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Intra-regional transport: a challenge for sustainable development and territorial cohesion

Committee on Sustainable Development
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Summary

An efficient transport infrastructure network is essential for the smooth development of the society and economy of a region; it enables the free circulation of goods, services and people, and ensures the mobility necessary for work, education and leisure. Transport is an essential link for social inclusion, and a condition for quality of life and work.

One of the key challenges for intra-regional passenger transport is the necessary reduction of its dependence on fossil fuels. Other challenges are related to CO₂ emissions and their negative impact on the environment and human health. Demographic evolution – especially in rural areas – is another reason to rethink transport strategies.

This report examines diverse strategies to give a new direction to intra-regional transport policies which would assure social and economic wealth without increasing the volume of traffic but through improved efficiency. These strategies combine actions on infrastructure and services as well as on awareness-raising and improving the image of sustainable modes of travel.

¹ L: Chamber of Local Authorities / R: Chamber of Regions
ILDG: Independent and Liberal Democrat Group of the Congress
EPP/CD: European People's Party – Christian Democrats of the Congress
SOC: Socialist Group of the Congress
NR: Members not belonging to a Political Group of the Congress



A. DRAFT RESOLUTION²

1. Mobility and transport policies have become a major issue for the quality of life and economic and social development of our societies. An efficient network of transport infrastructures is essential to ensure the integrated socio-economic development of a region. It enables free movement of goods, services and persons and ensures the mobility necessary for work, education and recreation.
2. Changes in the present-day economy and lifestyles have led to major transformations in the spatial distribution of populations and in types of land use and, consequently, to an exponential increase in mobility flows.
3. The Congress of Local and Regional Authorities of the Council of Europe, which has always paid careful attention to spatial development issues, is seriously concerned about the massive expansion in goods transport by road, the increasing use of individual cars and the development of major space-consuming road infrastructures.
4. The reduction of fossil energy resources, increasing fuel prices and the need to reduce CO₂ emissions are vital issues for mobility management.
5. Regional authorities must therefore resolutely take up the challenge of organising sustainable mobility. In order to do so, they must propose an intermodal, sustainable and integrated intra-regional transport system which promotes alternatives to the use of individual cars.
6. In the knowledge that the first step in organising intermodal transport systems is to co-ordinate the various public transport operators within a given territory, the Congress would stress the essential role of the Regions in ensuring balanced and effective development of their territories.
7. Accordingly, regional authorities must increase the co-operation among all the players concerned, namely local authorities, operators and users, in order better to apprehend all the aspects of the problem, including the difficult problem of transport financing and fares.
8. Political choices in this field are currently based on hypotheses which scarcely, if at all, incorporate indirect social and environmental costs, whereas, for instance, concentrating public funds on road infrastructure projects has the effect of encouraging individual car traffic. Implementing a sustainable and integrated transport policy will force the different parties involved to balance their efforts in such a way as to propose a better modal choice.
9. Furthermore, the Congress must also reaffirm the need to guarantee equal access to infrastructures and private and public services. Special attention must therefore be paid to suburban and rural areas in order to prevent any major social, environmental and landscape costs in the medium term.

² Preliminary draft resolution and preliminary draft recommendation approved by the Committee on Sustainable Development of the Chamber of Regions on 1 December 2009.

Members of the Committee :

V. Kadokhov (Chair) , *I. Linge (Vice Chair)*, C. Abela Baldacchino* (alternate: F. Cutajar*), R. Bayrak, L. Beauvais, M.A. Caronia (alternate: G. Marmo), Z. Cholewinski (alternate: A. Banaszak), D. Cukur, L. Dellai, N. Dudov, I. Franzen, P. Jansen, M. Kichkovskyy, J. Mattei-Fazei, S. Neeson (alternate: J. McCartney), C. Nicolescu, J. Stadelmann, A. Stoilov* (alternate: D. Ruseva*), E. Szucs, E. Villarroya Saldana.

N.B.: The names of members who took part in the vote are in italics.

Secretariat of the Committee : M. Moras

10. It is necessary to integrate transport, urban planning, environmental and spatial planning policies in order to cut transport volumes, minimise costs of collective transport and infrastructures, take better account of the populations' needs and secure the desired results in terms of reducing greenhouse gases.

