Chapter Eight

SAFETY AND ENVIRONMENT GENERAL

INTRODUCTION

Alongside the development of the single market, the Community discovered that it had further serious responsibilities - on the social side. Not only did citizens, increasingly through the 1990s, demand higher safety and environmental standards, but business and industry found they needed harmonisation of the same standards for a level and fair playing field within the commercial single market. The Member States' governments, too, saw advantages, and real added value, in joint policy and law-making at the EU level.

Although there is no dedicated Chapter or Title on safety per se, it is a persistent theme throughout the EC Treaty. For example, Article 137 says that, with a view to achieving the objectives set out in the Social Policy Title, "the Community shall support and complement the activities of the Member States" in a number of fields, including "improvement in particular of the working environment to protect workers' health and safety" and "working conditions". Moreover, with respect to transport, Article 71 says that, for the purposes of implementing the objectives of the Transport Title, the Council (in codecision with the Parliament) shall lay down "measures to improve transport safety".

No general safety policy papers

Despite the importance of safety within the Community's transport policy, the Commission has, to date, not put forward any general multimodal safety strategy - although one has been in preparation and is likely to be presented in 2000. Thus, apart from a short introductory section, and details of the general working time rules (which are pertinent to all modes), this general chapter focuses almost entirely on environmental policies, of which there are many with an impact on transport.

Environmental policy, like the single market in general, is a Community success story, and a relatively recent one. In 1987, the Single European Act introduced the Community objectives of preserving, protecting and improving the quality of the environment, protecting human health, and ensuring a prudent and rational utilisation of natural resources. In the mid-1990s, the Maastricht Treaty strengthened the Environment Title, and it also introduced qualified majority voting in the Council. Moreover, it gave the Parliament codecision powers on environmental framework programmes. The Amsterdam Treaty went one stage further by extending the codecision procedure to all environmental laws, and by requiring that environmental considerations "must" be integrated into other Community policies.

First paper on transport and the environment

In the early 1990s, the Commission began to take a serious look at the relationship between transport and environment policies. A first Communication, specifically on transport and the environment, was published in February 1992, and the same themes were reiterated in the transport policy white paper, later the same year. Since then, the relationship between the two areas of Community policy has rarely been far from the policy spotlight. Because the general environmental objectives in the transport sector tend to be described and packaged in many different ways, this chapter takes its lead largely from the Community's environmental policy, not from its transport policy. Thus, rather than examining the progress of the environmental ideas within the 1992 transport papers, the chapter focuses on the Fifth Environmental Action Programme, also adopted in 1992, and its follow-up in 1996.

In the latter half of the 1990s, as a result of a new requirement agreed in the Amsterdam Treaty, the EU's institutions began to focus on how to better integrate environmental protection into other Community objectives including transport. Although much work went into this policy process, it was difficult to perceive any concrete results, other than reports and lists of intentions, by autumn 1999. Nevertheless, the Helsinki summit, in December 1999, called for the "immediate implementation" of these strategies.

As a consequence, direct or indirect, of the Fifth Environmental Action Programme, the EU developed several important general environmental policy instruments. These include the establishment in Copenhagen of the European Environment Agency, the strengthening of the laws on environmental impact assessments, and a framework for voluntary environmental agreements. Attempts to bring in EU-wide rules for environmental liability and land-use planning have been more controversial. This chapter also looks at two key environment problems - air quality and

climate change - because they stem largely from energy and fuel use, and because the policies being developed to tackle them are having, and will have, a major impact throughout the transport sector. Policy responses in individual industries (the auto-oil programme and kerosene taxation, for example) are dealt with in the sectoral chapters.

There are other environmental problems within the transport sector, such as noise, although to date this has not been tackled in any general comprehensive way. The Commission did publish a green paper on environmental noise reduction, in 1996, which remarked that about 80m EU citizens suffer from unacceptable noise levels. It recommended some general actions, such as improving methods of assessment, recommendations on noise mapping and information on noise exposure, with possible target values at a later date. A draft framework Directive on noise reduction - including a noise index - is expected sometime in the future. Otherwise legislation in the aviation and road sectors does already exist, and this is covered in the sectoral chapters.

Finally, this chapter looks at one key policy idea, that of including external costs within the infrastructure charging framework, which, although it has some sector-specific policy components (such as electronic fee collection - Chapter Eleven), is likely to have a very profound overall impact on the way environmental problems in the transport sector - such as air pollution, noise and congestion - are dealt with in the future.

GENERAL VIEW ON SAFETY IN THE TRANSPORT SECTOR

Although there is a good framework of general environmental rules which affect transport, there are almost no significant general safety policy issues which warrant a description in this chapter - almost all safety policies are sector specific, with the one exception of working time. However, the 1992 white paper on transport policy stated: "*The safety of transport, in the interests of user and non-user alike, is a major concern of those responsible for transport policy in the Community. Unsafe transport can have catastrophic effects and, despite improvements in safety standards in many areas, the scale of the damage caused by unsafe transport is still very great.*"

The previous Transport Commissioner, Neil Kinnock, planned to present a Communication on transport and safety in 1998-99, but this had not appeared prior to the resignation of the Santer Commission in spring 1999. He did, though, make progress on various safety fronts, not least with several improved maritime laws and a road safety campaign. His successor, Loyola de Palacio, highlighted safety in her written replies to the European Parliament during the period of approval hearings. She said: "*Improving safety in the various modes of transport will be one of the main objectives of my term of office. 42,000 people are killed on the European Union's roads each year, and even though this constitutes an improvement on the past, I still regard such a figure as completely unacceptable. In the same way, each shipwreck which occurs on the shores of the Union and each air or rail accident is an occurrence unacceptable to the general public, the public authorities and, in many cases, to the environment too, on both human and economic grounds.*"

De Palacio's vision for future safety policy measures

She went on to list a range of current priorities, which, in effect, will set the agenda for the next few years: "*The Commission is engaged in numerous activities in this regard, and I intend to continue and develop them. Where road safety is concerned, I hope to place this issue higher on the political agenda. I shall shortly present a Communication on priority road safety measures, which will notably include information campaigns, promoting better awareness among vehicle purchasers and the introduction of a cost-benefit criterion for selecting and evaluating our measures in this field. I shall ask my departments to promote exchanges of information and good practice among the Member States. A number of practical measures will be implemented over the next few months, particularly concerning driver training, telematics and safety in tunnels.*

In the field of rail, I should like to study ways of harmonising safety practices and regulations in so far as necessary, in such a way as to maintain the highest possible safety standards. In the field of sea transport, I wish to promote exchanges of information and good practice and, within the context of a proactive, comprehensive quality approach, to ensure the proper enforcement of existing rules. As regards air transport, I shall seek the rapid establishment of a European air safety authority and the adoption of common rules in the various fields of civil aviation. The Community should also support worldwide enhancement of the air safety powers of ICAO."

Finally, on behalf of the Commission, she promised to bring forward the safety and transport paper: "*I realise full well that, while all the above measures relating to particular modes of transport are necessary, they do not in themselves amount to a genuinely multimodal approach. I am aware of the major synergies which would arise from such an approach, and I shall submit a*

report on the safety performance of the various modes of transport next year. This comparative approach, which could be backed up by research work under the Fifth RTD Framework Programme, will make it possible to devise a comprehensive approach in the interests of greater coherence."

Extension of the working time rules to the transport sector

The development of working time legislation has been a fundamental component of Community social policy, in that it is aimed at protecting workers from the adverse health and safety consequences of working excessively long hours. Where the transport sector is concerned there is a very direct link between working (e.g. driving or flying) time and safety. The issue is also of vital importance to the functioning of the single market; the costs of a transport undertaking, for example, are heavily influenced by limits on hours worked, and different national rules can significantly affect competition between undertakings. Moreover, if one mode is subject to regulation and another is not, then intermodal competition can be distorted.

