

## DECISION ON SUSTAINABLE DEVELOPMENT

[CEMT/CM(2000)1/FINAL]

### Ministers are asked:

- To note the background reports and summaries on:
  - The Joint ECMT-ACEA-OICA Conference: Smart CO2 Reductions;
  - Quantifying CO2 Abatement Policies;
  - Vehicle Emission Trends;
  - Assessing the Benefits of Transport;
  - Strategic Environmental Assessment for Transport;
  - Short Sea Shipping;
  - Safety in Road Traffic for Vulnerable Users.
  
- To note the substantial progress being made in a number of areas, and reported in this paper.
  - To recognise that there remain important problems and challenges:
    - Unsustainable rates of traffic growth, locally or at regional or international scales;
    - Severe noise, severance and intimidation nuisances from traffic in built up areas;
    - Persistent growth in emissions of greenhouse gases from transport;
    - Poor air quality in specific locations despite substantial progress in vehicle emissions controls;
    - Destruction and fragmentation of protected landscapes and habitats.
  - To note that many sustainability issues can only be resolved if decisions affecting access to jobs, to housing, to goods and services and for business and industry, are taken in an integrated manner across the sectoral divisions of the different administrations concerned.
  
- To accept this implies that:
  - Transport Ministers need a stronger voice in land use planning decisions and other areas such as housing and regional development policy if unsustainable traffic generation is to be avoided;
  - Transport Ministers will have to play an increasingly significant role in shaping fiscal policy where it affects transport prices in order that cost effective economic instruments can be used effectively.

- A more coherent policy is required towards the pricing and financing of transport infrastructure, based on the public benefits of transport infrastructure and the external costs of its use. To this end, public spending decisions on proposed investments should be based more clearly on the results of socio-economic assessments undertaken by transport and environment authorities.
- In return, this requires that economic assessment procedures are improved to take full account of distortions in transport markets and identify clearly how benefits are expected to accrue to target beneficiaries. It also requires that environmental assessments adequately cover strategic issues.
- To agree, in summary, that they need to take a more proactive lead in achieving sustainable development. Integration of transport and environment policy is essential to sustainable development and it is a two way process. Transport ministries cannot make their full contribution unless they have a strong voice in the traffic and mobility impacts of decisions taken outside their sector.
- To confirm the importance attached to pursuing work in ECMT on the development of more sustainable transport policies with particular attention to:
  - integrating transport policies with policies in other sectors;
  - reducing greenhouse gas emissions in the transport sector;
  - managing environmental impacts in the newer Member countries;
  - and improving decision making procedures in relation to infrastructure investments.

## SUSTAINABLE TRANSPORT POLICIES

*Maximising present and future welfare*

The objective of sustainable development is to maximise welfare, and provide a sound economic, social and environmental base for both present and future generations<sup>1</sup>. This paper identifies key issues for transport policy over the medium and longer terms and reviews progress to date towards the development of more sustainable transport policies, following up on the Comprehensive Resolution on Transport and the Environment of 1989 and other recommendations and resolutions agreed since then<sup>2</sup>.

### 1. Key Policy Issues

The development of sustainable transport policies implies reconciling environmental, social and economic objectives and will require further improvements on a wide range of fronts for inland transport.

*Accidents*

Death and injury from accidents are the most important issue in making transport systems more sustainable. Current rates of death and injury from road accidents are regarded as far from acceptable by Governments even in countries at the forefront of road safety performance. Accident rates in other modes, though much lower are still not regarded as acceptable. However, policy responses are not addressed in this report as road safety is the subject of a considerable volume of ECMT work in its own right.

Excluding accidents, the key issues for current policy making can be summarised as follows.

*Wealth creation*

– Transport is a fundamental element in the creation of wealth. Improving access to markets for jobs, housing, goods and services is essential to realising the goals of European economic integration across the continent. Facilitating the free movement of people in Europe is important for the social as well as the economic dimension of integration. Infrastructure investments are not always the most efficient route to improving access, but unnecessary delays in commencing work on valid projects as a result of poorly co-ordinated tests of economic utility, financial viability and environmental acceptability are increasingly perceived to be a barrier to integration and economic renewal.

*Access*

– All citizens should benefit from the access transport services provide in a reasonably equitable manner. This implies avoiding excessive dependence on private automobiles if certain sections of society are not to be excluded.