11. *In view of these various findings, the Congress invites the regional authorities of the Council of Europe member states to:*

a. develop a renewed mobility policy based on complementarity among different modes of transport, prioritising low-carbon modes of travel and minimising dependency on fossil fuels;

b. propose a sustainable and integrated transport policy which takes into account primarily the environmental impact, which is accompanied by the promotion of public transport and which improves public access to essential services and which adopts the polluter-pays principle in order to limit the use of individual vehicles;

c. to adapt the road to sustainable development challenges and ensure a better road sharing between different modes of transport;

d. to promote healthier and more sustainable travel habits and to enhance the image of public transport, cycling and walking;

e. organise intra-regional transport services in order to limit development disparities within the same region, by encouraging increased co-operation among the various operators concerned;

f. ensure access for the most vulnerable groups by promoting innovative transport solutions such as car-sharing, bus-on-request systems, etc;

g. exchange best practices with other European regions in order to take advantage of useful experiences conducted by others;

h. to set an example within the regional administration itself, with a sustainable mobility policy that encourages walking, cycling and the use of low-carbon cars;

12. For its part, the Congress asks its Committee on Sustainable Development to continue to monitor these questions, notably in the wake of the adoption of the European Urban Charter II: Manifesto for a New Urbanity.

B. DRAFT RECOMMENDATION³

1. In recent decades Europe's regions have undergone major transformations linked to economic globalisation, population trends and lifestyle changes. These transformations, which have significant impacts on the physical distribution of populations, on the tenure and use of land, as well as on the organisation of public and private services. Moreover, all these alterations cause an exponential growth in mobility flows.

2. The limitation of fossil fuel resources and the rise in fuel prices, together with the need to reduce CO₂ emissions, raise new challenges. The Congress of Local and Regional Authorities of the Council of Europe is concerned about the increase in these emissions, principally connected with the growing use of personal motor transport and the large expansion of goods transported by road.

³ See footnote 2

3. Mobility and its related policies have become a major issue in the quality of life and the economic and social development of our societies. An effective network of transport infrastructures is needed to ensure the proper functioning of the economy and the development of a region. It enables the free movement of goods, services and persons, and ensures the mobility crucial to labour, education and leisure.

4. The Congress is convinced of the obligation to re-think transport policies and of the necessary transition to post-fossil fuel mobility. Indeed, the inevitable rise in the price of fuel causes severe economic and social vulnerability linked with dependence on road transport which, in Europe, remains the principal means of carrying both passengers and goods.

5. Although the majority of Europeans live in urban areas, very special attention should still be paid to the outskirts of these urban areas as well as to rural areas where a coherent standard of service provision, which meets the legitimate needs of the population, has to be guaranteed.

6. The Congress calls for a new culture of mobility giving pride of place to sustainable modes of transport with greater emphasis on social and regional cohesion, hence on the more vulnerable users.

7. Since responsibilities in respect of transport are shared among the various levels of governance, the stimulus can be local, regional or national, and moreover public or private. Nonetheless, the Congress is convinced of the dominant role that the regions should play in order to achieve a high coherence of action and balanced regional development.

8. A sustainable intra-regional transport policy needs to limit traffic congestion, improve road safety, reduce levels of noise and air pollution and provide a better sharing of the road. It must also propose methods of rapid transportation at a reasonable cost to users and encourage greater interaction between urban and regional public transport.

9. Transport and spatial planning are the two facets of mobility. A good integration of transport issues into town and country planning decisions will result in a reduction of transport volume and a better account of the population's needs.

10. The Congress reiterates the imperative need for a renewed public policy for sustainable multimodal transport, promoting soft modes and innovative solutions which are alternatives to the individual car, such as car sharing, bus on request and public bicycle rental systems.

11. In this regard, it stresses the important, but largely underestimated, role of non-motorised modes which should be naturally grafted on to other modes of transport. In many regions of Europe they represent over one-third of citizens' entire daily travel. Walking and cycling should be encouraged as they are more accessible, cheaper as well as the most environmentally friendly and healthy modes of transport.

12. Where motor vehicles are concerned, European and national legislation require strengthening so that these vehicles comply with the highest standards of emissions. It will also be expedient to hasten the development of low carbon vehicles and to promote their distribution particularly in administrations and enterprises and integrate them into new mobility solutions.

