SUSTAINABLE AND HEALTHY URBAN TRANSPORT AND LAND-USE PLANNING

Report by the UNECE and WHO/Europe secretariats

INTRODUCTION

1. The present document contains a brief account of the workshop on “Implementing Sustainable Urban Travel Policies in Russia and other CIS countries”, which the secretariat co-organized with the Ministry of Transport of the Russian Federation, the government of the City of Moscow and the European Conference of Ministers of Transport (ECMT) in Moscow on 29 September – 1 October 2004.

2. The document also presents the main substantive input provided by THE PEP to the Moscow workshop, consisting of a comprehensive “Overview of the environmental and health effects of
urban transport in the Russian Federation and the other countries in Eastern Europe, Caucasus and Central Asia that was prepared by the secretariat with the assistance of a consultant.

3. Finally, on the basis of the outcome of the workshop, and taking into account the recommendations of the Bureau, at its meeting on 17 December 2004, proposals for follow-up action were put forward, for consideration and approval of the Steering Committee.

4. The main findings of the workshop will be made available for the consideration of the Steering Committee in a separate document, once finalized by the ECMT, in consultation with the host administration and THE PEP secretariat. The Committee will also be given an oral account of the main issues discussed at the workshop as well as of its main impacts by a representative of the host administration as well as of the ECMT.

5. The background papers and presentations from the workshop can be accessed and downloaded from THE PEP and the ECMT websites.

I. BACKGROUND

6. At its second session, the Steering Committee had welcomed the outcome of the workshop on “Sustainable and Healthy Urban Transport and Planning” organized by THE PEP secretariat in Cyprus on 16-18 November 2003 to review good practices and lessons learned on integrating environment and health considerations into urban transport and land-use planning. The Committee had also acknowledged the importance of implementing activities from THE PEP Work plan that focus on urban areas.

7. With regard to future activities, the Committee had encouraged focusing, in particular, on the countries of Eastern Europe, Caucasus and Central Asia (EECCA) and South-East Europe, due to the seriousness of the environmental and health problems as well as the disquieting future trends related to urban transport and planning that were highlighted at the Cyprus workshop. It had invited the secretariat to cooperate closely with the ECMT and the Russian Federation for the organization of the Moscow workshop in order to draw further attention to the health and environmental implications of transport policies in the EECCA region and to bring the relevant sectors together in order to discuss actions to be taken.

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1 ECE/AC.21/2005/5 - EUR/05/5046203/5.
2 http://www.oecd.org/cem/topics/urban/Moscow.htm
3 Document ECE/AC.21/2004/4 - EUR/04/5045236/4 containing detailed proceedings from the workshop.
8. For the ECMT, the Moscow workshop was the second in the series of workshops serving to test and disseminate the 2001 “Key Messages for Governments on Implementing Sustainable Urban Travel Policies” in this sub-region. The first workshop was hosted by the US Department of Transport in November 2003 in Washington DC and the third and last workshop, will be hosted by the Japanese Ministry of Land, Infrastructure and Transport in Tokyo, 2-3 March 2005.

II. MOSCOW WORKSHOP

9. The Moscow workshop was opened by the Minister of Transport of the Russian Federation, Mr. Igor Levitin. The workshop was attended by some 170 participants, approximately 60 of which came from outside the Russian Federation, including from a number of EECCA and South-East European countries (Belarus, Bulgaria, Georgia, Republic of Moldova, The former Yugoslav Republic of Macedonia and Ukraine). It brought together participants from central and local governments, representing mainly the transport sector but also the health and environment sectors and urban and land-use planners, including around ten national focal points of THE PEP. City networks, relevant intergovernmental and non-governmental organizations, international financial institutions (the World Bank and the European Bank for Reconstruction and Development, EBRD), as well as the academic community, were also represented.

10. The workshop focused on how countries - in particular the Russian Federation and other EECCA countries - are defining and moving towards implementation of effective sustainable urban travel policies. With a special eye on Russian and EECCA experience, participants reflected on and shared national experiences in applying strategies to improve implementation of sustainable urban travel policies. The institutional and regulatory framework for urban travel in the region and the organizing and financing of public transport were among the main topics on the agenda. The workshop included also interventions on managing of the traffic and car use in large cities. One of the sessions was devoted to the reduction of the environmental and health impacts of motorized transport in Russian and other EECCA countries, constituting the main input from THE PEP.