- Traffic growth* – Recent rates of road traffic growth are widely viewed as unsustainable in many countries. Failure to integrate land use planning sufficiently with transport policy has in many places been the cause of traffic demand that is difficult to manage. A certain degree of congestion should be expected on optimally dimensioned roads but it is unacceptably severe in some locations and at some times in many Member countries.
- In many sensitive areas it is no longer possible to construct new infrastructure for reasons of noise, space or the existing impact of heavy traffic. On some trade routes through mountain valleys only very limited further growth in road traffic is acceptable and new traffic will have to be carried by other modes, with consequent heavy investments in rail infrastructure in some cases.
- Intimidation* – The severance, nuisance and intimidation effects of road traffic for pedestrians and other non-motorised pavement and road users in built environments are in many places severe.
- Nature* – The costs attributed by the public to impacts of transport infrastructure investments on landscapes and biodiversity are rising.
- Noise* – Noise, from road use and from rail freight, in urban areas and in mountain valleys, is a major and growing problem. It frequently ranks top of the environmental issues of concern in household surveys. It is also important to conserve existing areas of quiet and limit the fragmentation that can result from the construction of new infrastructure.
- CO<sub>2</sub>* – Most Member countries have still to identify, in quantitative terms, measures for the transport sector that will make a sufficient contribution to meeting the economy-wide targets set under the 1997 UN Kyoto Protocol on reducing emissions of CO<sub>2</sub>.
- Air quality* – In many countries there have been striking improvements in the emissions of air pollutants from new vehicles over the last decade and two further rounds of significant cuts have been agreed in the EU in respect of CO, NO<sub>x</sub>, hydrocarbons, particulate matter and benzene. Important work in this direction is also undertaken by the UN/ECE Inland Transport Committee.
- However, at least for the medium term, air quality with respect to NO<sub>x</sub>, ozone and particulate concentrations remains a problem in many locations at a local and sometimes regional scale. The influence of prevailing weather patterns and topography, as well as traffic conditions, make the nature of air quality concerns specific to location.
- In most transition economies, developing strategies to reduce CO, hydrocarbon, NO<sub>x</sub> and particulate emissions from both new and existing vehicles remains a challenge. Air quality is deteriorating in many cities in these countries, with rapid growth in the car fleet through the addition of used and new vehicles with poor environmental performance.
- Enforcement* – Ineffective enforcement of existing regulations, e.g. parking regulations and vehicle inspections, exacerbates some of the above issues. This is the result of either insufficient resources being allocated to enforcement or to inappropriate design of regulations. In many cases improving the design or enforcement of existing regulations should be addressed before introducing additional measures.

## 2. Progress

The Council's comprehensive Resolution on Transport and the Environment of 1989 (No. 66) makes recommendations on all of these issues, many of which remain highly relevant. Progress in areas covered by the resolution is reported here.

### *Vehicle emissions controls*

#### *Euro 3 & 4 standards and the Auto oil programme*

In relation to vehicle emissions controls, the Council recommended that best available technology be applied to the maximum extent practically possible at acceptable cost. In the intervening period, four rounds of negotiations have cut EU emissions limits for new vehicles very substantially and the UN/ECE is following a similar course in developing emissions regulations under the 1958 Geneva Agreement. The joint Auto-oil programme of the European Commission, ACEA and EUROPIA has defined what is practically possible and what constitutes acceptable costs on the basis of cost effectiveness over a series of time horizons. The European Parliament played a key role in the process of negotiations required to reach a consensus acceptable to the public.

The work continues under Auto-oil II, as technological development of anti-pollution techniques progresses and modelling of the impact of emissions on health and the environment improves. Results of the Auto-oil programme have been applied in recent rounds of EU emissions regulations for both light and heavy-duty vehicles.

#### *Eco trucks under ECMT multilateral quota*

The ECMT multilateral quota has been regularly updated to provide continuing incentives for the use of the cleanest trucks available in step with changes in future emissions regulations through the green quotas. An extension, preparing the way for incorporation of Euro 3 and 4 standards, is to be tabled in the 2000 Prague Council.

#### *Emission limits, tests & inspection under UN agreements*

The 1997 UN/ECE Vienna conference on transport and the environment provided for EU and UN/ECE emissions limits and technical inspection procedures to be applied to all international truck and car traffic through the Agreement Concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections. ECMT Member Governments that have not yet done so are urged to ratify the agreement.