13. The transport sector also has social and cultural aspects which should not be overlooked. The image of certain modes of transport plays an important part in their development. Public opinion could be won over by offering a quality multimodal service.

14. The Congress welcomes the fact that the European Commission, in the framework of its plan to combat climate change, is taking more interest in sustainable transport, and stresses that these efforts need to be increased if a significant reduction in the proportion and volume of carbon dioxide emissions in this sector is to be achieved.

15. *Consequently, the Congress asks the Committee of Ministers to invite the European Conference of Ministers responsible for Spatial/Regional Planning (CEMAT):*

a. to continue its reflection on better links between transport and spatial planning policies for sustainable development and greater regional cohesion;

b. to include in the declaration from the next ministerial meeting (Moscow, 8-9 July 2010) concrete proposals for solutions to the new challenges that face regions in a globalised world.

16. *The Congress invites the Committee of Ministers of the Council of Europe to encourage the member states:*

a. to recognise the appropriateness of the regional level for building a concerted, future-oriented vision as regards intra-regional transport;

b. to develop, in co-operation with the regions, a new transport policy combining the new patterns of mobility with the approaches geared to space and time factors;

c. to foster and support coherent development of collective transport on a national scale;

d. to support experimentation and ensure systematic evaluations of experiences with innovative transport as well as their resolute generalisation.

17. *The Congress also asks the Committee of Ministers to invite the European Commission to give stronger support to the initiatives taken at the local and regional level for sustainable transport by means of demonstration programmes, for example, the CIVITAS initiative for clean urban transport.*

18. *The Congress invites the Parliamentary Assembly of the Council of Europe to continue its work on emerging challenges of sustainable development and regional cohesion.*

C. EXPLANATORY MEMORANDUM⁴

I. Introduction

1. Europe's regions are facing varied challenges in the field of transport related to: the limitation of fossil fuels and increasing fuel prices; the need for CO₂ reduction; structural changes in the economy and related migration; as well as demographic evolution.

2. Transport patterns within a region (intra-regional transport) depend very much on the type and structure of the region. Today, the majority of the population lives in urban areas, however, in some European countries up to 40% of the population still live in rather rural areas. In most urban areas, the majority of trips are done by sustainable modes of transport such as walking, cycling, and public transport. The patterns of transport are different in rural areas due to lower density (of both housing and infrastructure), often resulting in longer journeys.

3. Since car ownership has become an essential element of lifestyle, and not just a means of transport, the debate about transport solutions is often emotional and politically very sensitive. We

⁴ The Congress Secretariat should like to thank Mr Jürgen Stadelmann, former member of the Landtag Sachsen-Anhalt (Germany) for his contribution to the preparation of this report as the first Rapporteur until November 2009 and Mr. Michael Glotz-Richter, Senior Advisor on Sustainable Mobility at the Free Hanseatic City of Bremen (Germany) for the drafting of this report.

often see short-sighted solutions that provide more road infrastructure but do not address the broader question of mobility.

4. Furthermore, the road is by far the dominant mode of transport for the movement of goods. Today there is only a marginal role for transporting intra-regional goods by rail as a result of changes in rail services in most European countries.⁵ In some regions, intra-regional water-borne transport is possible,⁶ but it is relatively limited.

II. Carbon footprint and post-fossil fuel mobility

5. In terms of CO₂, the EU-27 had a decrease of total greenhouse gas emissions between 1990 and 2005 of 7.9%.⁷ The transport sector, on the other hand, had a 26% increase in emissions. In 2005, the transport sector represented 22% of the EU-27 total greenhouse gas emissions.⁸ It can be expected that in the extension of the Kyoto Protocol, Europe will commit to meeting greenhouse gas emission reduction targets by 2020. If this is to happen, the transport sector must raise its target and improve its environmental performance significantly.

6. Worldwide, we currently have more than 700 million cars almost exclusively dependent on fossil fuels. As far as the public are concerned CO₂ and other greenhouse gas emissions are invisible and rather abstract but the limitation of fossil fuels may have very concrete and drastic impact when the market laws of supply and demand bring about large price increases.

