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Environmental Policy Integration: Policy Process and Instruments for the Transport Sector in Bulgaria

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ABSTRACT

This paper presents a case study of environmental policy integration (EPI) in the transport sector in Bulgaria. It is inspired by the challenge of pursuing sustainable development through formulating policies and instruments for long-term win-win solutions in the transportation and environmental sectors. EPI stands for the incorporation of environmental concerns into other sectoral policies at an early stage of decision-making improving policy coherence. Essentially, this paper studies EPI as a process by analysing five factors: a clearly defined sustainable development concept, political commitment, institutional set-up to steer integration, stakeholder involvement and knowledge management. Also, EPI is examined as a policy output entailing environmental policy instruments. The methodological approach applied in the paper includes qualitative methods in order to match the collected empirical data to the theoretical framework of EPI as a policy process and output.

The main findings of the research illuminate EPI as a weak policy process since it suffers from serious shortcomings such as lack of National Sustainable Development Strategy, little political commitment towards EPI and deficient public participation. On the other hand, EPI as a policy output is relatively successful - new regulatory, market-based and informational policy instruments were effectively introduced. This phenomenon of having positive output from a weak policy process is due to external factors which emerged after the field research. Essentially, the most significant factor appears to be the accession process to the European Union, which leveraged requirements for stricter environmental regulations and higher standards translated into concrete policy outputs. However, the policy process for EPI needs to be seriously strengthened if long-term policy integration and coherence is pursued.

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1. Introduction

As early as 1987, the World Commission on Environment and Development (WCED) identified the problem of contemporary governance as follows: “Those responsible for managing natural resources and protecting the environment are institutionally separated from those responsible for managing the economy. The real world of interlocked economic and ecological systems will not change; the policies and institutions must” (WCED 1987, 310). The sustainable development agenda embraced at the United Nation’s Conference on Environment and Development in Rio de Janeiro in 1992 calls for enhanced balance between the ecological, social and economic aspects of policy-making. It requires long-term strategic planning, cost effectiveness, environmental effectiveness and policy integration (Lafferty 2002).

This research is inspired by the challenge of attaining sustainable development through environmental policy integration in policies, which have significant impact on the environment such as transport development. Essentially, transport is perceived as a driving force for economic development especially in new member states which places this sector high in the political agenda and usually receives strong financial support as well. However, the transport sector occurs to be one of biggest and also complex contributors to environmental damage nowadays – rapid growth of greenhouse gas emissions, reduced urban air quality and climate change¹, noise pollution and nuisance, landscape destruction and loss of habitats (EEA 2007). However, the task to tackle these environmental problems is not a simple one bearing in mind the complexity of transport sector – car dependence, fuel consumption, level of decision-making, stakeholders’ involvement from various economic sectors (International Energy Agency 2000). Therefore, environmental policy should act as a “cross-cutting” guiding principle (Organisation of Economic Co-operation and Development 2001) through the process of environmental policy integration in order to ensure long-term policy coherence. In Bulgaria, at the beginning of the transition towards market economy pollution emissions were comparatively low due to the collapse of the industry and the shift of consumption and production patterns. However, Bulgaria has recently started experiencing a new emerging source of pollution – transport emissions growing as fast as the GDP (European Eco Forum 2003). Energy consumption and emission increase with transport growth, which in Bulgaria is mainly in road and aviation. Transport is responsible for 55% of the nitrogen dioxide and 31% of the carbon oxide (MT 2007). Road transport has the largest share as a transport mode and aviation is the fastest growing one (EEA 2002b). Additional problems stem from the aging vehicles (most of them 20 years of age) and congestions in urban areas. Heavy metal

¹ Between 1971 and 1997 CO₂ emissions from the transport sector increased from 19.3 to 22.7%. Within the transport sector, motorized road traffic accounts for the vast majority of CO₂ emissions – in 1997 road transport produced 81% of the transport-related CO₂ emissions (IEA 2000).

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contamination is typically observed in areas adjacent to highways. Noise pollution from transport accounts for 80-85% of the overall noise in urban areas (MT 2007) affecting approximately 41% of the population (UN 2002). Furthermore, road and aviation transport infrastructure projects are heavily subsidized by the EU within the Trans-European Transport Network (TEN-T) as well as the European Bank for Reconstruction and Development (EBRD) which recently has led to even bigger energy consumption and more emissions (EEA 2007).

The aim of this paper is to examine the integration of environmental considerations in the transport sector in Bulgaria. EPI is studied as a policy process entailing five key factors for policy integration and coherence. Also, it looks at the EPI as policy output namely environmental policy instruments. EPI as a policy process and output constitute the main theoretical framework of this paper, which is then applied to the transport sector in Bulgaria. This approach might seem rather deductive but the empirical research is not limited to the application of the framework but rather seeks to identify new themes in an inductive way. Therefore, the desk research was combined with in-depth face to face open questions interviews with different stakeholders in Bulgaria.

The paper is organized in the following manner: first, definition of EPI is put forward and the significance of the research is justified within a review of the literature. Second, a theoretical approach towards EPI as a policy process and output is presented. Then, detailed analysis and discussion on the EPI in the transport sector takes place followed by conclusions and policy recommendations.

2. Environmental Policy Integration

Environmental Policy Integration (EPI) stands for the “integration of environmental concerns into other policy areas”, which should be a “guiding principle for the planning and execution of policy” in any sector (Lafferty and Hovden 2003). The Organisation for Economic Co-operation and Development (OECD) defines it as “early co-ordination between sectors and environmental objectives, in order to find synergy between the two or to set priorities for the environment, where necessary” (OECD 1996). Lafferty (2002) underlines that the most important task to ensure adaptation of the governance to sustainable development is to establish a clear “political mandate for goal-directed change” (Lafferty 2002). He also elaborates on the issue from the perspective of priority setting, stating that overarching priority to environmental concerns should ensure that environmental policy is “moved from periphery to centre in regional, national and local decision-making”.

2.1. EPI as a policy process

In this paper EPI is studied as a policy process and a policy output. Process and output might seem exclusive but actually they are supplementary to each other. On one hand, EPI as a *process* entails co-ordination between agencies, communication and procedures and on the other hand - an

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output as a logical result of the process in the form of statements, objectives, strategies, actions and regulatory instruments (Nilsson and Persson 2003). Often “both process and output are important, and that understanding the linkage between process and output is what really adds value to an EPI study” (Persson 2004) because each of them could be used as an evaluation criterion to measure the effectiveness of the other. In order to analyse EPI as a policy process a checklist of factors for policy integration and coherence developed by the OECD is used. EPI as a policy output is mainly studied through the introduction of environmental policy instruments.