11. In his intervention, the Chairman of the THE PEP Steering Committee, Dr. Jaroslav Volf, highlighted the importance of the Moscow workshop as a good example of the collaboration and joint efforts between the relevant authorities and stakeholders at the national and international level, which is a prerequisite for promoting urban mobility that is sustainable for health and the environment. He, together with all the other

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speakers, also stressed the crucial importance of effective and sustainable public transport both for the functioning and economic development of the cities in the region as well as for the health and environment of the urban citizens.

12. In the thorough background paper presented at the Conference by Mr. Vadim Donchenko, the main bottlenecks in the implementation of sustainable urban transport policies in the Russian Federation were summarized as follows:

(a) Insufficient priority given to reducing the negative impacts of private car use.
(b) Insufficient attention paid to growth in the motorization levels at federal and regional levels.
(c) Lack of co-ordination of policies, goals and objectives, for transport, town planning, environment and health protection at federal and state level.
(d) Lack of instruments (legal, administrative, economic) to ensure the sustainability of the transport systems.
(e) Consideration of traffic safety and environmental problems as purely technical issues, unrelated to transport system management.
(f) Insufficient co-ordination among levels of government and at local authority level; lack of co-ordination of goals and tasks to improve sustainability of urban transport.

III. CONTRIBUTION OF THE PEP TO THE MOSCOW WORKSHOP: OVERVIEW OF THE ENVIRONMENTAL AND HEALTH EFFECTS OF URBAN TRANSPORT IN THE EECCA COUNTRIES

13. As the main contribution of THE PEP to the Conference, an extensive overview of the environmental and health impacts of urban transport in the Russian Federation and the EECCA countries was prepared with the assistance of a consultant, Mr. Plamen Dimitrov, from the National Center of Hygiene, Medical Ecology and Nutrition of Bulgaria. The document has been translated into Russian and made available at THE PEP website on both languages.

14. The Overview builds on and summarizes the relevant information published internationally notably by the UNECE, WHO, EEA and ECMT on Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. For some of the countries and issues discussed, the unavailability of data set certain limitations.

15. The document starts with providing a brief overview of the main urban transport trends in the 12 EECCA countries, highlighting in particular the following issues:
(a) Currently the volume of transport in the EECCA countries is steadily growing after having declined sharply during the economic recession of the early 90s. Freight transport is also recovering, and freight volume increasing. This leads to increase of traffic density and to frequent traffic congestion, especially in urban areas.

(b) The rate of motorization is increasing largely due to the growth of the private car fleet, in particular in large cities. Most cars in the EECCA countries are more than 10 years old, are in relatively poor condition and still use leaded petrol. The car fleet is being expanded by used cars imported from Western Europe. Catalytic converters are often destroyed or removed from the imported cars to allow the use of the leaded petrol, which is more widely available than unleaded one. Most EECCA countries do not inspect vehicles systematically, and inspection bodies are most often not well equipped for measuring technical vehicle requirements and fuel quality. The emission controls, if they exist, may be based on outdated standards and therefore fairly ineffective.

(c) The growth of private motorization is accompanied by declining of public transport in the EECCA. In the 1990’s, the state authorities transferred responsibility for public transport to municipalities but usually without allocating sufficient funding to maintain and upgrade the vehicle fleet, infrastructure and services adequately. This had reduced the quality and quantity of public transport services, with declining competitiveness compared with private transport.

16. The main objective of the Overview was to describe the environmental and health effects of the current and projected transport trends, looking in particular at impacts from air pollution, road traffic injuries and noise, as well as from the unintegrated development of urban areas leading to urban sprawl, increasing dependency from cars and reduced opportunities for physical activity. The main issues discussed in the paper comprise the following:

(a) In the Russian Federation and the EECCA, the rapidly growing road transport and the increasing shift to private car use is the major source of ambient air pollutants in urban areas and big cities and an important source of suspended particular matters. The relatively poor road conditions, the ageing car fleet, the low-quality fuel and the continuous use of leaded petrol contribute to the associated heavy health burden which involves cardiovascular and pulmonary morbidity and mortality, respiratory symptoms and allergic reactions.