The 1998 UN/ECE Global Agreement provides for the development of harmonised world wide vehicle and testing procedures, including in respect of environmental emissions. Preparations for world wide emissions certification for truck engines are planned to be completed between 2005 and 2008.

#### *Phase out of leaded petrol*

The Council's recommendations on fuels have also been addressed, by Auto-oil I and through the phase out of leaded petrol recited in ECMT Resolution 99/6 and implemented, in particular, by EU Directive 98/70/EC and observance of the 1998 UN/ECE Declaration on the Phase out of Added Lead in Petrol.

### ***Greenhouse gas emissions***

*ECMT & EU  
voluntary  
agreements*

Council recommendations on global pollution issues were followed up by the 1995 ECMT Joint Declaration with ACEA and OICA on the reduction of CO<sub>2</sub> emissions from new cars which agreed on significant and continuous improvements in fuel efficiency. The subsequent ACEA voluntary agreement concluded with the European Commission quantifies the industry's commitment with targets. Monitoring under the ECMT agreement suggests that the trend in average emissions from new passenger cars is currently on course to meet the target of 140g of CO<sub>2</sub> per km in 2008 (a 25% reduction compared to 1995). This represents much the largest contribution in the transport sector to measures taken so far towards meeting the commitments to reduce CO<sub>2</sub> emissions made under the 1997 UN Kyoto protocol.

### ***Efficiency and traffic management***

*ECMT  
Resolution on  
internalisation*

In relation to the Council's recommendations on traffic management which underlined the importance of improving the efficiency and commercial organisation of transport, gradual progress has been made. Specifically, a Resolution on the Policy Approach to Internalising the External Costs of Transport was adopted in 1998. This was followed up by a report establishing a methodology for making international comparisons of transport charges and taxes and recommendations on efficient transport taxation and a draft resolution to be considered at the 2000 Prague Council.

Policy approaches towards travel in urban areas remains particularly challenging and now focus on the necessity of integrated strategies that combine urban land use and transport planning, improvement of public transport systems and pricing measures. This integrated policy approach requires more effective horizontal and vertical coordination between policy institutions and implementing bodies accustomed to working somewhat independently. Achieving a sufficient degree of integration has been difficult in practice and slowed the implementation of widely accepted principles for sustainability in urban travel such as those set out jointly in 1995 by ECMT and the OECD<sup>3</sup>.

### ***Infrastructure investments***

*Strategic  
environmental  
assessment for  
TENs and  
TINA*

In relation to infrastructure, Council called for better environmental assessment, better public consultation and better assessment of infrastructure needs. In 1997, the Council made recommendations on strategic environmental assessment and took up the issue again in 1999/2000 with a report and recommendations that highlight, inter alia, the need for SEA of corridors in central and eastern Europe where TINA projects are located and also further east in the New Independent States. Assessing infrastructure needs is a regular ECMT exercise and recommendations on assessing the benefits of transport were also prepared in 2000. On better public consultation, the 1998 UN Aarhus Declaration on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters is the seminal policy statement.

### *UN and EU transport and environment policy statements*

In October 1999, the EU Council agreed a Strategy on the integration of environment and sustainable development into transport policy; in June 1999 Ministers from 51 European countries adopted the WHO Charter on Transport, Environment and Health; and in 1997 transport and environment Ministers adopted the UN/ECE Declaration on Transport and the Environment. These three recent international declarations cover many of the areas of concern identified above.

#### *EU strategy*

The EU Strategy states that long term environmental concerns should play a role equal to other concerns, such as economic and social factors, when formulating future transport policy. Notably, the EU Council called on Member States to develop integrated strategies to promote sustainable development, leading where necessary to co-ordinated measures.

### **3. Policy Objectives**

The challenge of developing transport policies for sustainable development is to orient the sector towards a compromise that maximises the economic and social benefits of transport and minimises associated environmental, social and economic costs. Many of the measures required to achieve this balance are not new, the main difficulty is effective implementation.

#### *Efficiency*

##### *Combine regulation, pricing & better service quality*

The most efficient approach to achieving sustainable development of the transport sector requires a combination of regulatory instruments (particularly for vehicle emissions) and restructuring of charges and taxes on the basis of marginal costs (including external costs) to provide incentives to reduce external costs to optimal levels. It often also requires improvement of the quality of transport, especially rail services (ensuring reliability and complete logistic services) and promotion of inter-modal services. Failure to structure charges efficiently will make the use of other tools much less cost effective.