2.1.1 Criteria for evaluation

- *Common understanding of sustainable development*

This criterion addresses the question whether there is an understanding of sustainable development at governmental level and by sectoral administrators. It also examines the development and adoption of a National Sustainable Development Strategy which provides an overarching policy framework for the three pillars - economic, environment and social aspect of sustainable development.

- *Political commitment and leadership*

Strong political commitment and leadership are crucial factors to steer high level decision-making towards EPI (Lenschow and Zito 1998). Political commitment is the decision of political leaders to use their power and mandate to ensure that environmental considerations receive higher place at the political agenda. To translate the political commitment into concrete policy objectives an analysis of the key strategic sectoral documents shall be undertaken. Also, it assesses whether there are clear and widely accepted operational objectives for sustainable development and particularly for EPI in the sectoral policy-making.

- *Specific institutional mechanisms to steer integration*

This criterion looks for an institution, which acts as a ‘catalyst’ for EPI. It also assesses the institutional set up and communication / coordination mechanisms for formulating, adopting, implementing and monitoring the incorporation of environmental concerns into sectoral policies. It examines the presence and effectiveness of feedback mechanisms, evaluations and reporting mechanisms for environmental integration in the transport sector in Bulgaria.

- *Stakeholder involvement*

Public participation and consultations are a decisive element of attaining EPI in sectoral policy-making (Coller 1994, Lenschow 2002 and OECD 2002). Business, trade unions, NGOs and citizens’ associations should have an input in a transparent and accountable decision making and their input should be taken into account. Hence, a benefit from local knowledge could be acquired and larger public acceptance and legitimacy of activities and policies could be ensured. This

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criterion assesses the legal provisions and implementation mechanisms to warrant public input and feedback on environmental actions in the transport sector in Bulgaria.

- *Knowledge management*

This criterion assesses the role of science and knowledge for environmental integration in the policy processes. It looks at the role of scientific communities and their participation in the policy process of formulation and implementation of environmental policy measures in the transport sector. Persson (2004) identifies *science* and *knowledge* as major factors for EPI arguing that knowledge should be interpreted as the experience gained as lessons learnt and best practices which can be applied to policy-making. This criterion also evaluates the financial resources allocated for research and science in order to stimulate the generation of alternative policy solutions to environmental problems from the transport sector in Bulgaria.

2.2. EPI as a Policy Output

The previous section presented the theoretical approach towards studying EPI as a policy process putting forward criteria for analysing main factors for EPI based on an OECD check list. The next section discusses EPI as a policy output. Hereby, EPI as a policy output means the introduction and implementation of environmental policy instruments for the concrete public sector. Importantly, various policy instruments have recently become part of the transition from *government* to *governance*. They include: regulatory (traditional command-and-control), market-based (economic), informational and voluntary policy instruments. Literature on EPI elaborate on the use of “new” policy instruments for integration and improved governance, which main focus is on economic and voluntary instruments but also include environmental management systems (IEEP 2007).

Table1: Evaluation criteria for EPI as a process and an output

Criteria for EPI as a policy process	Criteria for EPI as a policy output
<ul style="list-style-type: none">• clearly defined sustainable development concept	<ul style="list-style-type: none">• Command-and-control instruments
<ul style="list-style-type: none">• political commitment	<ul style="list-style-type: none">• Market-based instruments
<ul style="list-style-type: none">• institutional set-up to steer integration	<ul style="list-style-type: none">• Information and education instruments
<ul style="list-style-type: none">• stakeholder involvement	<ul style="list-style-type: none">• Voluntary instruments
<ul style="list-style-type: none">• knowledge management	

Chapter V - EPI as a Policy Process in the Transport Sector in Bulgaria

5.1 Background Information

The transport sector has always been considered of strategic importance for Bulgaria. It is due to the favourable geographical location of the country on the Balkan Peninsula providing transport connections between Europe and Asia. Therefore, planning of transport routes has become a priority in the European enlargement context, supported largely by the pre-accession funds of the EU as well as international financial institutions. Within the EU's Trans-European Transport Network (TEN-T), there are five major corridors planned to pass through the territory of the country. Moreover, transport and the availability of infrastructure are considered to play a vital role for economic growth and competitiveness, especially within the EU single market. Importantly, the transport network throughout the country is comparatively well developed, which allows further development and upgrade of any of the transport modes (especially rail) as well as inter-modal development. However, planning for transport development do not seem to be based on rational needs assessments of the sector but rather on the interests in EU negotiations and available funding opportunities. The next sections will discuss in more depth these processes and analyse what the implications on environmental integration on the long term are.

5.2 Sustainable Development in the Sectoral Policy-Making in Bulgaria

In order to examine the integration of environmental concerns into the transport sector, it is important to study what is the common understanding of sustainable development in Bulgaria. In Bulgaria, high level commitment towards sustainable development can be considered present at the end of 1999 when the preparation process to developing NSDS was launched and external financial resources were channelled towards the country. At that time Bulgaria overtly declared its "strong political will and commitment to implementing Rio's principles and Agenda 21" (Ministry of Environment and Waters 1997). In April 2001, a preparatory process to develop a National Sustainable Development Strategy was started (Gercheva and Shoumkova n.d.). For this purpose, a National Commission on Sustainable Development (NCSD) was set up as an inter-governmental body. Established by a Decree of the Council of Ministers, the NCSD was initially chaired by the Deputy Prime Minister and the Minister of the Regional Development and Construction². The Commission foresaw wide representation of national, regional and local administrations, business and NGOs at its assemblies. A special focus was granted to energy and transport matters for attaining sustainable development. However, no final product came out of the process – there was no NSSD developed and soon afterwards the commission ceased its operation (Tzvetkov, Kovachev, Radev pers. comm.).

² After 2001 the Ministry of Regional Development and Construction is renamed into Ministry of Regional Development and Public Works.