The original Working Time Directive

The Community Working Time Directive was adopted in November 1993. Based on the requirements set down in Article 138 of the Treaty (Article 118/118a at the time), it was designed to protect workers from health and safety problems caused by working excessively long hours. It stipulated that, in principle, the working week should not exceed 48 hours on average (across a four month reference period, which could be extended under certain circumstances); that workers should receive a minimum of four weeks annual paid holiday; and that there should be a minimum daily rest period of 11 consecutive hours and at least one rest day a week. However, although the Commission's original proposal had taken account of the transport sectors, the Council changed its wording so that it applied to all sectors "with the exception of air, rail, road, sea, inland waterway and lake transport, sea fishing, other work at sea and the activities of doctors in training".

The 1997 white paper on extending the scope of the working time rules

Following extensive consultations with unions and employers, the Commission published, in July 1997, a white paper on the sectors excluded from the Working Time Directive. It contained a detailed analysis of each excluded sector and drew the general conclusion that there were workers who had no protection against excessive working hours or insufficient rest. In a second section of the paper, the Commission outlined four possible policy responses: a non-binding approach; a purely sectoral approach; a purely horizontal measure which did not address sector-specific aspects of the working time question; and a differentiated approach which would separate out those activities which could be accommodated under the Working Time Directive and those which would require specific measures, extending the original legislation where possible and introducing or modifying sector-specific legislation where necessary.

In the final section of the paper, the Commission dismissed the first three options. The non-binding approach would not guarantee sufficient protection for workers, it said, the purely sectoral approach "would make it very difficult to achieve a coherent or equitable treatment of non-mobile workers", and the horizontal approach would fail to provide adequate protection for mobile workers. The Commission said it would pursue the differentiated approach as its preferred policy option. Under this course of action it planned to:

- extend the full provisions of the Working Time Directive to all non-mobile workers, with derogations being adjusted to take account of operational requirements and the need for continuity of service;
- extend to all mobile workers the provisions of the Working Time Directive on annual paid leave and health assessments for night workers, while providing a guarantee of adequate rest and maximum hours to be worked annually;
- introduce or modify specific legislation for each sector or activity concerning the working time and rest periods of mobile workers.

The 1998 package to bring EU working time rules to the transport sector

The Commission put forward its package of proposals for extending the working time rules to the excluded sectors in November 1998. At the centre of the package was a draft general Directive to ensure the full provisions of the Working Time Directive would be applied to all non-mobile transport sector workers, as well as (on the basis of an agreement reached in the relevant Joint Committee) all workers within the rail transport sector. It also proposed extending basic provisions of the Directive, for example on annual paid leave entitlement and conditions covering night workers, to all mobile employees with the exception of those in the maritime sectors. Other employees excluded from the original Directive - junior medical personnel and offshore workers - were also covered by the proposal.

The draft Directive was accompanied by three further proposals. Two of these focused on the maritime sector, drawing on an agreement reached between the Social Partners (Chapter Ten),

while a third sought to establish new rules on working time in the roads sector (Chapter Eleven). Further proposals on flight time limitation and on navigation time, relating to the aviation and inland waterways sectors respectively (Chapters Nine and Eleven), were also announced but had not appeared by late 1999.

Following the adoption of a positive Opinion by the European Parliament in April 1999, the Social Affairs Council adopted its Common Position the following July. In its second reading, however, the EP continued to argue for some points (not directly related to transport) unacceptable to the Council. The dossier will, therefore, require conciliation between the Parliament and the Council in 2000.

THE GENERAL ENVIRONMENTAL POLICY FRAMEWORK

In 1987, the Single European Act introduced the new Community objectives of preserving, protecting and improving the quality of the environment, protecting human health, and ensuring a prudent and rational use of natural resources. Legislative powers, though, were constrained by the need for the Council to act unanimously and by the purely consultative role given to the European Parliament. Then, in the mid-1990s, the Maastricht Treaty widened the Commission's remit by the insertion of a new Community objective: "promoting measures at international level to deal with regional or worldwide environmental problems".

A high level of protection required by the EC Treaty

One key paragraph in the Environmental Title of the EC Treaty (part of Article 174) reads: "*Community policy shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.*"

The Amsterdam Treaty, which came into force on 1 May 1999, boosted the Union's control over the continent's environmental policies even further. It inserted the very definite clause, "environmental protection requirements must be integrated into the definition and implementation of the Community policies"; and it extended the codecision procedure to all environmental laws, not just the frameworks for those laws.

The Fifth Environmental Action Programme - Towards Sustainability

For most of the 1990s, the general direction and thrust of the Community's policy in this area has been dictated by the Fifth Environmental Action Programme "Towards Sustainability", adopted in 1992. The Commission argued that regulatory actions would be insufficient to bring about the necessary changes in consumption and behaviour patterns and that a much broader range of instruments would be necessary: legislation to set environmental standards; economic instruments; horizontal measures in support of information, research and education; and financial support measures. There was a need, it also suggested, for much improved data on the environment in order to underpin future strategy. The programme defined five target sectors for action, including transport and industry; and seven themes, including climate change, acidification/air quality, and the urban environment. It stressed that action in many areas would be carried out at levels other than that of the Community, and it looked forward to a much deeper partnership between industry, government and the consumer, with shared responsibilities among the main actors.

Detailed review of the Fifth Environmental Programme

In early 1996, the Commission published a very detailed report on the Fifth Programme which looked at the progress, or lack of it, in every nook and cranny of environmental policy, at national as well as Community level. It concluded that the strategy and objectives of the Programme remained valid, but that there was still a fundamental unwillingness to make the "quantum leap" necessary for progress towards sustainable development.

The report noted that, although there had been some integration of environmental considerations into other policy areas as required, there had been little concrete action with regard to structural issues in either the transport or energy sectors. It had been more difficult than expected, the report explained, to broaden the range of policy instruments (because of the failure to persuade the Member States to implement a CO_2/energy tax, for example). The Commission, thus, called for more effective implementation structures and new patterns of shared responsibility to cope with the increasing need for sophisticated responses to environmental problems.

Codecision to review the Fifth Environmental Action Programme

In parallel with the progress report, and on the basis of the then new codecision powers for framework programmes, the Commission put forward a proposal for a Council and Parliament

Decision to "review" the Fifth Programme. This took two and half years to negotiate and was formally adopted, after a compromise was reached through the conciliation procedure, by both institutions in September 1998. This Decision is important because, for the first time, it defines and extends the Community's objectives and priorities, not on the basis of bland Council Conclusions or a list of intentions from the Commission but on the basis of a legal Decision.

While reconfirming the commitment to the approach set out in the Programme, the Decision aims at ensuring its more efficient implementation. It identifies defines general priorities for integrating environmental objectives into the key sectors, lists a wide range of instruments to be developed, and stresses the need for better enforcement of existing legislation and for enhanced international cooperation.

Priority environmental objectives for the transport sector

In terms of the transport sector, it sets three general priority environmental objectives. Firstly, it calls for a further tightening of the provisions on emissions and noise from road and off-road vehicles and, taking due account of international developments, from aircraft, and on fuel quality. And it calls for action to reduce CO_2 emissions from road vehicles and to strengthen EC provisions on vehicle inspection and maintenance.

Secondly, it says the Community should pay greater attention to the factors determining transport demand in two ways: by developing and promoting measures to achieve better internalisation of external costs in transport prices, and by promoting a more integrated transport policy through, inter alia, better integration of land use and transport planning, and demand management measures such as telematics.

Reducing imbalances between transport modes

Thirdly, it says, the Community should pursue its aims, of reducing the imbalances between the different transport modes and encouraging more environmentally-friendly means of transport, in four ways: by developing potential methods of analysis with a view to strategic evaluation of the environmental impact of the TENs; by investigating possibilities for the use of Community funding to promote a better balance between transport modes; by developing a framework for solving the environmental problems caused by HGVs; and by encouraging public and collective transport and low-emission vehicles.