##### *Restructure charges & taxes*

Initially the structure of charges is more important than the precise level. It should be noted that efficient prices do not generally coincide with coverage of total infrastructure costs (for example in railways efficient prices will in many cases leave substantial uncovered infrastructure costs; and for urban roads efficient prices will raise revenues substantially above capital infrastructure costs). In this context it has to be acknowledged that efficiency is not the only political consideration in setting the level of charges, and budgetary pressures at times result in increasing charges above marginal social cost levels. Moreover, full cost coverage is viewed as an important principle in some countries.

*Electronic t-km charges for trucks are now possible*

Technological advance has brought down costs and opened opportunities for introducing charges closely linked to the incidence of external costs. This now appears feasible for heavy goods vehicles and an electronic km charge could be introduced to replace part of existing fuel charges and annual vehicle taxes, as for example will the new Swiss Heavy Vehicle Fee which will enter into force in 2001. Recent restructuring of the Eurovignette in 6 Member countries to provide environmental incentives is consistent with Resolution 98/1 on the policy approach to internalising the external costs of transport. Dissatisfaction with the current system in some participating countries presents an opportunity to replace it with an international system of electronic t-km charges. Other countries could join such a new truck charging system rather than increasing existing fuel charges and fixed taxes.

*Three point strategy*

More generally, a number of Member countries have adopted a three part strategy for improving the incentives produced by charges levied on all vehicles: shifting the emphasis from fixed to variable charges; introducing relatively simple systems of use charges; and differentiating both fixed and use charges.

### ***Congestion***

*Adjusting expectations*

To some extent congestion is a form of rationing that reflects the absence of a pricing mechanism for road space. In some places chronic congestion is the result of under-investment in road capacity over a prolonged period. Frequently it results from a failure to integrate land-use and transport planning. To some extent, however, concern with congestion reflects unrealistic expectations that free-flow conditions should be the norm — optimally dimensioned infrastructure will inevitably be congested at peak periods of use. The utility of even crowded transport infrastructure is such that net benefits remain positive, even when quite extended periods of congestion are encountered. A better understanding of the way economic benefits get transferred from direct users of infrastructure to their employers, customers and other economic agents is required.

Congestion pricing can certainly improve traffic flows on inter-urban trunk roads and its potential for managing congestion in urban areas needs to be assessed through trials in pilot cities. Better integration of land-use and transport planning is the underlying imperative for the longer term.

### ***Urban travel***

#### ***Integrating land use planning and traffic management***

Current best practice in local planning and traffic management policies is an appropriate target for all Member countries in many areas of urban traffic management, for example in addressing the severance and nuisance effects of road traffic. In the ongoing joint ECMT/OECD work, it is becoming clear that although progress is slow, a majority of cities experiencing chronic congestion and air quality problems are introducing measures to improve the efficiency of urban travel. Much is being done to enhance public transport solutions, for example improving service quality and integrating public transport networks into a more individualised “door-to-door” approach to urban mobility. It is widely accepted, however, that public transport cannot solve the problem alone and complementary pricing measures (including for parking) are essential as an incentive for more optimal use of private cars. Recent European research and the experience with planning guidelines of several countries, including the Netherlands (where the “ABC” guidelines direct developments to different sites according to their public and private transport impacts and needs), has highlighted the importance of coherence between policy towards the development of urban planning, public transport and parking.

### ***Greenhouse gas emissions***

#### ***Quantify cuts in CO<sub>2</sub> emissions***

To ensure cost-effective CO<sub>2</sub> emissions reductions, the measures applied to the transport sector should be determined on the basis of a cross-sectoral analysis of possible measures. The first step in the transport sector is to accurately quantify the emissions reductions expected from national and multilateral measures already taken and proposed. Reference to a robust base case scenario for emissions projections is important. The process is underway in most Member countries, but not complete in any as yet.

#### ***Smart emissions reductions***

To complement the ACEA voluntary agreement on emissions from new cars, efforts to influence driving styles and ensure adequate maintenance of vehicles are likely to be most rewarding in the short term. Economic instruments will be important both in providing incentives for accelerating the uptake of more fuel efficient vehicles and in managing demand. Improved traffic management has made a significant contribution in a number of cities (e.g. Turin) particularly through integrated measures to improve information in real time on congestion and information on bus arrival times (a key factor in quality of service).