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After the elections in 2001, however, the political momentum declined due to changes in the government and the political attention was strongly focused on fulfilling the requirements stemming from the EU accession. The responsibility for sustainable development matters was “delegated” to the Minister of Environment and Waters, who did not record much activity in this direction. In 2007, Bulgaria became a member of the EU and new efforts towards developing a NSDS were undertaken as an obligation of the EU membership. This time the leading authority was the Ministry of Economy and Energy (MEE) which organized an inter-governmental working group to develop the new NSDS of Bulgaria. The process became publicly announced only after the completion of the draft strategy and hence it was severely criticized by NGOs and other stakeholders outside of the government for its non-transparency.

In Bulgaria a lot of international projects and national initiatives for capacity building of the administration and awareness-raising among the general public were organized on the topic of sustainable development. Many seminars, training, conferences and round tables aimed at developing a profound understanding and ultimately generating a clear concept for sustainable development. Gradually, the concept of sustainable development gained some ‘popularity’, but instead of bringing understanding about it, actually has led to losing its meaning in the political populist rhetoric. Therefore, it can be assumed that no clear and well articulated concept of sustainable development is present at the national level. Importantly, it appears that there is a significant discrepancy between political and administrative approaches regarding sustainable development and transport development. Even if politicians maintain the rhetoric of embracing more holistic approach towards the policy process there is no long-term vision for sustainable transport development. Hence, the sustainable development objectives remain in the hands of transport central administration who generally possess low administrative capacity to deploy an interdisciplinary and holistic approach in policy-making. For instance, according to the representatives of the MEW sustainable development does not mean anything unless it is operationalized into policy instruments for the environment (Karadgova pers. comm.). Karadgova also argues that such instruments are effectively incorporated in the existing legislation, thus forcing all economic sectors to comply with it. NGOs, on the other hand, are rather critical claiming that sustainable development is not only poorly understood by the authorities but also there are no existing documents to entrench the principles of the sustainable development. NGOs explain that therefore sectoral authorities often perceive environmental protection as an obstacle for the sector’s development. The Transport campaigner of CEE Bankwatch Network Bulgaria, Petko Kovachev describes it as follows:

“Politicians might have a better understanding about the sustainable development concept but they have hardly undertaken any action in this direction. Administrators, on the other

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hand, have knowledge, which however is narrowed down to each separate element – environmental, social and economic” (Kovachev per.comm.).

4.3 Political Commitment

Given the divergence between sectoral policy objectives and possible clashes of interests, the EPI theories define strong political will and commitment at the highest level and sound leadership as obligatory factors in the policy process towards EPI. To assess the political commitment towards the integration of environmental concerns into the transport sector, one should investigate whether and how the integration principle is stipulated in key strategic planning documents. The draft NSDS in section 2 is devoted entirely to “sustainable transport”. First order objectives are to switch to cleaner fuels and to “encourage the use of cars which comply with environmental standards”, which can be considered as an environmental call. However, these are rather humble and ambiguous objectives having in mind that they directly encourage car use, which leaves the increasing congestion problems not addressed and might even cause higher demand for roads. The draft Strategy looks at modes of transportation – road, rail, public transportation, freight, inter-modal and water transport without any clear prioritization among them. Moreover, it is not clear the connection between the NSDS and other transport policy documents, which becomes apparent when looking at the Strategy for the development of transport infrastructure in Bulgaria until 2015 (SDTI), which is the main strategic document for the transport sector. Even from the title occurs that “infrastructure” is the key issue. Main priorities are major rail and road projects along the Trans-European Transport Corridors (MT 2006). In numbers, the strategic planning in the transport sector according to the Bulgarian Transport minister Petar Mutafchiev sounds like this: “There are 4, 7 billion leva for transport infrastructure, which will be allocated between the road – 1,7 billion, rail – 1,8 billion and 1,2 billion leva for the other parts” (BSP online).

The SDTI analyses the current state of the transport network, presents a SWOT analysis, lays down sectoral policy objectives and measures to achieve these objectives. However, the key objectives of the Strategy do not include environmental integration. The only place where the environment is mentioned is in relation to aviation: “Development and modernization of airports so to comply with EU regulations on environmental protection” (MT 2006). Interestingly, environmental protection is identified as a selection criterion for infrastructure projects giving 15% of the points for a project to get funding. Particularly, it means that a project will have higher chances for financing if it reduces environmental pollution and the need for land appropriation (MT 2006). The indicators for monitoring the implementation of SDTI does not include however any environmental indicators. Content-wise the Strategy gives absolute priority to the development of large-scale rail, road and airport infrastructure whereas public transportation, inter-modal transport, bicycle lanes and walking paths are not even discussed. The other planning document

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which has been recently completed is the Operational Program Transport 2007-2013 developed for the absorption of the EU Structural and Cohesion Funds. The narrative refers to environmental protection in the very beginning of the Program as “Bulgarian transport policy also fully supports the objective of a sustainable, environmental friendly transport system” (MT 2007) and the requirement for the application of Environmental Impact Assessment for each transport project. The Program declares that “sustainable urban transport system is a priority of the strategy” but later explains that it will focus on the Sofia metro project and the rest is a responsibility of the Ministry of Regional Development and Public Works (MRDPW). Yet, the document makes it clear that high level priority is the investing in infrastructure mainly road, rail and water and the only “integration” commitment is the integration along the EU transport corridors. This argument becomes stronger after looking at the financial plan of the program, which commits approximately 50% of the Program’s budgets directly to road construction and the rest is divided between rail, metro, water transport and technical assistance (MT 2007).

To sum up, in Bulgaria there is little political commitment towards environmental integration in the transport sector which has materialized in setting priorities mainly for large-scale infrastructure development along the Trans European Transport Corridors. These plans are not only politically inspired by the EU’s Trans European transportation schemes but also financially well supported through the EU funds. A positive initiative is the identification of environmental protection as a selection criterion for transport projects as well as the obligation for performing of EIA for each transport project.

4.4 Institutional Mechanisms to Steer Integration

The next factor for EPI addresses the question of how environmental integration is institutionalized in the transport domain. Generally, the decision-making within a policy domain is constrained to the structures of the particular sector. Both national transport and environmental policies are primarily developed within the respective Ministries, without substantial input from any other stakeholders. There are no specifically established environmental departments within the structures of transport authorities, which promote and deal with environmental policy instruments. When it comes to environmental impact of transportation it is usually addressed by the Environmental Ministry despite the fact that there are no separate units which work on sustainable transportation.

