressure in the Alpine regions against freight transit, and the veto power in which the governments had to use during negotiations for membership to the EU.

7 The Impact of the New Nordic Members

Since this chapter is not a part of the research project, only a rough estimation of the potential impact of the new Nordic members can be made, neglecting the differences between them. More data still needs to be collected and analyzed.

Both Sweden and Finland joined the EU in 1995. Transport was not a major problem during the membership negotiations of the new Nordic countries. Nevertheless, they will be important and partially innovative players in the European setting.

One can mention five characteristics:

- Environmentalism is relatively advanced in these Nordic countries (Jamison u.a. 1991).
- Even before becoming a member of the EU, Swedish sources were actively supporting the foundation of the T&E Federation, which became a competent NGO-player in the European scene for the integration of the environmental dimension into transport policies.
- Sweden is one of the pioneering countries in terms of environmental taxation, which has already been applied to the transport sector (Kageson 1993; Hanssen 1992; OECD 1994).
- Some of the countries have already applied strategic environmental impact assessments and multi-criteria cost-benefit analysis (see: AIRE 1994; EURET 1994).
- Coastal shipping traditionally has played a major role in the foreign trade in these countries. This may improve the chances for a re-evaluation of this neglected mode of transport.

However, two negative impacts should be addressed, as well:

- The permitted maximum capacity tonnage for lorries is generally higher in Scandinavian countries. If these countries are successful at pressing for higher tonnages in the EU, then the competitiveness of road transport will get further improvements at the expense of the other modes. Uncovered infrastructure costs will considerably increase, while the specific environmental efficiency tends to be higher by fully-loaded and larger lorries.

- Another controversial issue is the building of the multi-modal SCANLINK, a railroad-highway-bridge network that will link Denmark and Sweden. For the first time, this will create an attractive link for road transport to central Europe, which will considerably impact the competitiveness of the other modes. Furthermore, plans for the bridge has drawn much criticism because of its direct environmental impact.

The overall impact of the new Nordic members in the transport sector will be that they add to the debate on the integration of the environmental dimension, in addition to new ideas and concepts. Environmentally-friendly modes and environmental taxation will receive more political support with their participation. But taking the lack of consensus and the institutional characteristics of the EU into account, both active and defensive integration will have more effectiveness at the national levels than at the EU level.

8 Conclusions and Recommendations

Integration is as yet “the iceberg under the surface.” The relationship between transport and the environmental policies have been intensively discussed since 1989. Likewise, a number of policy instruments to strengthen integration have been evaluated, in addition to establishing a coordination system between Directorate General for the Environment (DG XI) and Directorate General for Transport (DG VII). Yet, political output appears to be rather weak. This could be explained by a dual-arena concept of European policy-making: the supranational arena is more prospective, problem-oriented, and open, while the intergovernmental arena is rather concerned with safeguarding the national status quo.

The limited problem-solving capacity of the EU raises one important question: How might the “subsidiarity principle” be applied to the integration of the environmental dimension?

In theory, there is a strong need for European action. Over the past years, the playing field has shifted from the national to the European level. Multiple interdependence can be observed. There is a need to define the terms of competition for freight transport, which has extremely mobile production factors, according to environmental requirements at the European level. It is also necessary for greater European action in the field of taxation, social requirements for hauliers, stronger criteria for the access to the profession, and technical harmonization. Moreover, there is a need for the coordination of national infrastructure policies in order to avoid double and parallel investments, dead-end links, and lack of interconnectivity. Furthermore, the self-control of community investments should be considerably strengthened. However, reaching a consensus to an ecological qualification of those activities is weak. A stronger European Parliament could help to bring environmental issues on the Council agenda, but certainly it would not help to overcome the prevailing “preference divergence” surrounding this issue.

Therefore, if national preferences are not to be distorted; decentralization and the application of the subsidiarity principle should play a strong role (to this debate: Zimmermann u.a. 1994; Scherer/Blatter/Hey 1994; Binswanger/Wepler 1993). Subsidiarity, however, should not be misinterpreted in the sense, that environmental measures will be decentralized, while the centralization of transport policies continues without environmental checks and balances.

This study found that it is necessary to synchronize the European integration of transport policies with the respect to environmental policies. In other words, either the new European playing field for transport achieves a stronger environmental correspondence, or the scope for national and regional action (especially in the field of taxation and infrastructure policies) should be broadened. In the field of taxation, this means the strict application of the territoriality principle (which has been restricted by compromises in 1993), so that non-discriminatory tax increases (or other market-oriented instruments) may be promoted without endangering the competitiveness of national hauliers.

The same must apply to infrastructure policies: Community infrastructure funding should either be limited, or follow stricter environmental criteria. Present legislation is not sufficient to promote infrastructure policies compatible with environmental requirements. Any strengthening of infrastructure competencies at the EU level should be paralleled with strengthened citizens' rights at the regional and local levels to guarantee a balanced selection of projects, taking into account the diffuse global environmental interests at the European, as well as special victims' interests at the lower levels.

Finally, the EU decision-making rules should improve the opportunity structure for "environmental instruments." This study recommends that this may be achieved by further strengthening the role of the EP, as well as by opening formal and informal actors networks to represent environmental interests.

9 Literature

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