#### ***Voluntary agreement for light goods vehicles?***

For the longer term complementary progress in improving the fuel efficiency of commercial vehicles, especially the lighter vehicles, is required and a further voluntary agreement could be appropriate. Cost sensitivity and the modularity of vehicle models complicates the issue for heavy goods vehicles where improved driver behaviour and advances in logistics and information technology appear to offer the greatest potential for emissions reductions.

The outlook for CO<sub>2</sub> emissions trends suggests some stabilisation in emissions from passenger cars whilst emissions from trucks and air transport continue to grow, truck emissions overtaking car emissions in the near future. This suggests efforts should now focus on measures to deliver emissions reductions in these fast growing sub-sectors.

*More support for advanced technology*

Technological advance is a key part of all strategies to reduce emissions. There is therefore a role for efficiently targeted public support for research and development in improved engine and vehicle technology and design. Some joint research with industry is being funded under the current research programme of the European Community and there is scope to expand the co-operation at both national and international levels.

Government measures are required both to sustain technological development, notably towards low emissions vehicles, and to moderate transport demand. In this latter respect the measures already discussed in relation to land use planning, inter-modal transport and improving urban mass transport are important.

*Smart measures — immediate gains*

Because of the relatively long time frame for many measures to achieve their full potential, it is necessary to make an early start in order to achieve the CO<sub>2</sub> emissions reductions required. This underlines the importance of non-product measures (for example changing driver behaviour, improving vehicle inspection and maintenance programmes, raising tyre pressures) which have an impact on existing vehicles in use and have at least as great a potential as improvements to vehicle design.

A coherent regulatory framework is required to avoid obstacles to the commercialisation of technological advances. This sometimes requires explicit trade-offs between incompatible regulatory pressures. Fuel quality is an important part of this equation. It also requires a degree of uniformity in the regulations and incentives introduced across Europe in order to achieve economies of scale, for example in the development of the use of alternative fuels.

#### *Air quality*

*Inspection & maintenance*

Measures to improve maintenance of existing vehicles and accelerate uptake of low emission vehicles are required if current advances in vehicle technology and emissions regulations are to have an impact on air quality in the short to medium term, in all Member countries. The remarks made in the previous section on driver behaviour and other non-product measures also apply.

*Success in cutting the mass and number of particles emitted?*

An assessment of the impact of the particulate emission limits planned to enter into force will be important in determining what further measures, if any, should be envisaged. Particle traps, recently commercialised on some diesel cars and on trucks, are expected to cut not only the mass of particles but also the number of particles emitted, reducing emissions to levels comparable with petrol engines. It appears, however, that some cars might be able to respect EU Euro 4 emissions regulations applicable from 2005 without the use of particle filters. If filters are not widely employed, further regulation of particulate emissions may be required, subject to the results of research into the health impacts, including cancer risks, of ultra-fine particles.

In the longer term, as a result of progress in reducing emissions from passenger cars and commercial vehicles, emissions from other kinds of vehicles (e.g. aircraft, diesel locomotives, motorbikes, agricultural and industrial vehicles) will become increasingly significant and attention should shift to these sources.

*New member countries — old problems*

In the newer Member countries additional measures to reduce emissions from new and existing vehicles are required. This includes developing and enforcing tighter emissions standards — based on the two latest rounds of EU emissions limits in order to avoid creating barriers in the international market for vehicles. For some of the major cities, introduction of measures to retrofit existing vehicles with pollution control devices and promote the use of alternative fuels needs to be considered, taking account of expected cost-effectiveness. Improving fuel quality will probably be an important part of strategies in these countries.

### *Noise*

*Integrated measures*

Traffic from aircraft and on arterial roads can cause severe noise stress in homes, offices and schools etc. in their vicinity. Where noise exposure guidelines exist, exceedence tends to be widespread and frequent. Noise from rail operations, freight wagon brakes in particular, is not such a widespread problem but nevertheless significant and night-time noise restrictions can be a barrier to efficient use of the railways. Tackling problems of road and rail freight traffic noise will require a combination of measures to influence traffic, invest in noise barriers and reduce noise emissions at source. At the other end of the noise nuisance spectrum, quiet in recreational areas are increasingly compromised both in urban areas and in rural areas traversed by trunk roads.