A more recent approach to sectoral policy-making is based on Working groups (WG). Usually these working groups emerge on an ad hoc basis in order to solve a particular problem or to develop a particular document such as Strategy, Program, etc. Usually, the working groups consist of mainly governmental representatives from almost all domains but sometimes include other stakeholders – for instance, regional authorities, municipalities, NGOs, professional organizations, etc. All stakeholders are expected to submit statements regarding the preparation of

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the particular strategy, programme or plan and these are to be taken into account into decision-making. If a statement is disregarded in the policy process, there should be a sound justification of the reasons (Tzvetkov pers. comm.). However, the final decision is taken by the sectoral authorities.

Importantly, at the working group's forums it is the Ministry of environment representative which will act as a 'catalyst' for EPI. For instance, the MEW participates through its representatives in intergovernmental bodies such as the Transport Working group within the frames of the National Development Plan, having the mandate to ensure environmental objectives in the transport policies. Also, many joint meetings including the Ministry of Transport and Communications (MTC), the Sofia municipality transport departments and representatives of the MEW have taken place in order to address the escalating environmental problems stemming from transport in the capital city. Therefore, it is very unlikely that the sectoral administration will initiate on its own taking into account possible environmental impacts or environmentally friendly solutions but leave it to the environmental authorities. Importantly for EPI, the MEW does not always prove to have the necessary capacity and skills to provide input and ensure integration of environmental objectives. According to the environmental NGOs representative at the WG under the Sectoral Operational Program Transport 2007-2013 the MEW had rather inadequate behaviour when necessary input for environmental protection is needed (Tzvetkov pers. comm.). Notably, there is very little contribution at a Strategic and program level from the MEW and concrete environmental measures remain to be dealt with at a project level. However, Tzvetkov also expressed satisfaction with the work of this working group as it is "comparatively progressive and presents an open system for work; ... a kind of consultative process" (Tzvetkov pers. comm.). For instance, all stakeholders could participate equally in the initial discussions on the analysis of the condition of the transport networks in Bulgaria, SWOT analysis and identifying key strategic priority axis for the transport sector. After the approval of the OPT by the European Commission, this working group will be transformed into a monitoring committee for the OP for the purpose of pursuing continuity and policy coherence on the long term.

Also, in the Strategy for the development of the infrastructure in Bulgaria until 2015, the section devoted to institutional arrangements is rather poor. Basically in one paragraph it explains that the managing authority for implementing the Strategy is the Ministry of Transport. With regards to the Operational Program Transport 2007-2013 for the allocation of the EU structural and cohesion fund, there is much more elaborated section on the institutional arrangements. These are obligations stemming directly from Article 63 of the Regulation No 1083/2006 of the European Commission on the establishment of Monitoring Committee for each of the Operational Programs. Therefore, its members are clearly identified and include a rather wide array of stakeholder inside and outside the governmental institutions.

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Although some positive developments with regards to setting up inter-institutional committees / working groups are starting to serve various purposes of developing strategic documents especially in relation to the EU structural and cohesions funds, in general the institutional set up for integrating environmental concerns in the transport sector is rather weak. Transport authorities do not have ownership of any integration actions, leaving the job to the environmental authorities who however not always have the capacity and the political credibility to ensure integration. Moreover, EPI literature requires much more advanced early coordination mechanisms which clearly are not present in the Bulgarian transport sector. The contribution towards EPI from other stakeholders is discussed in more detail in the following section.

4.5 Stakeholder Involvement

Public participation is envisioned as a fundamental principle in ensuring good governance and a means for achieving sustainable development. It is considered as a major human right aiming at improving the quality and transparency of decision-making and bringing the valuable input of local knowledge.

After the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Environmental Justice in Environmental Matters entered into force on 16 of March 2003 and new regulations on EIA and SEA were adopted in Bulgaria, public participation is embedded in the relevant legislative acts. The EIA procedure entails public participation during the development stage of any transport investment project that takes place in Bulgaria through public hearings, submission of statements and appeals from the affected community and non-governmental organisations. The provisions for SEA proclaim the right of public participation during the development of new transport plans and programmes but not in the formulation of new transport legislation. Both EIA and SEA public participation procedures are regulated within the Environmental Protection Act (EPA), Regulation in the Terms and Conditions for Carrying out Environmental Impact Assessment and Regulation on the Conditions, Procedure and Methods for Environmental Assessment of Plans and Programs.

Environmental NGOs have developed a system for nominating and electing NGO representatives at various Working groups or Monitoring committees through the Bluelink information system. Bluelink is a non-governmental organization in the field of environment and information technologies which in the recent years established itself as a mediator between NGOs and officials when it comes to participation and election of NGO representatives. Before, for instance, the NGO Bulgarian Foundation for Biodiversity was ‘invited’ by the Transport Ministry to participate in the working group for developing the OPT. At that time, a problem arose about its legitimacy because it did not go through an election procedure among all NGOs. When the Foundation decided to quit the WG, an election process was launched but only one nomination was received from the Association of the Bulgarian Energy Agencies. This situation illuminates a

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significant problem of the Bulgarian environmental community – there are no environmental organization which works in the field of transportation and have expertise to work on these issues at a strategic or program level.

The Environmental Impact Assessment (EIA) procedure is considered as one of the most important instruments for integrating environmental measures and ensuring public participation within the development and implementation of a transport infrastructure project. However, there are no clear procedures on the actual “taking into account” of the results of public participation and how it influences the actual decision-making. For instance, in many cases of EIA reports for transport projects, NGOs had a lot of criticism at the methodology and content of the reports. The unclear mechanism and the unwillingness of the responsible institutions to organise public hearings create many obstacles such as late and limited announcements of public hearings, no preliminary access to project documentation, etc. NGOs further argue that while the investor of the project pays for conducting the EIA report, the EIA experts are preconditioned to deliver ‘soft’ reports even if the project might impose adverse impacts on the environment. According to the procedure NGOs comments should be put together in statements and submitted to the investor. The investor is obliged to send them together with the minutes from the public hearings to the decision-making authority, which must take them into account during decision-making. However, currently investors are requesting statements from any kind of civil organisations and in the end they have “20 positive statements from totally unknown ‘NGOs’” (Kovachev pers. comm.). Therefore, a common practice is the investor to skip all negative statements and submits to the decision-making institution only the positive ones (Hlebarov, pers. comm.). Hence, the actual results from the public participation are doomed to have no impact on decision-making in the transport sector policy towards environmental protection.