In a final Article, the Decision also refers to key environmental themes, many of which have a direct bearing on transport and which are further developed in this chapter. For example, it stresses that "particular attention" should be paid to meeting the greenhouse gas reduction objectives with regard to climate change, and to developing a strategy to ensure critical loads of pollutants are not exceeded in relation to air quality and acidification. Moreover, the development of a noise abatement programme, and the management of risks and accidents are also mentioned.

Joint meeting of transport and environment ministers

In June 1998, the UK Presidency brought the transport and environment ministers together for a joint debate and to approve a lengthy set of Council Conclusions "with a view to reducing as much as possible the damaging effects of transport on the environment". In the set of Conclusions (which like a Council Resolution is a firm and unanimous statement of policy), the Council recognised "the vital role played by transport in economic development and the single market and the contribution of mobility to improving the quality of life of citizens of the Union", but expressed concern "at the significant impact that increases in the provision and use of transport have on human health and the environment, for instance in relation to climate change, air quality, acidification, noise, the degradation of seas and coastal areas, [and] the consumption and fragmentation of land resources".

Conclusions of the joint Transport/ Environment Council

The Conclusions drew attention to the "different geographic circumstances and levels of economic and transport development as well as of different needs of Member States and hence of differential effects of policy between different parts of the Community and accepts that these require a range of responses to the environmental impacts of transport, as well as action coordinated internationally and at the Community, national and local levels". The Council said the promotion of sustainable mobility required an integrated approach, including the following: measures to enhance fuel efficiency and reduce emissions and noise; measures to make best use of the existing infrastructure (through, for instance, electronic traffic management and improved freight logistics); measures to achieve a shift to less environmentally-damaging modes of transport, in particular public transport, and to cycling and walking; and measures, such as land use planning and telematics, which can reduce the need for travel. It will also be necessary, it said, to ensure that economic growth can continue without necessarily entailing continued traffic growth.

After making suggestions for the Member States and the Commission (see box), the Council itself made a number of specific commitments: to "examine" proposals aimed at developing rail transport in order to reduce environmental impacts due to road traffic; to "take forward" work on the Commission's proposals for a revision of energy excise taxes; to reduce the environmental impact of transport, and in particular that of projected growth in transport by, inter alia, continuing to strengthen relevant technical standards as necessary; to "carry forward" work on the integration of quantified environmental costs into transport pricing; to "examine" the Commission's ideas for developing measures for protection against noise from all modes of transport; to examine "as a priority" the Commission's proposal for future emissions standards for HGVs.

The Council's programme of actions for the Commission

It is worth noting that there was a considerable watering down of some parts of the text prior to agreement. Four delegations - France, Germany, Austria and Belgium - attached a declaration to the Conclusions in which they stated that "environmental impacts linked to transport activities, constitute a major challenge for countries of the EU" and that the problem is particularly severe in major urban areas. It is, therefore, "urgent to elaborate at the European level, a pragmatic but ambitious work programme".

Environment/Transport Council Conclusions - June 1998

The Council invites the Member States:

"- To draw up and implement national and local strategies, with targets where appropriate, for reducing the level of road traffic growth and the environmental impacts of transport through a mix of regulation, appropriate, carefully targeted economic instruments, land use and transport planning and other instruments. . ;
- to seek to ensure that local transport policies are consistent with the achievement of environmental and quality of life objectives, by promoting the exchange of experience between cities and the development of 'best practice', and by providing cities with appropriate guidance and incentives;
- to develop appropriate measures to promote awareness among the general public and business of how to reduce the environmental impact of transport, including by promotional campaigns and driver training;
- to work for progress within ICAO on measures to reduce aircraft noise and emissions and to work towards the establishment of a system for the allocation of international aviation greenhouse gas emissions;
- to undertake appropriate measures to implement fully the relevant Community transport policy measures including those which contribute to the establishment of a truly intermodal transport system at Community level, connecting also with its neighbouring countries;
- to encourage the railways . . . to take forward their practical response to the Commission Communication on rail freight."

The Council invites the Commission:

"- To facilitate the exchange of information on national and local strategies and to contribute further to the development of a Community strategy on how to achieve environmentally sustainable transport based on relevant intermediate and long-term environmental objectives, taking into account best practice in national and local strategies;
- in conjunction with the European Environment Agency, and taking account of work done in other international organisations and in Member States, to develop a comprehensive set of indicators of the sustainability of transport and tools for evaluating external costs, building on useful work already done, and to report on them regularly to the Council;
- to inform the Council of the steps taken to ensure that future Community research and development activities, notably in the context of the 5th R&D Framework Programme, reflect the research requirements of the Community's transport and environment policy agendas, including relevant general action programmes and requirements stemming from Community obligations under relevant international treaties and conventions;
- to come forward with further proposals to improve the environmental performance of motor vehicles, including emission and fuel quality standards;
- to assess the potential for 'greener cars' and other environmentally enhanced road vehicles to contribute to environmental objectives, and to make appropriate proposals;
- in the light of the Council Resolution of 9 June 1997 to complete rapidly its study on aviation fuel tax in order to ensure that, after due appreciation by the Council, this work can contribute in a timely way to, inter alia, the ongoing discussions in ICAO;
- to assess the full range of options for reducing SOx emissions from ships in the context of the Marpol Convention, and the need for any Community measures;
- to work to ensure the incorporation of environmental concerns into transport policies, taking account of the economic and social development of the Community as a whole and the balanced development of its regions;
- to examine how the environmental consequences of EC transport proposals can be assessed;
- to assess ways and means of supporting traffic management, improved freight and urban logistics, intermodality - taking into account the Commission's Communication of 1996 on this subject, modernisation of existing rail infrastructure, and to assess the need for investment in new infrastructure capacity for freight and passenger services;
- to strengthen the EMAS scheme, to make transport a much more visible element in companies' environmental management."

Source: Council of Ministers

Integration of environmental protection into other Treaty areas

A Sixth Environmental Framework Programme for the 21st century will be issued by the Commission at some stage in the future; however, during 1998 and 1999, all the EU institutions were more concerned with another and somewhat parallel general framework policy - that of implementation of the Amsterdam Treaty and its demand that environmental protection requirements be integrated into other areas of Community activity.

The Commission's first paper on environmental integration

The Commission got the ball rolling, so to speak, with a short paper in May 1998, entitled "Partnership for integration - A strategy for integrating environment into EU policies". It called for a firm commitment to ensuring that the new Treaty provisions would be "rapidly implemented in practice" and proposed a partnership between the Council, the Parliament and the Commission based on a number of commitments by each institution. It also picked out the Agenda 2000 and climate change policies as two areas to act as test cases for implementation of the guidelines. The Cardiff European Council, in June 1998, endorsed the Commission's broad strategy and invited the Transport, Energy and Agriculture Councils, "to establish their own strategies for giving effect to environmental integration and sustainable development within their respective policy areas".

In December that year, the transport ministers approved an interim report in which they agreed that the strategy should focus on the integration of quantified environmental costs into transport pricing; on the revitalisation of rail transport and promotion of other modes such as inland waterways, maritime and combined transport; and on the integration of environmental concerns into external relations policy in the transport sector, notably with a view to EU enlargement. It also emphasised the need for accurate monitoring of transport trends and indicators, which, it said, was "of central importance to devising an effective strategy".