7. It is widely recognised that supplies of fossil fuels are depleted.⁹ Consequently, the more the transport sector depends on the car for passenger transport and the lorry for freight transport, the more vulnerable the economy and society will be when fossil fuel prices rise.¹⁰ Therefore, it would appear advisable to prepare the currently very petrol-dependent transport sector for a post-fossil fuel system.

8. While the use of alternative fuels may ease pollution problems, they cannot solve our transport problems. A change is required which is feasible and which supports independence from fossil fuels – thus CO₂ reduction must become part of securing an energy supply for transport, and post-fossil fuel mobility must become a focus of transport strategies.

III. Enhancing spatial management of territories for efficient intra-regional transport

a. Integrating transport, urbanism, environment and spatial planning public policies

9. The design of spatial planning influences how much we depend upon the car. Suburbanisation and urban sprawl – resulting in disperse living, working, and leisure facilities – leads to low-density, spatially-segregated land use with poor conditions for collective transport, walking and cycling, and thus a high rate of car dependence.¹¹

10. A continuation of the dominant trends of decentralised and delocalised land use (between housing, workplace, public services and leisure) would inevitably lead to additional car traffic. An increasing spatial separation weakens the social and financial base of town centres, leading to concentrations of

⁵ Such as the deconstruction of rail links to industrial areas and the removal of regional freight rail service.

⁶ Inland water transport accounts for 3% of overall goods transport within the EU; while major waterways only exist in certain parts of Europe, this mode of transport still offers considerable potential.

⁷ from 5 621 Mt CO₂-equivalent (1990) to 5 177 Mt CO₂-equivalent (2005).

⁸ European Energy Agency, EEA Report No 1/2008, "Climate for a transport change", TERM 2007: indicators tracking transport and environment in the European Union, European Energy Agency, Copenhagen 2008.

⁹ European Energy Agency, EEA Report No 1/2008, p 32.

¹⁰ There are different calculations about 'peak-oil'. The "Hirsch-Report" – carried out for the US Ministry for Energy indicates the risks of oil dependence: Robert L. Hirsch, "The Inevitable Peaking of World Oil Production," The Atlantic Council of the US, Bulletin N° XVI/3, October 2005.

¹¹ Report from the European Environmental Agency "Urban sprawl in Europe - The ignored challenge", 2006.

low income populations in certain areas, and potentially, to a downward spiral of social neglect, decreasing standards of public services, and a retreat of private investment.

11. In order to prevent this, the different land uses need to be regrouped. It is crucial to plan developments along corridors with good collective transport provision, preferably rail or high-quality bus service with inter-modal connections to feeder systems, including walking, cycling (including park/bike & ride facilities). New dwellings should only be built along major infrastructural axes of public transport, energy, water, and other basic supplies. The different modes of transport must be better connected in order to facilitate a shift from individual motorised travel to public transport, cycling and walking.

12. Regional development in peri-urban and rural areas also determines the level of dependence on the individual car. The concept of “decentralised concentration” along major corridors of collective transport modes allows a better supply of transport services to be located near social infrastructure and, again, supports inter-modal transport patterns. All these modes require a minimum density, which cannot be achieved without coordinated regional planning.

13. In rural areas, a well thought out provision of private and public services as part of a regional project can allow the development of innovative transport possibilities such as “bus on demand” or collective taxis. A transport policy which would abandon less accessible rural areas would lead to important social, environmental and landscape costs over the medium term. The strong correlation between the presence of local sustainable agriculture and a fair level of quality of life in rural areas should lead to a transport policy where the specific issues of territorial cohesion and reducing pollution are also taken into account.

14. Due to the decline of heavy industry in some European countries, as well as the conversion of former military sites, new spaces are available near to the centre of towns allowing the reintegration of formerly separated functions into the centre.¹² This not only contributes to a reduction of traffic, but also strengthens the economic base of urban agglomerations and conurbations.