In general, NGOs are not perceived as a potential and valuable partner in decision-making. Therefore, co-operation with NGOs is deliberately avoided or artificially conducted for the purposes of reporting to the EU that NGOs were involved. Generally, the state administration does not realise the benefits of effective public input in policy-making. Its sheer unwillingness for cooperation combined with a lack of clear mechanisms to ensure public participation have preconditioned the public’s quite poor input in the policy processes for incorporating environmental concerns into the transport sector in Bulgaria. It is unfortunate because environmental NGOs might not hold the necessary expertise at a planning level but they have a lot of capacity when it comes to implementation and monitoring. For instance, public hearings within EIA are embraced by the environmental NGOs as a major tool to voice local concerns and influence decision-making from below. There are cases when NGOs are the ones to more widely publicise public hearings through local media. Some of the NGOs prepare additional printed materials which are distributed during public hearings or organise press conferences to raise

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alternative opinions regarding a transport project. This way, environmental NGOs can compensate for the limited capacity of the sectoral authorities to act on the ground and work with local people and turn out to be a valuable partner.

In the near past, an important way for participation of environmental NGOs regarding transport projects constituted their representation on the ISPA Monitoring Committee. The ISPA pre-accession fund of the EU played an important role in the transport policy of Bulgaria because it provided abundant financial resources for infrastructure development. NGOs requested a place as observers at the committee's assemblies and were allowed to send up to two representatives. Through this monitoring committee environmental NGOs received information and documents for investment projects, monitored their implementation and reported on violations in terms of environmental protection during the committee's assemblies. The latter activity was not appreciated by the Bulgarian authorities especially when criticism of bad environmental performance of most of the transport projects was presented by NGO in front of representatives of the EU and IFIs. As a consequence, NGOs were excluded from the ISPA monitoring committee by questioning the stand of these NGOs as representatives of the public interest while it was obvious that critical input was simply not encouraged at the committee's meetings. Anyhow, it was felt by the NGOs representatives that such participation occurs at a very late stage and could hardly proactively influence decision-making in terms of environmental policy integration in the transport sector (Kovachev pers. comm.). Basically, participation in monitoring activities indeed means involvement but in a post implementation stage of development of a program or a project whereas EPI would require stakeholders input at the development stage.

4.6 Knowledge management

At the Rio Summit the good governance principle was recognised as a preventive measure based on best existing science and technology achievements (MEW 2001). Before the fall of the communist regime in Bulgaria every Ministry had attached to its structure a 'scientific unit', which was generating 'science' upon order, serving for the purposes of each separate Ministry. Nowadays, practices have changed when it comes to the participation of the epistemic community in policy-making. There are several ways for the scientific community to participate in the decision-making processes and procedures regarding the environmental and transport sphere. One way would be the development and participation in research projects. Therefore, most academics have established private consultant companies or research centres at the universities and conduct research within concrete projects financed either by the government or international organizations. Importantly, participating in international projects can have a very positive effect of keeping up to date with international research and expertise. On the other hand, however, it might have a negative effect of reducing the opportunities of the scientific community in Bulgaria by imposing an external research agenda (Prof. Troeva pers. comm.).

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Another way of participation of the scientific community is through experts in the field of transport who are usually invited to participate in various consultancy and working groups for developing legislation, strategies, operation plans, etc. For instance, the Dean of the Transport Department within the University of Architecture, Civil Engineering and Geodesy is a member of the working group for preparing the Sectoral Operational Program Transport under the National Development Plan. The MEW can also request from environmental or transport associations or the Bulgarian Academy of Science to process data or conduct analysis for the purposes of any of its programmes. And yet, similarly to the NGOs experience, there is no clear mechanism when and how the scientific community is involved and to what extent it can influence the policy making. Essentially, it is recognised the need for more profound and well organised input of the scientific community in the decision-making process especially in terms of processing data, generating independent analysis and proposing more effective policy instruments and measures for transport related environmental problems.

Also, the Environmental Impact Assessments and Strategic Environmental Assessments by legislation must be conducted by licensed experts from academia, who work in teams and networks. During the last planning cycle for regional and local development a new practice have emerged where academics would organize themselves into private consultancies and perform various ‘consulting’ services for quite good remuneration although with a questionable quality. Hence, the major criticism levelled by the NGOs at the scientific community in Bulgaria regarding transport matters is that most of it has been converted into ‘profit-oriented’ consultancy rather than scientific research. The possibility to get invited into a governmental project or a working group decreases if a scientist is critical. “Unfortunately, Bulgaria is full of scientists who do not produce science anymore except for the sake of profit” (Radev pers. comm.).

Chapter VI - EPI as an Output: Environmental Policy Instruments for the Transport Sector in Bulgaria

Whereas in the previous chapter I discuss environmental policy integration as a policy process within the transport sector in Bulgaria, in this chapter I investigate EPI as an output and describe the available environmental policy instruments for this sector.

6.1 Regulatory Instruments

Some of the most popular and powerful instruments for environmental protection are *regulatory* or *command-and-control* instruments, which often entail adoption of new and improvement of existing legislative acts. These instruments can include special programmes, standards, norms, bans, etc. Even economic instruments become legally binding only after they are introduced via legislative provisions.

Environmental legislation in Bulgaria has been developing quite dynamically in recent years due to the ratification of international Conventions and the harmonization with the European

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Union *acquis*. This legislative process is intended “to incorporate in the new law all the recognised basic principles of contemporary environmental protection, which should lead to better compliance and enforcement” (Maslarova n.d.). The MEW has explicit obligation to monitor strictly the implementation of the environmental legislation. Environmental problems related to transport and environmental policy integration are regulated primarily in the environmental legislation of the Republic of Bulgaria.

A currently revised Environmental Protection Act entered into force in 2002, regulating EIA and SEA procedures, access to environmental information and public participation (Environmental Protection Act 2002). The Clean Air Act is also a fundamental act in terms of transport, adopted and brought into force in 1996, regulating the emissions from static and mobile sources, determining the taxes for liquid fuels and the fines in case of non-compliance (Executive Agency Environment n.d.). A special Decree adopted in 1999 regulates the norms for harmful emission rates in urban areas and two more adopted in 1999 regulate also norms on NO_x, dust and lead in the atmosphere and the VOC emissions while storing, loading, unloading and transporting petrol (EAE n.d.).