The Transport Council's final report for the Helsinki summit

As requested, in October 1999, the Transport Council adopted its final report on integration of the environment for the Helsinki summit in December. There was a "most urgent need", the report stated, for further action in the following areas: "*The growth of CO_2 emissions from transport, in particular road transport and aviation; the harmful emissions from all transport modes . . ; the expected growth of transport, and in particular, private and commercial road transport, notably as a consequence of enlargement; the modal split among transport modes and its evolution . . ; [and] the problems of noise from road, railways and aviation.*" Progress to counter these problems was necessary in a range of areas, it said, including efforts to promote fair and efficient pricing; improved land use and transport planning; public transport, intermodal and combined transport; and improved R&D. Telematics applications, it suggested, should focus on applications that support environmental objectives.

A few days prior to the Helsinki summit, the European Commission presented its own analysis of the various Council's work on environmental integration. Of the Transport Council report, it concluded that it was a good basis for short-term action, but it noted that some areas - such as the underlying causes of transport demand - would need more attention in the future. The Commission also put forward a set of 27 possible indicators for measuring the future environmental performance of the transport sector. These will be developed in 2000.

Helsinki summit conclusions on environmental integration

The Presidency Conclusions of the Helsinki summit itself stated: "*The strategies for integrating the environmental dimension into agriculture, transport and energy sectors have been agreed. Work on similar strategies has started in the Internal Market, Development and Industry Councils . . . The Council is asked to bring all of this work to a conclusion and submit to the European Council in June 2001 comprehensive strategies with the possibility of including a timetable for further measures and a set of indicators for these sectors. The completion of sectoral strategies should be followed by their immediate implementation. Regular evaluation, follow-up and monitoring must be undertaken so that the strategies can be adjusted and deepened. The Commission and the Council are urged to develop adequate instruments and applicable data for these purposes.*"

POWERFUL INSTRUMENTS FOR IMPLEMENTING ENVIRONMENTAL POLICY

A number of powerful instruments have evolved at Community level to develop and implement environmental policy, some of which have quite direct impacts on the transport sector. Although not a regulatory body, the European Environment Agency is an import Community tool for collating information on environmental issues, and presenting it in a form useful to policy-makers. In terms of actual laws, there is the potent environment impact assessment Directive, recently revised. Moreover, the Commission is looking to widen the instruments available to it, by using voluntary agreements and by spreading the burden of enforcement.

Chapter Eight

The work of the European Environment Agency

The decision to set up a European Environment Agency, to meet the much increased requirements of the EU for accurate and detailed information on the environment, was taken in 1990. However, due to an intergovernmental dispute over the location of institutions, it was not formally launched, at its base in Copenhagen, until 1993. In April 1999, after several years of operation, a new Council Decision clarified and extended the Agency's remit. Apart from providing objective information for the Commission, its main tasks include the obligation to:

- produce reliable and comparable information for policy-makers and disseminate it to the public alike;
- to provide the Commission with the information it needs to identify, prepare and evaluate suitable environmental measures, guidelines and legislation;
- coordinate the European Environmental Information and Observation Network (Eionet) and publish a report every five years on the state of the environment;
- liaise with other national, regional and global environmental programmes and institutions.

The Agency's 1998 state of the environment report

The Agency's latest report on the state of the environment was published in 1998. It declared that Europe had made progress (since the 1995 report) in reducing some pressures from pollution but that this had not lead to an overall improvement in the quality of Europe's environment. In many cases, it said, the scale of measures to reduce pressures on the environment had been too limited given the size and complexity of the problems, It also blamed the transport and agriculture sectors for being the "key causes" of many of Europe's environmental problems. Moreover, the environmental pressures caused by these sectors were in some cases "growing fast", and were more difficult to control than those from industry.

Conclusions of the European Environment Agency report

The report tended to focus on the main problems, i.e. climate change, acidification, and marine/coastal environment. However, it did draw conclusions directly about the transport sector, and the summary is worth quoting: "*Goods transport by road in the whole of Europe has increased by 54% since 1980 (measured in tonne-km), passenger transport by car has increased by 46% since 1985 (passenger-km, EU only) and the number of passengers transported by air has grown by 67% since 1985.*

Environmental policies failing to keep up with the pace of growth

In the transport sector more than any other, environmental policies are failing to keep up with the pace of growth. Problems of congestion, air pollution and noise are increasing. Until recently, the growth of transport has been widely regarded as a fundamental part of economic growth and development: governments have set themselves the task of developing the necessary infrastructure, while the environmental task has been restricted to ensuring that vehicle emission standards and fuel quality are gradually improved, and that the choice of traffic routes is made subject to environmental impact assessment.

This report shows that some progress has been made on these limited objectives in most of Europe. Nevertheless, the continuing growth of traffic and transport infrastructure has resulted in an overall growth in transport-related environmental problems and public concern about them. This is now leading to more fundamental questioning of the link between economic development and the growth of traffic.

Recently efforts are being made to restrain growth in the demand for transport, promote more use of public transport, and encourage new patterns of settlement and production which reduce the need for transport. This transformation to a more sustainable pattern of transport will not be easy to achieve because there is considerable political momentum behind the traditional approach to infrastructure development, and public transport is losing out to private transport everywhere in Europe."

The Agency's other tasks and duties

Another of the Agency's tasks is to coordinate the work of the European Topic Centres (one of which collects data on air emissions), National Focal Points, and the many National Reference Centres appointed for specific topics by the Member States. The Agency is also continually widening its network, within Eastern Europe and across the Atlantic, and trying to develop common approaches to environmental information.

Although facts and figures are the backbone of the Agency's work, it does not shy away from commenting on the important debates. In autumn 1996, it produced reports on green taxes and on current measures to prevent CO_2 emissions after 2000. In June 1997, it published a report on the importance of access to environmental information, and, in July 1997, it responded to a request from the European Parliament with a report on the effectiveness of environmental agreements.

Under the terms of its extended mandate, the Agency is also now tasked with supporting the Commission in developing environmental assessment methodologies and best practice, and in diffusing information on environmental research revised.

The environmental impact assessment Directive

Historically, one of the most powerful Community regulatory instruments designed to prevent environmental damage, during both the construction and operation of infrastructure, has been the 1985 law requiring environmental impact assessments (EIA). In March 1994, the Commission put forward a proposal to revise the ten year old EIA Directive, not only to iron out some of the practical difficulties caused by different interpretations of the law, but to ensure better assessments across a wider range of projects.

The EP's Opinion on revising the EIA Directive

The European Parliament's Opinion called for the European Environment Agency to be involved in the setting of criteria and for the extension of the Directive to EU-financed public works in third countries. But, under the cooperation procedure, it had no power to insist on these changes; the former of the two ideas, however, was taken up in the revision of the Agency (as above).

The Council, after reaching political agreement in December 1995, did not formally adopt the Directive until March 1997, with Germany voting against it. Almost every article in the original Directive was amended to a greater or lesser extent. The new Directive requires that "Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their direct and indirect effects" on the following factors: "human beings, fauna and flora; soil, water, air, climate and the landscape; material assets and the cultural heritage"; and the interaction between these factors.

Transport projects included in the revised EIA Directive

Most significantly, the original annexes were considerably reinforced. The first now lists the projects for which an EIA must be carried out, items seven and eight referring to transport infrastructure:

"*7a) Construction of lines for long-distance railway traffic and of airports with a basic runway length of 2,100 metres or more; b) construction of motorways and express roads; c) construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road would be 10km or more in a continuous length.*

8a) Inland waterways and ports for inland waterway traffic which permit the passage of vessels of over 1,350t; b) trading ports, piers for loading and unloading connected to land outside ports (excluding ferry piers) which can take vessels of over 1,350t."

A second annex lists project areas in which the Member State is free to decide on whether an EIA should be carried out, either on a case-by-case basis or through the use of thresholds or criteria set by the Member State. (This annex includes railway and intermodal trans-shipment facilities, airfields, road, harbours, inland waterway constructions, and tramways, all where not caught by the first Annex.) A "competent authority", designated by each Member State, is responsible for providing the necessary "development consent" and must ensure public access to information on EIAs.