15. There are early signs, in some cities, indicating that appealing urban developments attracts both young urban professionals and families with children into such neighbourhoods. It is worthy of note that such urban areas, for example, Stockholm, Amsterdam, Copenhagen, usually have high levels of public transport use, cycling and walking.

b. Considering the various dimensions of space to limit congestion

16. The quality of the built environment depends to a large extent on the use of public space. Space is a limited and valuable resource with various dimensions to consider:

- ◆ *The economic dimension of space:* traffic congestion – both within cities and on regional roads – reduces the attractiveness of cities as administrative and business centres. The technical effort and cost required to create new transport space (both for travel and parking cars) are often prohibitive. Examples such as Los Angeles show that building new roads does not solve the problem of congestion.
- ◆ *The social dimension of space:* children’s motor skill development is impaired if they are not able to play actively.¹³ The lack of social and play space for children in urban residential areas is a reason often cited by families relocating to the suburbs. On the contrary, if the urban public space was better, families prefer to remain living in town.
- ◆ *The ecological dimension:* the high rate of sealed surface space in urban areas influences the local climate. While green space is generally considered desirable, proposals to convert transport space to green space are often met with cries of disbelief and outrage.

¹² Examples are the former military base of Vauban in Freiburg and the new Hafencity development in Hamburg.

¹³ See Transport-related Health Effects with a Particular Focus on Children, Contribution to the UNECE – WHO Transport, Health and Environment Pan-European Programme, the PEP, WHO Europe and UNECE, 20.

17. Motorised transport corridors often have negative impacts on nearby space: noise and air pollution, the threat of accidents and the physical barriers they create which cannot easily be crossed. Potential social and/or ecological uses of space may be threatened by a transport corridor.

c. Fostering a reasoned development of infrastructure

18. Congestion is a serious problem. Numerous examples across the world demonstrate that adding new roads does not resolve the problem. The European Commission estimates that the cost of congestion will, on its own, account for 1% of the EU's gross domestic product in 2010. At the same time, many peripheral regions remain poorly connected to central markets.

19. The introduction of new transport infrastructure also raises concerns linked to the high cost of providing and maintaining this infrastructure as well as to its impact on the environment and to the social fabric of communities. Therefore, any decision concerning the establishment of new transport infrastructure - as well as the removal or alteration of existing infrastructure - requires a comprehensive assessment of long-term consequences.

20. Interestingly, there exist some contradictions across Europe. Whereas we still see a trend of growing car-ownership and use in Central and Eastern Europe, car use is expected to stabilise in most Western European countries. It is interesting to note that amongst the wealthiest cities and regions in Europe (for example, Copenhagen and Amsterdam) they have some of the lowest levels of car ownership.

IV. Developing sustainable mobility

a. Reinforcing public transport

21. Public transport is the backbone of mobility within urban agglomerations and conurbations. It can only play this role if it is strengthened in both financial and political terms. Therefore, a one-time funding for a new public transport infrastructure is not enough. It is more important to have an ongoing commitment to ensure the maintenance and operation of existing infrastructure. Governments at all levels play a vital role, but there is also a role for businesses to play in financing public transport since they profit directly from the service.

22. Even, more than financial support, public transport needs political support. In times of increasing budgetary restrictions, national, regional, and local governments must clearly set priorities that foster public transport. This requires an ongoing commitment to make public transport efficient, effective, and attractive.

23. These actions should be accompanied by regular reviews of the frequency and quality of the service provided to customers in relation to the price they pay for it.

b. Integrating all modes of transport

24. One of the challenges for regions is to find an appropriate balance between collective and private transport. Promoting multi-modal travel (bike + bus) and a better integration of different modes of transport (regional train to local bus) should be done in parallel to reinforcing train networks and exclusive right-of-way transportation. It entails developing links between buses and other modes of transport, building bicycle parking, enlivening stations and the access to them, and improving the security of surrounding areas.

25. For the cases where people do need to travel longer distances, the quality of the vehicle and riding time – the elements most often considered in transport planning – are only two elements in a complex chain. A journey from A to B may require a combination of several modes of transportation (bike and train) or of operators (regional train and local bus). From a passenger perspective, the quality of the entire chain is important. This includes the journey to the collective transport hub (often walking or cycling), the waiting area, the quality and timeliness of the information provided, and the ability to change smoothly from one mode of transport to the next. An integrated ticketing system can significantly reduce barriers, both real and perceived.

c. Favouring non-motorised modes of transport

26. Walking is probably the most underestimated mode of transport. It is healthy, low-cost, accessible to almost every citizen, requires a minimum of infrastructure, and in many European cities, about 20% of all trips are made on foot. Despite these advantages, many countries do not even include walking in their transport statistics.