Serious environmental problems related to transport stem from the use of leaded petrol, therefore one of the commitments Bulgaria has declared is to act towards the phasing out of leaded petrol within the Environmental Action Plan 2000-2006 (Chalakovska pers.comm.). Hence, the Council of Ministers adopted a National Program for gradual ceasing the production and use of leaded petrol. Its aim is to eliminate the production, import and trade with leaded petrol until 2003. Later, this program was followed by the introduction of economic instruments aiming at gradually reducing the use of leaded petrol (MEW 1997). Other measures included in the Action Plan and implemented by 2003 comprise a national system for engines approval; regulation for pollution reduction from motor vehicle waste; national control system for the quality of liquid fuels and national waste management program for treatment of end-of-life motor vehicles (Chalakovska pers.comm.).

In 2005, within the negotiations with EU on free movement of goods, two EU Directives were transposed in the Bulgarian legislation in relation to the type of transport vehicles, their quality and environmental impact as well as the threshold for emissions from transport vehicles and compliance with EURO 4 engine requirements from the EU. Effectively, these regulations do not allow vehicles which emit above the threshold and do not have engine EURO 4 characteristics to enter the market in Bulgaria. Later, the same year the Parliament adopted and ratified a brand new Noise protection act, regulating noise from transport and especially aviation. It is in line with the Directive 2002/49/EC for assessment and management of the noise in the environment.

It appears that in recent years a large number of legislative improvements have taken place and new programs have been adopted at both national and local levels addressing the

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environmental impacts from transport. Of course a major criticism stems from the fact that regulatory instruments come in an explicitly top down manner and do not engage the actors in the transport domain in a proactive initiative for environmental protection and this creating a severe implementation and enforcement problem. Therefore, the need to other instruments is apparent and is discussed in the next section.

6.2 Economic Instruments

Economic instruments for environmental integration became popular in Bulgaria in the 90s. As early as 1993, first instruments for the transport sector were launched such as the additional duty on the import of old cars. The tax is imposed for all motor vehicles, which were registered 10 or more years ago and accounts for 3.8 – 22.8% of the cars' value. The income generated from the imported cars is channelled towards the National Environmental Fund.

In 1994, a differentiated excise between unleaded and leaded petrol was introduced. The Excise Act declared that the excise for leaded petrol is 10% higher than the unleaded fuel excise. This measure is assessed as one of the most successful - the general trend for diminishing the annual concentrations of lead aerosols for the country as a whole continues (EAE 2002a). However, surprisingly, from the fuel excise tax, exemptions for aviation are foreseen.

In 1992, a passenger cars excise was introduced. In 1993, noise pollution non-compliance fees were imposed for acoustic load exceeding a daytime limit of 60db and night time limit of 50db. Additional noise tax on aeroplanes came into force in 1997. Vehicle, vessels and aircraft tax implies taxation on agriculture vehicles, auto cranes with load capacity above 40 tonnes, buses over 22 seats, buses up to 22 seats, construction vehicles, lorries, motorcycles, all types of cars, airplanes, ships. The annual vehicle tax is determined according to the engine power and provides allowance for cars with catalysers (REC 1998). Later in 2000, a fuel road charge was introduced for unleaded petrol, leaded petrol, diesel, liquefied oil gas and other gaseous fuels. It was supplemented by a liquid fuels product charge on unleaded, leaded petrol (A98, A91), and diesel. Regarding road transport a road tax was imposed in 2002, depending on the total weight of the vehicle (Decree on the Vignettes Collection in Bulgaria 2004).

It can be observed a regular increase in the development of economic instruments in the recent years. Most importantly, environmentally related market instruments are earmarked, meaning that the income generated by them is channelled to environmental funds, established to support environmental protection projects. For example, the fines for non-compliance with fuel/air and noise regulations, are earmarked for projects for decreasing pollution from automobile transport. Fuel road charges are allocated for as follows: 30% for construction and maintenance of mountain roads, 30% for construction and maintenance of third category roads and 10% for railways (EEA/OECD Online Database 2005).

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6.3 Educational and Information Programmes

The sustainable development concept has inspired some specialists in the Bulgarian Universities and environmental protection has been incorporated in the academic curriculum. Surprisingly, the first attempts to set up subjects related to sustainable development and environmental protection were initiated in the University of Architecture, Civil Engineering and Geodesy. A TEMPUS project was launched envisaging a separate module on Environment and Sustainability (Prof. Dimitrova pers. comm.), where urban planning and sustainable transportation systems present a significant part of the set of courses. Currently, there is an elective course for sustainable development within the Architecture Program and a compulsory course on Sustainability and Environment within the Urbanism Program. The focus of the courses is to educate experts in the field of sustainable development, urban planning, territory organisation, etc. as well as integrating innovative techniques such as Geographical Information Systems and modelling into urban planning. Unfortunately, such initiatives are absent in other higher education institutions. In general, the problem is the lack of holistic thinking among University managements and the lack of understanding of the need to ensure interdisciplinarity in the education curricula.

With regard to awareness-raising and informational campaigns relevant to transport problems and sustainable development the Bulgarian Ministry of Environment officially joined the EU campaign “22nd September – Car Free Day” in 2002, which grew in the following two years into Car Free Week. The initiative usually involves activities such as closing the centre of the capital city for cars, establishing bike routes, children’s competitions, etc. (MEW web page). The MEW has tried to involve the environmental NGOs in the organisation and in launching this initiative but with varying success. Usually, NGOs organise parallel events on the same day such as bike actions (For the Earth web page). Importantly, due to NGOs’ efforts the initiative was implemented in the city of Stara Zagora as well. However, neither the Ministry nor the Municipalities have a consistent policy for encouraging pedestrianisation in city centres or promotion of cycling lanes.

Chapter VII – The EU Accession Process and EPI in the Transport Sector in Bulgaria

In Bulgaria, as discussed in previous chapters, the EU accession-related obligations appear to constitute the main impetus for moving the environment from the periphery to a more central part of decision-making, or in other words strongly preconditioning environmental policy integration. Although the initial steps towards the sustainable development agenda were triggered by a more global policy context, nowadays in Bulgaria, it is mainly the EU requirements for legislative harmonisation and environmental standards unification that determine the main policy processes and instruments for environmental protection.