Strategic impact assessments for plans and programmes

The Commission also proposed, in December 1996, an extension of the EIA idea to an even earlier stage in the planning process. The application of EIAs to specific projects in specific locations often takes place very soon before the project is due to be implemented, the Commission said, and this can be costly in both environmental and economic terms. There was a need, therefore, for a strategic environmental assessment (SEA) procedure to be imposed on development "plans and programmes", as part of the land use planning process. This would ensure, the Commission argued, that significant environmental issues, which cannot be addressed by the current system, are confronted properly in future. There would also be benefits for developers, due to a reduced risk of approval not being given at project level.

The concepts of "plan" and "programme" were defined carefully in the proposal and embraced sectors such as transport (including transport corridors, port facilities and airports) and tourism. In essence, the draft Directive required an environmental assessment to be carried out, according to general principles,"before adoption of the submission to the legislative procedure by the competent authority of a plan or programme". The kind of information to be presented in the assessment was

laid out in an annex: environmental characteristics of the area, for example; existing environmental problems; the relevant local, national and EC objectives; any alternative ways of achieving the objectives of the plan; and, measures envisaged to minimise environmental problems.

The European Parliament's Opinion on the SEA proposal

The European Parliament, which inherited codecision powers on this draft law with the entry into force of Amsterdam, called for several major changes. The EP proposed a brand new paragraph stating firmly that "strategic environmental assessment shall always be carried out in respect of the following plans and programmes" including "urban planning plans and regulations" and "transport network programmes" among others. In early 1999, the Commission (whose Opinion on the Parliament's amendments can matter if they are disputed in the Council) produced an amended version, absorbing some of the Parliamentary changes, but declining several of the more important ones (including the one above).

In December 1999, the environment ministers finally reached political agreement for a Common Position. However, because the Council had so diluted the proposal, the Commission, in a rather unusual move, declared it would not support the Council's text. Considering that the Council and the Parliament are so far apart, the outlook for this proposal in 2000 looks rather bleak.

EU-wide rules for environmental liability prove elusive

Another general policy area - that of EU-wide rules for environmental liability in case of accidents - may be destined for regulatory action, but so far has only been the subject of a green paper, in 1993, and a lengthy debate. Responding to the green paper, the Parliament used its Maastricht Treaty powers to require the Commission to bring forward legislative proposals. By 1997, the then Environment Commissioner Ritt Bjerregaard had still not been able to persuade her fellow Commissioners to agree on a draft Directive and she therefore took the unusual step of publishing a discussion paper - with various options - addressed to the Commission. Despite persistent pressure from environmental lobby groups, and from the Parliament (in various Resolutions), by late 1999, there was still no sign of any further developments.

Innovative proposals needed to help with enforcement of laws

Regulations, however tough, are likely to mean little if Member States continually fail to implement them. The Commission's 1998 annual report on the monitoring of Community law pointed out that there were more proceedings against Member States over implementation of environmental EU law (3,000 cases in progress as of 31 December 1998, and 226 Court cases) than in any other area. More effective implementation is not just a case of taking States to Court, the Commission said in a 1996 Communication on the subject, but of introducing more innovative proposals: EU environmental law has to be put into practice on a daily basis by large numbers of people throughout the Community, and it is neither possible nor practical for all the legal actions resulting from non-compliance to be channelled through one enforcing authority, the Commission, and one court of law, the Court of Justice.

Three policies to help with enforcement of EU environmental laws

The Commission said that, in future, it would include in proposed Community legislation, where appropriate, provisions requiring Member States to provide for national sanctions in the case of non-compliance with EU environmental law. It also suggested three policies, to be applied and enforced on the ground:

- the establishment of guidelines to assist the Member States in their environmental inspections;
- the establishment of a procedure within the Member States to receive and examine complaints from the public about the implementation of Community environmental law;
- the examination, according to the principles of subsidiarity, of how best to ensure that representative organisations are guaranteed basic access to the national jurisdictions responsible for the implementation of EU environmental law.

Environment ministers, meeting in June 1997, agreed a detailed Resolution confirming the Commission's assessment that "increased efforts are needed by all actors in the different links of the regulatory chain to improve the drafting, implementation and enforcement of Community environmental law". In particular, the Resolution covered inspection, which the Council considered "a prerequisite to achieve the even, practical application and enforcement of environmental law in all Member States", but it stressed that the various systems used in some countries should not be replaced by a system of inspection at Community level.

The increasing use of the voluntary agreement model

Apart from the imposition of increasingly tough regulations, the Commission is also broadening its approach, as prescribed under the Fifth Environmental Programme, through the use of

voluntary instruments, some aimed at avoiding legislation, and some at harnessing the power of the public to choose, by environmental criteria, products and services. One aspect of this is to allow, indeed to encourage, the use of voluntary or negotiated agreements - such as those being developed for controlling CO_2 emissions from cars (Chapter Eleven).

Discussion document on environmental agreements

In late 1996, the Commission published both a discussion document on environmental agreements, and a Recommendation setting guidelines for their use by Member States. In the former, the Commission showed that a very wide range of such agreements already existed. It set out conditions under which they could be used for implementing certain provisions of Community Directives and managed at Community level. More specifically, the Communication included a detailed checklist in four stages - reasons for choice of the instrument, content, compliance with the EC Treaties, publication - which should be used in analysing the use of an agreement. The Commission said it would carefully consider, when preparing new regulatory action, whether binding environmental agreements could be used instead.

Council backs idea of voluntary agreements

In its response to the Commission's ideas, the Council adopted, in June 1997, a Resolution stating that environmental agreements "can play an important role within the mix of instruments". It recognised that they must have "specified objectives, be transparent, reliable and enforceable", and considered the Commission's checklist as a useful starting point. However, more work needed to be done, the Council stated, to clarify how environmental agreements could be used to implement EU Directives, and it invited the Commission to look into the matter.

REGULATING AIR QUALITY - ASSESSMENT AND CONTROLS

Regulations on air quality have been in place at the European Community level for nearly 20 years in some cases. By the early 1990s, however, the Commission was aware that they amounted to a rather ad hoc and outdated approach. In 1994, therefore, it proposed a new framework Directive for the management and assessment of ambient air quality. It was formally adopted by the Council in September 1996, and came into force in March 1998. The general aim of the law is to:

"- *Define and establish objectives for ambient air quality in the Community designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole;*
- *assess the ambient air quality in Member States on the basis of common methods and criteria;*
- *obtain adequate information on ambient air quality and ensure that it is made available to the public, inter alia by means of alert thresholds;*
- *maintain ambient air quality where it is good and improve it in other cases.*"

Provisions in the EU's air quality framework Directive

It requires Member States to designate competent authorities at the appropriate level for a whole range of tasks, such as making the air quality assessments themselves, approving of measuring devices, and analysing assessments. Measurements of air quality are mandatory in agglomerations of more than 250,000 inhabitants (the EP had wanted this to be 100,000) or, if less than that, where the population density "justifies the need" for ambient air quality to be assessed and managed. Apart from warning the public when alert thresholds are breached, Member States must also develop short-term action plans in order to reduce the risk of the thresholds being breached and to limit the duration of any occurrence. Such plans can include restrictions on the use of motor vehicles. Other detailed provisions cover requirements for those zones where levels are higher than the limit values, for the transmission of information and reports, and for a committee to oversee the Directive's implementation.

First air quality daughter Directive for SO_2 and NOx

A first daughter Directive under the air quality framework Directive was proposed by the Commission in October 1997. Bjerregaard said it would bring enormous benefits in terms of improved public health - "thousands of deaths associated with air pollution will be avoided". However, she added that to achieve the objectives would require a partnership between the EU institutions, national governments, local and regional authorities, industry and the citizens. "Since we all, in one way or another, contribute to problems of air pollution we must all be part of finding a solution", she concluded.