27. Cycling is also often excluded from official transport statistics, although in some cities up to 40% of urban trips are made by bike. Those cities would look very different indeed if even half of those trips were made by car instead. In the Netherlands, trends show an increase in cycling, with the total distance of 14 billion bicycle kilometres in 2005 (an average of 2.5 km per person per day), an increase of 10% compared to 2002.¹⁴

28. On average, every EU citizen makes about 500 trips a year that are shorter than 5 km - a great potential for increasing walking and cycling.

29. Walking and cycling are also important as a means of access to public transport. Most people walk to bus or tram stops, emphasising that good pavements and pedestrian crossings are beneficial to public transport. Bike & ride facilities encourage inter-modal travel for regional transport.

30. For both cyclists and pedestrians, it is important to have complete networks of a good quality:

- footpaths of good dimension and materials, easy crossings and good lighting;
- for cyclists: clean, safe, accessible cycle parking facilities at their homes, workplaces, in shopping areas, and in association with other forms of public transport. Cycling paths and walking routes need to be expanded, even if it comes at the expense of roads and parking spaces for cars in towns.

d. Promoting health and road safety

31. Despite technical progress, most European cities do not fulfil European air quality standards, and road transport is responsible for about 70% of emissions. The key problems are high levels of particulate matter (PM) and nitrogen oxides (NO₂), both of which are very harmful to health. Heavy duty vehicles contribute disproportionately to local pollution. Although new vehicle standards are making a difference in some cities,¹⁵ buses and delivery vehicles (less than 10% of road users) contribute about 50% of the concentration level of NO₂.

32. Obesity and overweight – related to a lack of physical exercise – are becoming an increasing health problem. In Germany, some estimates show that as many as 17% of all sick days are due to illnesses related to a lack of physical exercise,¹⁶ while a study in London calculated that a 10% shift from cars to cycling and walking might save 100 early deaths and 1,000 hospital admissions each year.¹⁷

33. Safety, both actual and perceived, is a major concern for non-motorised transport users as pedestrians and cyclists are among the highest casualty groups in accidents. Safety can be improved by “hard” (infrastructure) and “soft” (behavioural) measures. Infrastructure concepts like traffic calming and shared space¹⁸ can reduce the speed of motorised transport in order to improve safety and, as has been demonstrated in Amsterdam and Copenhagen, a combination of hard and soft measures

¹⁴ EEA, ‘Climate for a transport change’, report, p.30.

¹⁵ In 2006, the city of Bremen purchased diesel buses that met Europe’s most ambitious emission standards (Enhanced Environmental Vehicle, or EEV). Although only 40 of Bremen’s 230 buses were replaced, the PM and NO₂ emissions of the entire fleet had already halved by 2007.

¹⁶ Thomas Wessinghage, “Gesundes Gehen – Gehen für die Gesundheit” in: Reader “Fußgängerfreundliche Verkehrs- und Stadtplanung, Verkehrsministerium Baden-Württemberg (Minister for Transport of Baden-Württemberg).

¹⁷ Transport for London and the Implications for Health, Soderland N., Ferguson, K., McCarthy, M. (199) in “Towards a thematic strategy for the urban environment” EC COM (2004) 60 final.

¹⁸ Shared space is a traffic engineering concept involving the removal of the traditional separation between motor vehicles and pedestrians and other road users, and the removal of traditional road priority management devices such as kerbs, lines, signs and signals. The reasoning behind the idea is that it will result in improved road safety by forcing users to negotiate their way through shared areas at appropriate speeds and with due consideration for the other users of the space.

encourages more people to cycle and walk. When the amount of cycling doubles, the risk per cyclist falls by 34%.¹⁹ Thus, increasing the number of bicycle users creates a virtuous circle of health and safety benefits.

34. The World Health Organisation calls for a “child-friendly mobility” vision as part of transport and transport-related policies, infrastructure and human settlement planning and notes that “this could be facilitated by developing environment and health targets specific to children, i.e. reductions in road traffic injuries, increase in physical activity.”²⁰

e. Limiting emissions of pollutants and noise

35. New vehicles meeting the latest emission standards can significantly improve the quality of urban air, as proven in the city of Bremen which was the first European city to purchase diesel buses that met EEV (Enhanced Environmental Vehicle) standards, the most ambitious European emission standard²¹.