(b) Transport is also one of the main contributors to global greenhouse gases emissions contributing to climate change and, due to its expected growth, its relative contribution is expected to increase, possibly even offsetting emission reductions in other sectors.

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6 e.g. volatile organic compounds, VOCs; carbon monoxide; nitrogen dioxide, polycyclic aromatic hydrocarbons, PAHs and lead).
(c) The increasingly high-levels of traffic noise affect psychological well-being, mental activities and efficiency mainly through sleep disturbances, and can also cause adverse cardiovascular effects and hearing impairment. It is estimated, for instance, that in Moscow, 70–80% of the population live in conditions of high noise pollution causing acoustic discomfort from intensive motorized transport activities. Road traffic noise has reached disturbing levels also in an increasing number of other major cities in the region because of the rising density of road traffic combined with the deterioration of the road quality and ageing cars.

(d) Traffic accidents are a major cause of death, injuries and disability that waste vast human and economic resources, hamper economic and social development and pose a major challenge to health care systems. It has been estimated that every year more than 60,000 people are dying in the EECCA region because of road traffic injuries. In the EECCA countries, most crashes occur in built-up areas, where speed limits are often dangerously high. A disproportionate amount of this burden falls on children and vulnerable road users, in particular pedestrians. Road traffic injuries are also the leading cause of mortality among young people in the sub-region.

(e) Transport infrastructure - in particular for private cars - uses up large areas of land and the impacts on land-use go well beyond the area directly covered by the infrastructure, with high economic costs to society. The unintegrated urban land-use planning and the increased shift towards more private motorization leads also to urban sprawl, lengthens the trips and decreases the opportunities for physical activity practised through walking and cycling - in combination with public transport. The links between physical inactivity and a broad range of diseases, such as cardiovascular diseases, hypertension and some types of cancer as well as risks related to overweight and obesity have been well established.

17. The Overview contained in its last part conclusions and recommendations for further steps. These conclusions were further supplemented and developed during the workshop.

(a) It was recommended making health and environmental concerns an integral part of policy making in the field of urban mobility through an integrated approach to policymaking, involving cooperation between the authorities at different levels and co-ordination between the sectoral goals and responsibilities. The following factors were identified as facilitating cross-sectoral integration:

- The countries should take further advantage of the international legal, policy and planning measures available, including on environmental and health impact assessments of transport projects and policies (SEA,EIA,HIA) which facilitate the implementation of integrated transport policy and planning approaches by providing a mechanism to bring sectors together to discuss ways to maximize the gains of a given action while eliminating or minimizing its negative environment and health impacts.
Cross-sectoral integration implies requirements for consultation and participation of the public and other stakeholders in the decision-making process. Public participation not only has the merit of improving the plans and programmes designed and the decisions taken, but also of contributing to raising awareness of environment and health impacts of transport, and increasing public acceptance of the decisions - with a potential contribution to strengthening the civil society.

Raising awareness about the health and environment implications of different transport policy alternatives is an important means of managing transport demand and influencing travel behaviour in combination with education and economic and fiscal instruments.

Supportive institutional and administrative structures, reforms to clarify the responsibilities and interrelations of the various actors; education and training to build capacity of administrations to foster better working relations between sectors and to influence lifestyles of citizens.

Furthermore, to tackle the transport, environment and health externalities arising from urban transport and to promote sustainable and healthy urban mobility, EECCA countries should consider addressing the following issues on a priority basis:

- Phasing out lead from petrol and improving the quality of fuel, involving ratifying and implementing relevant international regulations, notably the Protocol on Heavy Metals to the Convention on Long-range Transboundary Air Pollution; and improving standards, data collection, vehicle inspections, emissions testing, monitoring, fuel pricing and other economic instruments;

- Investing in maintaining and upgrading the public transport infrastructure, fleet and services to offer a competitive and attractive alternative to private car use;

- Increasing the use of economic assessment of the possible effects of alternative transport and urban development options and economic instruments to manage the demand for transport;

- Mobilizing political commitment towards implementing effective preventive measures for reducing and preventing traffic-related crashes and injuries, by implementing measures such as those addressing excessive speeds in urban areas, driving under the influence of alcohol or other substances of abuse and using the necessary safety devices, such as seat-belts, child restraints and helmets; in
strengthening the prevention of road traffic injuries\(^7\); and improving the availability and quality of data to support informed and evidence-based decision-making, especially striving to improve the monitoring and assessment of exposure to air pollution and noise, the risk of injuries and the levels of physical activity.