The Directive was adopted by the Council in April 1999. It sets limit values and alert thresholds for ambient concentrations of SO_2, NOx, particulate matter and lead in ambient air in the Community, in order "to avoid, prevent or reduce harmful effects on human health and the environment as a whole". The main elements are based on the revised Air Quality Guidelines for

Europe adopted by the World Health Organisation in 1996:
- health-based limit values for SO_2, lead and particulate matter to be met by 2005;
- health-based limit values for NO_2 and a tighter set of limit values for particulate matter to be met by 2010;
- limit values to protect the rural environment against the effects of SO_2 and NOx;
- details of pollutants levels to be assessed throughout the EU;
- a requirement that up-to-date information on all pollutants should be easily available to the public.

Limit values for SO_2 and NOx in 2005 and 2010

Among the limit values set are the following (in micrograms per cubic metre):
- an hourly limit for SO_2 of 350 to be met by January 2005;
- a daily limit for SO_2 of 200 to be met by January 2005;
- an hourly limit for NOx of 200 to be met by January 2010;
- an annual limit for NOx of 40 to be met by January 2010;
- a 24 hour limit for pm10s of 50 not be exceeded more than 35 times in a calendar year by 2005;
- a 24 hour limit for pm10s of 50 not be exceeded more than 7 times in a calendar year by 2010.

To meet these targets, emissions of SO_2 and NO_2 must be reduced by nearly 10% throughout the Union in addition to the reductions already expected by 2010, the Commission said. For particulate matter (including pm10s), it estimated that emissions in cities would need to be reduced by some 50% below present levels. The Directive must be transposed into national legislation by July 2001, and a first assessment report is to be prepared by the Commission before December 2003.

Second daughter Directive aimed at benzene and carbon monoxide

A second daughter Directive, proposed by the Commission in December 1998 (much later than specifically called for by the European Parliament), aims to establish limit values for benzene and carbon monoxide. For benzene, air quality values should be reduced to a maximum of 5 micrograms per cubic metre, averaged over a year, by 2010. According to the Commission, this figure implies a reduction of roughly 70% in benzene emissions, over and above the substantial reductions already expected as a result of ongoing initiatives.

Proposed limit values for benzene

The draft Directive will also require a much closer monitoring of air quality levels and the publication of such information. In areas/zones where the current air quality is above 10 micrograms per cubic metre, Member States will be required to develop and to implement action plans to reduce emissions and to ensure that the standards will be met by the required date. Where the current average is between 10 and 5 micrograms per cubic metre, States will have to inform the Commission and the public about the prevailing pollution levels. The Commission said, in its proposal, that it recognises the relevance of 'hot spots' where pollution levels exceed the limit values in particular urban areas, but that the way to deal with them is through measures at local level rather than by a lower general level for benzene which would not prove cost-effective.

Proposed limit values for CO

Under the terms of the proposal, the average levels of CO, measured over an eight hour period, must not exceed 15 milligrams per cubic metre from the date the Directive enters into force, and must be progressively reduced over the period 2003-2005 to reach 10 milligrams per cubic metre by 1 January 2005. This represents a reduction of CO emissions of roughly 30% over and above the reductions already expected as a result of existing policies. The Commission believes that most Member States should not have a problem meeting this air quality standard.

Both the Parliament and the Council reached first agreements on this proposal in late 1999. In its first reading, the Parliament called for a number of amendments, including a restriction on the available derogations. The Council's draft Common Position, agreed on 13-14 December, accepted the main parameters as proposed by the Commission; and, for benzene, accepted the idea that Member States might need a transitional period of five years, subject to certain conditions.

A mechanism for the exchange of information

As a complement to the air quality framework and daughter Directives, the EU has also put in place, on the basis of a Council Decision adopted in January 1997, a mechanism for the "reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States". The Decision requires the Member States to designate one or more organisations to implement the reciprocal exchange, to provide the Commission with all the relevant details of its measuring stations and equipment, and to update the Commission regularly with information on a long list of pollutants (all those in the air quality framework Directive and many others besides). It establishes that the public is to be kept informed

through the setting up of an information system by the European Environment Agency (which is involved with the reciprocal exchange) and through regular reports from the Commission.

THE CLIMATE CHANGE STRATEGY - MORE WORDS THAN ACTION

In June 1990, EC leaders at the Dublin summit pressed for the earliest adoption of targets for limiting greenhouse gases; and, in October the same year, the Council agreed on a Community commitment to stabilise CO_2 emissions by the year 2000 at 1990 levels. In mid-1992, the EC signed up to the same target at Rio within the Framework Convention on Climate Change. Internally, the Member States agreed to a number of measures - concerning energy efficiency, the promotion of renewables and a CO_2 monitoring mechanism - to help it meet the target.

The failed proposals for a CO_2/energy tax

However, the Commission argued that a CO_2/energy tax was also necessary if the Community were to meet its 2000 target. Such a tax, it said, would raise energy and fuel prices and would, therefore, lead to increased energy saving; moreover, the 50% weighting of the tax based on CO_2 emissions would encourage a shift away from fossil fuels. A proposal in 1992 was debated intensely within the Council in 1993 and 1994 - some Member States being forcefully in favour and others being equally strongly against. Because unanimity was necessary, the proposal was finally rejected at the Essen European Council in December 1994. Subsequently, a revised plan from the Commission was also extinguished, by a meeting of finance ministers in March 1996.

A turning point for Community policy came in 1995 when the United Nation's International Panel for Climate Change hardened its view on the climate change problem with the following statement: "*The balance of evidence suggests that there is a discernible human influence on global climate, and that global temperatures are projected to rise by between 1 and 3.5°C by the end of the next century, compared with 1990, leading to changes in climate patterns and increases in sea levels with the risk of significant damage and disruption.*" The EU's Environment Council said, soon after, that this finding underlined "the necessity for urgent action at the widest possible level".

The pre-Kyoto wrangling over burden sharing

Although it took substantial wrangling between themselves for a burden-sharing arrangement, the EU's Member States did agree, in the first half of 1997, on a negotiating stance for the Kyoto Third Conference of the Parties in which it called for a 15% reduction target for CO_2, CH_4 and N_2O by 2010 compared to 1990 levels. They stressed, though, that this was simply a negotiating position and would be dependent on other developed countries making a comparable commitment. They also agreed on an indicative list of common and coordinated policies and measures (so-called CCPMs) which included the following: a modal switch in transportation; fuel efficiency improvements for freight and passenger vehicles; reduction/removal of fossil fuel subsidies; and tax schemes (fuel and vehicles, removal of regulations which counteract energy efficiency, higher excise taxes).

In June that year, still prior to the important Kyoto meeting, the then Commission President Jacques Santer publicly rebuked the US after the Denver G8 summit. He said: "*I am frankly disappointed that not all our partners were able here and now to take quantified commitments on the reduction of greenhouse gas emissions . . . We must stop the degradation of our climate. The future of the planet is at stake.*"

Transport sector not expected to even stabilise its CO_2 emissions

A Communication, entitled "Climate change - the EU approach for Kyoto" adopted in October 1997, was aimed at demonstrating that the EU's proposed climate change target was technically feasible and economically manageable, despite the underlying trend for an increase in emissions. One analysis in the paper looked at the expected 8% increase in emissions, under a pre-Kyoto scenario, and highlighted the fact that by far the largest increase was due to come from the transport sector. However, in the report, the Commission noted that it did not expect the sector to even stabilise its emissions within the period. Of the expected 39%, or 289mt, increase in CO_2 emissions, the strategy called for a reduction of only 180mt (i.e. leaving an overall increase of 109mt).