36. Another solution is the implementation of “low emission zones” / “environmental zones” that restrict access for older, more polluting vehicles. Many such zones already exist in Europe, but there is no single standard for access. Harmonisation of vehicle labelling would help to ease access for cross-border trade and tourism.

37. Along with air pollution, the problem of traffic-related noise is a concern in both urban and rural areas along transport corridors, where the noise levels created by road, rail or air transport are excessive. Administrative solutions such as night time noise limits are important but, as with low emission targets, they can only bear full fruit if they are implemented on a regional level since the damaging effects of car usage do not stop at political boundaries.

f. Encouraging innovative solutions that meet the challenge of an ageing population

38. When combined with reduced provisions for infrastructure and services (e.g. shopping, social services, etc.), demographic development becomes a significant challenge, particularly in rural areas. It then becomes a question of social policy as to whether adequate infrastructure and transport services are provided to meet the needs of the elderly, in particular as concerns health care.

39. Demand-responsive and small-scale transport solutions (‘citizens’ buses,’ microbus services, Turkey’s Dolmus, collective taxis, demand-responsive services) may become a solution for low-density areas.

g. Supporting alternative solutions to discourage car use and car ownership

40. As there is limited space in our towns and cities, one challenge we face is to develop alternatives to car ownership. Car-sharing, a modern service that reduces dependence on car ownership, supplements the sustainable modes by offering a ‘car-on-call’ with 24-hour vehicle access at decentralised stations: access to a car through the use of a smart card and PIN. The ‘car-on-call’ is a viable alternative to car-ownership. Car-sharing supplements public transport and cycling.

41. Current car-sharing experience shows positive environmental impacts: car-sharers drive less and cycle and use public transport more, combined with the high quality vehicles of car-sharing, it reduces their personal CO₂ emissions on average by 200-290 kg a year.²² Bremen’s 5,000 car-sharers have replaced about 1,000 private cars, reclaiming street space for better purposes than parking.

¹⁹ Jacobsen's Growth Rule in: EEA, “Climate for a transport change”, report, p.30.

²⁰ WHO (World Health Organisation), Transport, Health and Environment Pan-European Programme, the PEP, WHO Europe and UNECE, Transport-related Health Effects with a Particular Focus on Children, Contribution to the UNECE – p 9.

²¹ See footnote n° 12

²² Evaluation Car-Sharing, Schlussbericht, report for the Federal Swiss Agency for Energy (Bundesamt für Energie BFE), Luzern (CH), 2006.

42. If we were to extrapolate existing car-sharing density in Switzerland to the EU-25,²³ we could have 4 million people sharing 100,000 cars at 50,000 car-sharing stations. The potential results are:

- a reduction of about 850,000 tons of CO₂ annually;
- replacing 500,000 private cars with one fifth the number of shared cars;
- reclaiming more than 2,500 hectares of urban space for urban greening or for pedestrians and cyclists, instead of car parks;
- an increased use of public transport, walking, and cycling (with all their associated positive health benefits).

43. But even in Germany – with the highest number of car-sharing users in Europe – only 19% of the population knows about the service. As a still relatively untapped resource, car-sharing, has huge potential to reclaim urban public space for the improvement of quality of life.

h. Favouring freight transport by rail or waterways

44. The EU-25 shows an overall increase in transport volume, both for freight (+28%) and passenger transport (+18%) during the period 1995-2004. If this trend continues, freight transport will grow by 50% for the period 2000-2020. Within the EU, road transport dominates with 44% of freight and around 85% of passenger transport (from the number of total km travelled).²⁴ Railways carried about 10% and 6%, respectively, but among the main structural trends it is noted that rail freight transport has halted its relative decline since 2001 and is on a growth path in a number of EU member states. Inland water transport accounts for just 3% of overall goods transport within the EU; while major waterways only exist in certain parts of Europe, this mode of transport still offers considerable potential.