*Protect quiet spaces*

### *Impacts of investments on landscapes and biodiversity*

As the territorial extent of transport networks grows, more money will inevitably have to be spent on mitigation, more attention given to alternatives to construction and better procedures developed for public consultation (as set out in the 1998 UN/ECE Aarhus Declaration). The conclusions on strategic environmental assessment developed below are relevant here.

## **4. Decision Making**

*The real issue*

During the last Council debate on environmental issues in 1997, the Dutch Minister underlined that despite the major environmental costs of transport, the benefits are large and the real issue is in making decisions that achieve the greatest benefits while minimising the costs. How this balance is reached in making decisions on transport projects, and also policies, is critical to making the transport system sustainable in practice.

### *Evaluating transport policies and projects*

*Accounting for market distortions*

Recent work<sup>4</sup> underlines the importance of good cost benefit analysis (CBA) to making sustainable investment and policy decisions. It also provides a framework for arriving at reliable results in the face of market failures that are widespread in transport, overcoming weaknesses in traditional CBA that has undermined its use in many countries. The framework identifies the economic circumstances in which additional analysis is appropriate according to the degree to which there is distortion in a) transport prices and b) the prices of products on the market:

- Where distortions are minor, good traditional CBA is adequate to capture all economic benefits flowing from the decision to invest. There are no significant additional economic benefits (e.g. from regional development) beyond those captured by the analysis.

- Where prices are distorted there will be additional benefits *and costs* to consider.
- But where *transport* prices are distorted, it will be appropriate to correct transport prices rather than shape investment decisions on the basis of inefficient pricing.

*Who benefits in the end?*

The distributional aspects of the benefits from investments are likely to be of overriding political importance, particularly in respect to regional development policy. Over time the beneficiaries of an investment change as, for example, companies relocate to extract the best advantage from the expansion of a road network. The ability of the economy to shift benefits to those who value them most in monetary terms may indeed make the original target beneficiaries worse off, once the economy fully adjusts to the new piece of infrastructure. Reliable analysis of the way benefits are expected to be realised, and the way they are expected to be captured and redistributed over time, should therefore be included as a priority in any cost benefit assessment. The way some of the initial time-savings get replaced by other, financial forms of benefit are particularly important, especially where an investment is designed to relieve congestion.

*The right balance in public investment expenditure*

The relation of project assessment to government spending decisions is of crucial importance. Transport projects that have passed a full CBA and satisfy environmental and legal conditions are not always implemented. This is often because they are believed to ‘crowd out’ private investments. There is a problem in that financial assessment tests differ between private and public sectors, making direct comparison of value for money difficult. The appropriate test for public spending is whether the calculated return on investment exceeds its cost by more than the opportunity cost of public funds. This might be measured by the long term bond rate, including a weighting if higher public expenditure would affect this rate. A project that passes this test would then be justified. Such a decision rule was employed in France (using an opportunity cost rate of 8%) for most of the 1990s. The rule has important implications for marginal social cost pricing in transport, demonstrating that its revenues arise as part of a consistent set of economic instruments and not as a result of under-investment. Further research to build consensus internationally should be encouraged in this field.

### ***Strategic environmental assessment***

Environmental impact assessments are an essential component of the process of making decisions on infrastructure investments. Shortcomings in this discipline have become apparent in relation to impacts that go beyond the scope of projects in isolation. Strategic environmental assessment (SEA) has emerged in response to address large scale effects including:

- impacts on traffic on the network beyond the geographical confines of the project assessment;
- regional and global environmental impacts including acidification, stratospheric ozone, climate change and biodiversity;
- and the environmental impacts of policy decisions.

*Decision tool*

Recent work in ECMT highlights four key routes to maximising the effectiveness of this new tool:

- link SEA clearly to the planning process leading to an investment decision and begin it early;

- keep the output of SEAs simple and to the point, to maximise the impact on decision-makers;
- the only way to develop effective SEA methodologies and procedures is through practice;
- in the newer Member countries, SEAs along pan-European corridors, for example undertaken in conjunction with the TINA programme, are a priority.

*Do it without delay*

The aim of procedures for SEA is to improve the decision making process by addressing fundamental environmental issues early in the planning process. When successful this should streamline decision making and eliminate unnecessary delays, rather than creating new barriers to implementation of successful projects.