A further section of the report looked at the costs of the climate change strategy. For a 15% reduction in CO_2 emissions compared to 1990, estimates of the direct compliance costs (related to energy supply/demand mitigation actions) ranged from around Ecu15bn to about Ecu35bn annually by 2010, the report said, a figure which would correspond to roughly 0.2-0.4% of GDP in 2010. The Commission also estimated that the global benefits of meeting the target would be

between Ecu0.3bn and 101bn/yr, of which only part would actually benefit the Union (the wide range arose largely as a result of the uncertain values allocated to damage occurring in the distant future). Ultimately, the Commission concluded, the extent to which the costs would become politically and socially acceptable would depend on the willingness of society to invest in a European global warming strategy. And that, in turn, would depend on commitments by other industrialised countries: "Joint action is a condition for a proper balance of costs and benefits for all countries concerned", it said.

The Kyoto agreement for a binding Protocol

The greenhouse gas reduction commitments

The Third Conference of the Parties to the UN Convention on Climate Change concluded a day late on 11 December 1997, after more than a week of intense negotiations. The final compromise, for binding commitments to be contained in a Protocol to the Convention, sets differentiated targets aimed at a collective cut in emissions of six greenhouse gases (CO_2, CH_4, N_2O as wanted by the EU, plus HFCs, PFCs and SF_6) of 5.2% by 2012. The EU and its Member States have the highest target, at 8%, which they share with several other European countries, while the US agreed to 7% and Japan to 6% reductions. Countries will, though, be able to mitigate their targets through the so-called flexible mechanisms (something the EU had not wanted); i.e. through joint implementation, a clean development mechanism, and an emissions trading regime. The Protocol also requires some implementation of CCPMs (although not as much as the EU hoped for).

Meeting in December after Kyoto, both the Environment Council and the European Parliament welcomed the agreement. Bjerregaard told MEPs that it was "history in the making" and a "milestone in international environment policy". She regretted the fact that the EU had been unable to push the US and Japan any further but noted that an 8% reduction based on six gases was equivalent to a 12.5% reduction based on three gases, and was thus close to the EU's original negotiating position.

Transport and CO_2 - developing a Community approach

How CO_2 emissions from transport could be halved

Only three months after the Kyoto agreement, in March 1998, the Commission published a first report on transport and CO_2, entitled "Developing a Community approach". It was clear, the report said, that if left unchecked, growth in transport CO_2 emissions would make it extremely difficulty to achieve the CO_2 emission reduction target set at Kyoto. The report provided "a first assessment of the effectiveness in limiting CO_2 emissions from transport" in a range of policies at Community, Member State and local levels. In the medium term (up to 2010), it said, growth in CO_2 emissions from transport could be halved by "fully and rapidly implementing a number of policy approaches" in four broad areas (three of which are covered elsewhere in this report):

- action on passenger car fuel economy (Chapter Eleven);
- the completion of the internal market in rail transport (Chapter Six);
- measures to better integrate the various modes of transport, both in freight and in passenger transport into intermodal transport systems (Chapter Thirteen);
- progress with fair and efficient pricing in transport (see below).

Apart from these four main areas, the report also looked at the development of efficient infrastructure (i.e. using the TENs policy to promote intermodality).

The Council, in its important 1998 Conclusions on transport and environment, recognised "that policies and measures to reduce the high forecast growth in CO_2 emissions from transport are essential" and it welcomed "the Commission's timely production of its Communication on transport and CO_2".

More generally, following Kyoto, the EU institutions spent most of 1998 and 1999 working out their policy on the follow-up to Kyoto (including a revised burden-sharing arrangement), and particularly on a negotiating position concerning the flexible (or Kyoto) mechanisms. On the insistence of the Dutch and the Swedish, the Council eventually agreed, in June 1999, that up to 50% of a country's greenhouse gas commitment should be attainable through the various flexible mechanisms. During this period, the Council also updated the CO_2 monitoring mechanism so that it would continue after 2000, and so that it would apply to a wider basket of greenhouse gases.

The Kyoto mechanisms and new targets for CO_2 reduction

In May 1999, the Commission put forward a detailed analysis of the Kyoto Protocol and its consequences for Community policy. It too focused on the Kyoto mechanisms and one of its main conclusions was that the Community should set up its own greenhouse gas trading system in

advance of the one to be implemented internationally from 2008. It also contained an updated assessment of the climate change statistics and forecasts. It said that, although the Community was expected to reach its target to stabilise CO_2 emissions at 1990 levels by 2000, overall greenhouse gas emissions were forecast to increase 6% by 2010 without adequate abatement measures. Thus, it warned, the EC needed a reduction effort of -14% to meet its Kyoto target, which is equivalent to around 600mt of CO_2.

Reduction potential for annual EU greenhouse gas emissions (mt CO_2)*

	Low cost	Med. cost	Total
Transport	80[1]	70	150
Tertiary/households	20	120	140
Industry (direct energy uses)	5	45	50
Cogeneration	12	45	57
Renewables[2]	20	90	110
Fuel switching and efficiency[2]	30	85	115
EU total	**167**	**455**	**622**

* from baseline 2010 projections
[1] including ACEA agreement estimated at 60mt CO_2
[2] in power generation

Source: COM/99/230

Meeting this target, the report said, would be achieved primarily through policies and measures at national level, but additional action at Community level would also be vital, not only to meet the Kyoto targets but to respect the internal burden-sharing agreement. The report updated the figures on potential reductions of CO_2 emissions (see table). In the transport sector, for example, the Commission said 80mt of CO_2 could be saved at low cost by 2010, of which 60mt would come from the agreement with the European Automobile Manufacturers' Association (Chapter Eleven). A further 70mt could be saved at medium cost by the same date, making a total contribution from the transport sector of 150mt, out of a total across all sectors of 622mt.

The Commission's detailed analysis of the Kyoto agreement

FAIR AND EFFICIENT PRICING - AN ESSENTIAL PART OF TRANSPORT POLICY

In December 1995, the Commission published a groundbreaking green paper in which it argued that fair and efficient pricing should constitute an essential component of a transport policy strategy and that it could contribute significantly to reducing some of the main transport problems. It argued that, in the past, transport policies had focused too much on direct regulation and consequently had not been able to unlock the full potential of response options which can be triggered by price signals. The green paper provided evidence of a large mismatch between the price to individual users of many journeys and the costs they caused. The paper estimated the "external" costs of transport (accidents, noise, air pollution) in the EU, Norway and Switzerland as over Ecu250bn, of which 90% was caused by the roads sector.

During the extensive discussions and consultations which followed publication of the green paper, the Commission was criticised, not least by the road lobbies, for focusing too strongly on road transport. The European Parliament, in a Resolution adopted in January 1997, criticised the lack of "a concept for charging full infrastructure costs for rail, inland waterway and air transport", and it called for the apportioning of external costs to all modes at the same time.

Subsequently, the Commission set up a high-level group of six transport experts to provide it with firm policy advice. The group met several times during the first half of 1998 and drew on several detailed studies which had been prepared for the Commission. In a final report, presented in June 1998, the group said there was a clear need for an EC-level approach to infrastructure charging across all major modes, developed according to a number of basic principles. It recommended that the Commission and the Member States should work together with users and operators to agree key aspects of the new approach, including:

Conclusions of the high-level group on infrastructure charging

"- *The elements to be included in a common accounting framework for assessing the various infrastructure costs at a national level applicable to all major transport modes;*
- *guidance on the principles to be used in calculating the agreed elements of transport infrastructure costs, and on how to estimate marginal costs for the various cost elements to be recovered from users;*
- *Commission proposals for charging principles for the use of transport infrastructure for different modes;*
- *common guidelines for cost-benefit analysis of transport infrastructure investment projects, covering both internal and external costs and benefits;*
- *guidelines for defining the extent of acceptable cross subsidy, between and within modes, and geographically;*
- *preparation of a phased programme for implementation, the first priorities being the road and rail networks in the Community, and the major ports.*"

Chapter Eight

White paper on fair payment for infrastructure use

A few weeks later, in July 1998, the Commission unveiled its white paper "Fair payment for infrastructure use: a phased approach to a common transport infrastructure charging framework in the EU". The EU's transport sector was characterised by inefficiencies, the paper advised, with a great diversity of infrastructure charging systems and tax structures, between modes and between Member States. In addition, it warned, current trends in traffic patterns and growth were leading to escalating congestion and pollution, while the true costs of these problems were not reflected in market prices. As a result, certain modes were used excessively. These factors could distort intermodal and intramodal competition within the single market, often on the basis of the nationality of the transport provider, it added, while existing charging systems did not always allow infrastructure managers to recoup the costs of providing infrastructure, and could act as a barrier to new investment.