45. For the period between 2000 and 2020, forecasts establish the average annual GDP growth rate at 2.1% (52% for the whole period). In order to achieve a shift towards more sustainable modes of transport (especially rail), and to reduce climate impacts: pollution, noise, and dependence on fossil fuels; much more attention must be paid to the planning of sustainable transport strategies for freight transport – in particular rail, waterways and intermodal hubs.

i. Rebalancing the financing of the different modes of transport

46. Transport financing is neither sufficient in terms of resources, nor evenly allocated. Moreover, the concentration of public funds on road infrastructure projects effectively encourages individual motor traffic. Public transport, in general, depends more heavily on funding from operating loans, and tends to be neglected.

47. The external (social and environmental) costs of individual motor traffic are rarely taken into account and are not accounted for in the individual driver's financial contribution to the transport system (the polluter pay principle). The result is that political decisions on spending public money for transport are based on false assumptions and inaccurate cost estimates, leading to a distorted allocation of resources and fostering the kind of development that discourages rather than encourages positive change in the way intra-regional transport is organised.

48. More financial support for the sustainable modes (walking, cycling, transport and rail networks) is required. A stronger internalisation of the external costs of transport will help to justify this shift in investment priorities.

49. In many European countries, we see a lack of maintenance of transport infrastructure. In many cases this is related to a disproportionate growth in transport volumes (especially by freight vehicles). Germany, having an extensive highway network, spends more than half of its highway budget on maintenance.

²³ Switzerland currently has more than 85,000 Car-Sharing users – with a population of 7.5 million people – in comparison, the EU-25 has a population of about 450 million.

²⁴ See Mid-term review of the European Commission's 2001 Transport White Paper "Sustainable mobility for our continent" (SEC (2006) 768).

50. For trucks over 12 tonnes operating on German motorways there are several emission classes. Trucks with low emission standard (currently Euro V) pay less than medium emission classes (Euro III and IV), and high emitting vehicles (Euro II and below) pay even more. This differentiation has led to a comparatively high market share of low-emission Euro V trucks, and it has been achieved by market forces alone.

51. The experience of congestion charging in Stockholm, London and Rome – with restricted access and user charges – is interesting, but not universally transferable. Smaller cities with less gravitation to a central core run the risk of economic activity shifting from the centre to the periphery, thus creating more road transport and car-dependence rather than less.

V. Conclusions

52. We need to set new objectives for the transport sector that focus on climate change, environment, energy security, health, social inclusion and social and regional cohesion. One step would be to decouple economic growth from the volume of transport movements. Following the example of the energy sector, the transportation sector can also take steps to improve the efficiency of the existing system rather than continuing to increase its size. This will lead to an increased level of inter-modal services, to combat congestion and to an increase in safety on our roads.

53. There is no magic bullet for sustainable and integrated transport. Both short-term and long-term actions are needed, involving a complex and integrated approach of various public policies including spatial planning and urbanism, housing and transport policy, and social, educational and economic measures and at all levels (local, regional, national and European).

54. Solutions must deal with both infrastructure and technical services (“hardware”) and behavioural aspects (“software”). The role of soft factors, such as the public perception of various transport modes, should not be underestimated.

55. The organisation of intra-regional passenger transport is essential for a sustainable and balanced development of urban agglomerations, their conurbations and regions. However, the existing patterns of urban / regional planning and transport planning still lack integration and cohesion.

56. Financial resources are scarce and unequally allocated between different modes of transport and political priorities. With the expected increase in fossil fuel prices, there is a serious risk of economic and social vulnerability associated with a high dependence on the car for passenger transport and the lorry for goods transport.

57. Cities and regions all over Europe face similar structural problems with regard to sustainable transport. Exchanging information and best practices with other European regions can put fruitful experiences to good use. The European Commission proposes several supportive tools²⁵ to encourage such exchanges within the European Union and beyond.

58. Organising sustainable mobility is a challenge that regional authorities must meet in a resolute manner. They must be able to develop a renewed mobility policy based on the complementarity of different modes of transport, favouring public transport and low-carbon modes of travel and limiting dependence on fossil fuels. By promoting a positive image of sustainable modes, regions will succeed in creating a new mobility culture which promotes effective and balanced development of their territories.

²⁵ The CIVITAS initiative network CATALIST) is dedicated to fostering such exchanges on clean urban transport. (www.civitas.eu)