## **5. Implementation**

Implementation of the measures to achieve the policy objectives set out above is sometimes slow or politically difficult. Better understanding of how implementation can best be carried out and how barriers to the introduction of the appropriate measures can be overcome is important. A number of lessons emerge from ongoing work on implementing sustainable urban travel policies.

*Consult with the public*

Consultation with the public and with interest groups is extremely important, not only in preparing proposals for infrastructure projects but also in introducing traffic management, pricing and other policy initiatives. Effective consultation requires time and resources but without it the risk of failure or prolonged delay close to planned implementation is exacerbated.

*Work with the press*

It is vital to win popular and political support. This can make the introduction of measures better understood and accepted. It requires communication, campaigning with local or affected groups, mobilising support from groups who benefit as distinct from the rather natural mobilisation from groups who think they will not. The role of the media is crucial and it is necessary to work with the media to ensure balanced coverage. Proof by example, through well publicised pilot projects, can also be a powerful tool.

*Build support*

The sequencing of measures can in some circumstances be planned to foster acceptance where a package of measures includes some that will be seen as positive and others as negative by certain interest groups. In a special case of this general principle, earmarking of revenues from new charging schemes to investment in improved transport services has also been used with success in some instances. Earmarking revenues to provide for the reduction of taxes elsewhere (inside or outside the sector) could probably be used to similar effect.

*Enforce properly*

Effective enforcement is an essential part of implementation. Where enforcement proves problematic, modification of the regulation, charge, etc. to render enforcement easier may be appropriate but technological advance is increasing the opportunities for automatic enforcement of the law, for example with the existing use of speed governors on trucks and likely development of satellite tracking applications for pricing and possibly regulatory controls.

## **6. Enhanced Role for Transport Ministers**

*Taking a more proactive lead*

External pressure for improved environmental protection has, over the decade since the Council's Comprehensive Resolution on Transport and the Environment, resulted in improved planning and regulation of the transport sector.

Meeting the challenge of developing sustainable transport policies is now going to require a proactive lead from Transport Ministers. The emphasis will be on integrating sectoral policies, as emphasised for example in the 1998 EU Amsterdam Treaty. Integration of transport and environment policy is a two way process and transport Ministries cannot make their full contribution to sustainability unless the traffic and mobility impacts of decisions taken outside the sector are given adequate consideration. Transport Ministers thus will have a significant role in shaping fiscal policy where it affects transport prices. Transport Ministers also need a stronger voice in land use planning decisions if unsustainable traffic generation is to be avoided and similarly in other areas such as housing and regional development policy traditionally the responsibility of environment and other Ministers.

*Integration is a two-way process*

To achieve better policy integration, initiatives are particularly recommended in the following specific areas:

- Transport Ministers should advise Finance Ministers on ways charges and taxes for the use of transport infrastructure can be developed to improve the efficiency of the transport sector. This should be done both in the national context and in international institutions such as the ECMT to ensure coherent developments in this field across the continent;
- In making economic assessments of potential investments in transport infrastructure, transport and infrastructure ministries should take full account of distortions in transport prices. Assessments should also identify clearly how benefits are expected to accrue to target beneficiaries and take account of the way these benefits are likely to be captured by other economic groups over time, for example through changes in behaviour and in the location of industry. In seeking public funds for projects that have passed stringent cost benefit analysis and environmental evaluations, more weight should be given to objective tests of financial returns as opposed to arbitrary spending limits.
- Transport Ministers should seek to establish joint consultative procedures with planning authorities at local level and Environment, Housing, Public Works and Regional Development Ministers at a national level, to subject transport projects to environmental impact assessments and land use plans to assessments of transport impact.

*Intelligent management*

In the long term transport ministries will increasingly see a change in emphasis in their role and will be seen less as a simple provider of transport infrastructure and more as responsible for the intelligent management of the transport system as an integrated whole.

## NOTES

1. Sustainable Development: A Renewed Effort by the OECD, OECD Policy Brief No.8, 1998.
2. The ECMT is mandated to work on inland transport but most of the conclusions and recommendations presented in this paper apply to all modes of transport.
3. Urban Travel and Sustainable Development, ECMT, Paris, 1995.
4. Assessing the Benefits of Transport [CEMT/CS(2000)9].