Common charging principles needed for all modes

The solution to these problems, the Commission suggested in line with the advice of the high-level experts group, was the introduction of common charging principles which should apply to all commercial modes of transport. Charges, it said, should be based on the 'user pays' principle and should be related to the costs incurred in using the infrastructure, including external environmental and social costs. They should be imposed at, or as close as possible to, the point of use; should be non-discriminatory; and should promote the efficient use of infrastructure. These principles could, it said, "usefully be extended to passenger cars, and this would render the overall charging system more efficient". For reasons of subsidiarity, though, it said the choice should be left to each State.

The most efficient charging method should be based on "marginal social costs", the white paper recommended, a parameter which should include not only operating costs, but also those costs attributable to infrastructure damage, congestion, environmental degradation and accidents. In addition, because a marginal cost-based system would not always allow infrastructure managers to recover total investment costs, there should be scope for further charges to allow higher rates of cost recovery, it said. The introduction of such a regime would take time, the Commission added, due to the complexities and transition costs involved in developing new charging systems and the different 'starting points' of the various modes. In some cases, it suggested, "current charges may serve as a reasonable proxy for particular marginal costs, and so no immediate changes may be necessary".

The recommended three stage approach to the introduction of fair charging

The Commission recommended a progressive, three stage approach.

- A "preparatory" first phase, from 1998-2000, during which the Commission would promote agreement between the Member States on common methods for estimating marginal costs, develop practices to promote transparency of accounts and advise on statistical research needs and priorities. This phase would include sectoral policies such as the proposed Directive on rail infrastructure charges (Chapter Six), a Directive on airport fees (Chapter Three), and a framework for port charges (Chapter Four).
- A "development" second phase during which the charges themselves would start to reflect the Community approach and in which complementarity between modes would be improved. Charges should in general be set at total social marginal costs, the white paper said, that is marginal infrastructure and external costs. "*Charging levels for externalities having a Community dimension should be set at Community level . . . other charges by Member States for congestion and other local externalities would be encouraged and should, when introduced, be based on an agreed Community framework methodology*." Member States would be free to introduce additional fees, preferably flat rate, to recover investment costs.
- A "consolidation" third phase beyond 2004 in which the aim would be to further implement harmonised charging principles, both in terms of the marginal cost basis and the consistency of cost estimation. Mandatory charging structures, but not levels, for local externalities, could also be considered.

Austrian informal Council discusses charging principles

Although by the end of 1999, the Council had not responded formally to the complicated and far-reaching ideas in the white paper, the EU transport ministers, meeting informally in Austria in September 1998, did discuss a related question raised by the Presidency. Did delegations share the view, it asked, that "only fair causative charging of costs in road and rail haulage gives a chance of fair competition" between modes? The ministers agreed in principle that infrastructure charges should reflect external and social costs, but appeared unwilling to take immediate action. The UK said that charging for external costs might not be practical in the short term, and that the ideas needed further analysis. The Netherlands observed that if any harmonised charging system were to be introduced it was necessary to know beforehand what costs would be included.

The European Parliament, though, responded in April 1999 when it approved one of its last Resolutions before the July elections. It welcomed the white paper but was concerned that the wealth of measures planned might not be properly coordinated. It suggested the Commission "adopt an integrated approach to implementation" and seek to prevent distortions of competition between modes where measures laid down in the white paper are implemented at different times on the principle that "fair competition between all modes . . . must be the goal". It recommended that the Commission examine the possibility of supplementing the marginal social cost system with "a multi-tier pricing system incorporating in particular taxes on emissions, energy and CO_2". Among a host of other suggestions, the Parliament also called for the inclusion in the charging system of private car traffic, and for comprehensive measures to win the public's confidence in infrastructure charging.

The EP calls for a multi-tier system and fair competition between modes

The new Parliament, when it assembled to examine the nominee Commissioners in August/September 1999 remained highly interested in the subject of infrastructure charging. One of the written questions to de Palacio asked how she saw this area of policy developing over the next five years. She answered as follows: "*Like you, I have observed that transport charges are not currently coordinated either between modes or between Member States. The economic signals sent by such heterogeneous charging often disrupt the operation of the single transport market and choices of mode and route. All these distortions increase the economic, social and environmental cost of transport in Europe. I therefore entirely subscribe to the transport policy objective of gradually reforming infrastructure charges with the ultimate aim of reflecting more accurately the costs of transport use, rendering the transport market more efficient and making it possible to take account of environmental concerns and of the specific situation in the various Member States.*

De Palacio aims for the gradual reform of infrastructure charging

This charging policy cannot have the aim of replacing the existing regulatory framework: rather, it should supplement it. To a large extent, the instruments necessary for its creation already exist; what I have in mind here is, for example, the existing tolls and user charges. The aim is not to use these instruments to increase revenue but rather to alter the structure of these charges so as to turn them into effective political measures. It is possible, therefore, that the charges policy proposed by the Commission may help to reduce transport costs. The most significant change in the structure of infrastructure charges is called for in the field of road transport where, above all, greater diversity of charges is needed. But, as your question implies, charges in other sectors also need to be changed. For example, effective charging for energy is essential and could form part of the 'multi-level charging system' which you mention, which could constitute a multisectoral approach. This necessarily ambitious programme will be implemented by means of political, legislative and research initiatives. As examples of practical measures in the short and medium term, I would mention the conclusion of the Council's discussions concerning the railway and air transport Directives; the development of road charging instruments; changes to port dues; and the provision of technical support to municipalities which wish to introduce road pricing in urban areas."

Infrastructure charging - first stage actions (1998-2000)

General
- Make effective use of the experts' group on charging for the use of transport infrastructure to assist the Commission in the development of methods to estimate marginal costs of transport
- Launch research within Fifth FP concerning estimation of marginal costs, measurement and valuation principles regarding transport accounts and charging regimes in order to fully recover infrastructure costs
- Develop comprehensive approach to common transport statistics
- Consider revision of Regulation 1108/70 on accounting system for expenditure on infrastructure in respect of all modes of transport
- Revise Regulation 1107/70 on state aid for inland transport
- Introduce voluntary investment coordination initiative

Aviation
- Communication on air transport and the environment
- Follow-up study on taxation of aviation fuel
- Analyse possibility of linking ATC charges to pollution levels rather than developing separate scheme for the purpose
- Green paper on financing of air traffic management infrastructure
- Adopt a Directive on airport charges
- Communication on air transport market
- Communication on airport capacity and airport cost developments in the EU

Maritime
- Establish inventory of port finances and transparency of accounting practices
- Carry out evaluation of need for further clarification of state aid guidelines in ports sector
- Develop a framework for ports charging

Inland
- Communication on electronic fee collection (EFC) systems in Europe
- Proposal on EFC convergence and standards
- Further develop proposal on charging for HGVs and commercial passenger transport
- Set up advisory group to develop best practice on motor liability insurance schemes and internalisation of road traffic accident risks
- Proposal for a Directive on rail infrastructure charging and capacity allocation

Source: COM/98/466