In relation to transport matters, it should be acknowledged that the EU influence has had enormous impact on the priority-setting in the entire sector. The main objectives of the

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development of the transport sector are predetermined and entirely in line with the EU's Trans-European Transport Corridors Network (TEN-T), declaring that "the high quality of the transport infrastructure is the backbone of the society and the economy" (EEA 2002c). In an interview with a representative of the Ministry of Transport and Communications responsible for the implementation of national programs and projects, he candidly stated that the Bulgarian national policy for transport development is planned and implemented entirely in the context of the EU TEN-T and the MTC "does not have its own priorities for development" (Mustafov pers. comm.). The interference in the domestic transport policy is so relentless that even the Sectoral Operational Program Transport, is not subordinate to the Strategy for Development of Transport Infrastructure until 2015 but to the National Strategic Referential Framework, which is the overarching policy document in relation to the EU membership and the distribution of the EU funds for regional development. Indeed, this process of external priority setting can imply that national policies are not based on a logical process of sectoral assessment but rather predetermined by external interests. Even if the mission for transport development is supposed to be "ensuring efficient, effective and sustainable transport" (MTC 2004), the main goal is still the integration of Bulgarian transport networks within the EU transport networks, which implies usually the construction of highways, airports and railways. Therefore, all available funding from the EU funds, International Financial Institutions (IFIs) and national budget are allocated for developing and implementation of large transport infrastructure projects. Consequently, the 'big money' never manages to reach public transportation improvements and literally excludes bicycle lanes and pedestrian zones from the viable options for transport development. Furthermore, the mitigation measures foreseen in the EIA reports for the environment within the main infrastructure projects hardly ever take place because the financial resources are already spent or because the implementing bodies lack the capacity to implement them (Kovachev per.comm).

Basically, all strategic documents in the field of transport pursue the objectives of EU integration and the absorption of EU pre-accession and the structural and cohesion funds for transport projects. Rather than strive for sustainable development and inter-sectoral integration, and utilising the EU funds as a means for achieving these goals, the EU funds constitute the goal themselves. From this perspective, the EU accession process could be assessed as a limiting factor for establishing environmental and sustainable transport systems by imposing the Trans-European Transport Network objectives. Another question could be whether Bulgaria would anyway plan to develop environmentally sustainable transport and undertake environmental measures without the EU accession process and its financial support.

At the same time, however, the EU has played the most crucial role in Bulgaria in terms of harmonisation of environmental legislation and imposing higher environmental standards and norms than the ones present in Bulgaria. The EU appears to be the driving force for the adoption of

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strict legislation in terms of phasing out leaded petrol (EAE n.d.). The joint program of the Sofia municipality and the MEW has been launched for the gradual substitution of the public transport buses in Sofia according to EU norms (Engibarov pers. Comm.). A lot of economic instruments were introduced in the legislation in the form of fuel and road charges, etc. due to the EU accession requirements. Many educational programs and awareness-raising campaigns took place.

In this respect, EU accession process appears to be the most influential factor for steering towards environmental policy integration. The adoption of various environmental policy instruments is an explicit merit of the EU accession obligations, which provides opportunities for even further measures for environmental protection in terms of transport. It is the EU accession process which has facilitated the transfer of know how and capacity as well as involving input from various stakeholders, aimed at improving the quality of decision-making in the transport and environmental sectors.

The EU seems to be an important factor in Bulgaria not only by pushing for the introduction of policy measures as EPI output, but also regarding EPI as a process. The EU has been performing strict monitoring and control over transport and environment related activities. NGOs even claim that the external EU control over national authorities' activities is vital for democratic and participatory decision-making regarding transport and environmental issues. However, they also claim that whereas a requirement for internalisation of the environmental objectives into the transport sector and stringent monitoring of environmental legislation compliance by the EU were in place so far, they would be put at risk after the accession becomes reality (Kovachev pers. comm.). Then the EU's control on and interference in domestic policy-making would diminish and further EPI in transport sector in Bulgaria might not be very likely to happen.

Essentially, transparency and public participation in transport projects and programmes have been major principles compulsory during the EU accession process. The availability of public documents and broad representation of various stakeholders in the transport policy process have been a must although sometimes not very successfully implemented as discussed earlier. Also, in terms of legally binding provisions the regulations on SEA and EIA over transport plans, programmes and projects strictly follow EU Directives – SEA Directive and EIA Directive 85/337/EEC, amended by EIA Directive 97/11/EC. SEA and EIA constitute main tools for transparency of and participation in the planning of a policy process and for environmental policy integration in the transport sector.

Interestingly, regardless most fundamental theories of EPI all positive trends towards EPI in Bulgaria are not due to internal factors but due to external factors, such as the EU accession process. It can be assumed that in countries like Bulgaria, which experience quite harsh transition period towards market economy and strive to achieve fast economic growth and increased living standard, environmental protection remains comparatively low in the political agenda. Importantly,

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EU appears to have substantial influence on the EPI both as a policy process and as an output. EPI theories are usually based on Western European experience and practice and they emphasize the importance of internal factors such as political leadership and commitment and policy-making rules as crucial for achieving EPI. In Bulgaria, in the transport sector there is relatively little political commitment and leadership not only within the studied sector but also at a higher political level. This fact presents one of the major obstacles for EPI in Bulgaria. Therefore, it can be assumed that the external factor (EU accession process) has pre-conditioned attaining EPI in the transport sector in Bulgaria rather than any internal factor. Moreover, internal factors such as institutional set up and public involvement again emerge from EU related requirements of the accession.

In conclusion, apparently the transport policy-making is far from being a domestic policy process as the EU has a significant role in influencing national priorities in line with the Trans-European Transport Corridors, which might turn out to be deterring the development of more sustainable transportation modes. Nevertheless, the EU can be simultaneously considered as a major factor for attaining EPI - not only as a policy process but also as concrete output.

Chapter VIII - Conclusions and Recommendations

This paper was inspired by the challenge of addressing environmental problems stemming from the transport sector, which is believed to be a serious contributor to environmental pollution and damage. Hence, I was stirred to study the environmental policy integration as a policy process and an output and to investigate the main factors and obstacles for attaining EPI in the transport sector in Bulgaria. Essentially, this paper is grounded on the existing EPI theories, which appear to be challenged by the Bulgarian reality.

Studying the EPI as a policy process required the examination of the following fundamental factors: clearly defined concept of sustainable development, political commitment within the sector management, institutional mechanisms to steer integration, stakeholder involvement and knowledge management in the policy-shaping. All of them appear to suffer from serious deficiencies.

In Bulgaria there is no clearly defined and communicated concept for sustainable development and no understanding of the need for and the benefits of sectoral environmental policy integration. The lack of a comprehensive National Sustainable Development Strategy, constituting the fundamental policy framework at national level, pre-supposes a lack of long-term political vision towards sustainability and EPI. Although sustainable development has been embraced successfully in the political rhetoric and has obtained certain 'popularity', the ways it is operationalised are left to the interpretation of the sectoral administration.

An essential obstacle to attaining EPI in the transport sector in Bulgaria is due to the lack of political commitment within the sector towards environmental protection. In countries in transition

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like Bulgaria, the transport is still considered a major driving force for economic growth. Hence, the clash of interests between transport demand and environmental protection escalates and given the lack of political commitment a ‘win-win’ situation in terms of integrated policies is not very likely to be reached.

Furthermore, such a situation strongly determines the national transport policy to be reactive rather than proactive. The main policy approach undertaken is not how to minimise traffic but how to respond to increasing traffic. It is not based on objective and critical assessment of the transport problems and the needs of the transport sector but guided by what the EU funds provide funding for. Environmental protection is ensured only by the requirements of the environmental legislation and the performance of EIA, which transport authorities are obliged to comply with, under the stringent monitoring of the EU. Therefore, EPI implies mainly deploying various environmental policy instruments, which appear to simply be ‘fixing’ the transport policy rather than promoting sustainable transport alternatives.

Regarding institutional mechanisms to steer integration within the transport sector, there are some attempts to ensure a more open and flexible mechanisms based on the principle of the working groups, involving the participation of all interested stakeholders. A platform for co-operation, however, seems to be very difficult to set up due to the fact that all main stakeholders studied in this paper – the authorities, NGOs and academia – accuse one another of a lack of capacities, objectivity and willingness to co-operate. Hence, a partnership based on mistrust and suspicion is not likely to be effective, which consequently can influence the EPI process quite negatively.

There appear to be many obstacles to achieving effective stakeholder involvement for incorporating environmental objectives in the transport sector and therefore the input from environmental NGOs, who were studied in this paper, can be assessed as poor. Despite public participation is well embedded in the existing legislation on EIA and SEA, which strictly follows the EU regulations, there are no clear guidelines on how practically public participation should take place. On the other hand, public participation usually takes place in the form of ‘post-implementation’ schemes, which prevents any input during planning and implementation of policies and projects. Therefore, environmental NGOs have developed their own initiatives and campaigns to voice out local concerns and influence national decision-making via organizing alternative public consultations or report for violation to the EU or international conventions.

Despite of the weak EPI as a policy process, EPI as a policy output, i.e. the introduction of environmental policy instruments, seems to be more effective. Operationalization of environmental objectives into concrete measures – regulations, economic incentive and information and education projects – can be assessed as more effectively contributing to the attainment of EPI. Most of these instruments are soundly embedded in the existing legislation and authorities are obliged to comply

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with these legislative provisions. Moreover, the introduction and evolving of these policy instruments is a continuous process and it can be assumed that this process will continue in the future especially in the context of EU membership. Interestingly, the EU influence on the national transport policies can be considered to be two-fold. Transport policies appear to be highly in line with by the EU integration and specifically with the development of the Trans-European Transport Corridors. Hence, national transport priorities are bound strongly to the construction of large scale infrastructure network, entailing five major transport corridors to pass through the territory of Bulgaria. On the other hand, environmental integration is recognised as a guiding principle in policy-making mainly by the pressure from EU. The requirements for environmental legislation harmonisation, standards unification and the introduction of various environmental policy instruments are a must within the accession and the EU performs a stringent monitoring for violations. Moreover, it is the EU to call for the implementation of good governance principles in the policy process such as transparency, co-operation, improved public participation and knowledge management.

In conclusion, this paper suggests that EPI in the transport sector is a rather weak process but a relatively effective as an output meaning the introduction of various policy instruments. The main factor for EPI appears to be external – the EU accession process, whereas internal factors at national level prove to be rather weak. Hereby, I would suggest some policy recommendations regarding the environmental policy integration as a process and as an output in the transport sector in Bulgaria.

The National Commission on Sustainable Development should be assembled as soon as possible and it should start functioning and delivering results actively towards its initially determined goals. It should start acting as a ‘catalyst’ for sustainable development hence facilitating EPI. Its explicit task should be the development of a National Sustainable Development Strategy. Additionally, it should set up a platform for co-operation and partnership among various stakeholders in the policy process within the sector and develop mechanisms to ensure that feedback from the public is incorporated into decision-making.

National transport policies should be revised in order to promote environmentally friendly modes of transport – rail, public transportation and inter-modal developments. Public expenditures and foreign investments should be pledged according to the sectoral needs with an emphasis more on railways, public transportation as well as bicycle infrastructure and pedestrianization initiatives. Spatial planning and land use policies should be incorporated into transport policies ensuring further environmental policy integration.

Regarding the policy process environmental NGOs should also be actively involved not only in the monitoring activities but also in the planning and implementation of policies and projects. Partnership should be established in order to build capacity of the stakeholder to

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participate constructively or in order to compensate for limited capacity of the authorities during the implementation of policies. This can be a successful way of building trust among authorities and NGO. A further input from the academic community should be constantly pursued and a more critical and innovative perspectives towards transport policy-making should be encouraged.

Training and seminars are an established way of building capacity. For creating further incentive for authorities to develop into modern, open, transparent and co-operative public administration, training programs should take place but officials should be regularly examined and go through evaluation procedures. The fundamental goal in conducting training should not only be capacity building but also enhancing change in the administrative culture.

Environmental policy instruments should continue evolving in the transport sector, meaning improved application of market-based instruments, adoption of voluntary schemes and environmental indicators. More progressive measures such as carbon taxes, targeting global warming and parking charges must be levied. Tradable permits in the form of vehicle retirement strategies, for instance, should take place. No subsidies for polluting modes of transport should be pledged from national or internal sources.

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