IV. PROPOSALS FOR FOLLOW-UP ACTION

18. THE PEP Steering Committee is invited to provide guidance on the possible further steps to be taken in the field of urban transport in the EECCA countries as well as in the other countries with economies in transition of the region, following the outcome of the Moscow workshop and taking into account the recommendations from the Bureau.

19. In addition to the proposed further activities in the framework of THE PEP, and in accordance with the recommendations of the Bureau, the secretariat has committed itself to continuing the close cooperation with the ECMT secretariat, in particular in the field of urban transport. The ECMT will be moving onto the final phase of its the project on implementing sustainable travel policies, which has involved organization of three workshops and studies on specific topics. These pieces will be brought together into a Guide on good implementation, which is expected to be adopted by the Transport Ministers at the Ministerial Council in Dublin in 2006. The ECMT is willing to keep THE PEP Steering Committee informed on the development on the guide, including through reporting on the progress made at its annual sessions.

A. Publication and dissemination of the Overview and further analysis of the EECCA and South-East European Countries

20. At its meeting in December 2004, the Bureau of the Steering Committee had appreciated the “Overview of the environmental and health effects of urban transport in the EECCA” and recommended that the document be translated into Russian, published and disseminated widely in the region, through the Clearing House as well as through possible further workshops. The Committee may wish to indicate if it supports the publication and wide dissemination of the Overview.

\(^7\) EECCA countries could especially consider the recommendations of the World report on road traffic injury prevention (http://www.who.int/world-health-day/2004/informaterials/world_report/en) and of Preventing road traffic injury: a public health perspective for Europe (http://www.euro.who.int/eprise/main/WHO/Progs/TRT/injuries/20040326_2)
21. The Bureau also suggested complementing the report at a later date with a separate policy analysis focusing on how the transition countries in the region are developing cross-sectoral integration, and which challenges they are facing.

22. The Committee may wish to provide its views on the usefulness of a further policy analysis, and indicate issues that would require further investigation in particular. It is also invited to suggest ways to finance the preparation of the analysis, considering that such work would necessitate support from a senior consultant (cost approximately US$ 10 000). In addition, given the relative scarcity of the information available on the cross-sectoral integration in the EECCA region, the desk-based research would need to be completed by interviews in the countries themselves, requiring additional funds to cover travel and accommodation costs of the consultant. (With interviews of five countries (5 X US$ 2000 = US$ 10 000), the preparation of the analysis would require total of US$ 20 000). For cost-effective implementation and synergies, the Committee may also wish to consider ways to link the recommended policy analysis with the project focusing on “Institutional arrangements and mechanisms for integrated policy and decision making”.

B. Further workshops in the EECCA

23. Based on the feedback received during and after the Moscow workshop, notably from the local authorities, the event was seen as an important step towards exchanging information and promoting a constructive dialogue not only between different levels of the administration (e.g. at federal, state, regional and municipal levels), but also across different areas of expertise and sectors, including the health and environmental ones, setting an important precedent in the development of a better collaboration between the relevant stakeholders, and contributing to raise awareness about the effects of transport on the health of the citizens in the Russian Federation and CIS.

24. It has, therefore, been suggested that the Moscow workshop should be followed up with further workshops in the other EECCA countries for raising awareness on the environmental and health impacts of urban transport and for giving the required impetus to improve the dialogue and cooperation between the sectors and the different levels of governments. The workshops could specifically target the different sub-regions, namely Central-Asia, the Caucasus or the South-East Europe. Such workshops should be specially designed to strengthen the capacity of the national and local administrations as to the implementation of healthy and sustainable urban transport and land-use policies. The Bureau suggested also exploring opportunities of inviting International Financial Institutions (IFIs), such as the European Bank for Reconstruction and Development (EBRD) and the World Bank (WB) to take part in the workshop.

8 ECE/AC.21/2005/8 EUR/05/5046203/8.
25. In order to maximize the benefits from these workshops, the Bureau recommended tailoring them in such a way that they would target the specific conditions and the main concerns and challenges faced by the EECCA and South Eastern European countries in relation to the sustainability of urban travel, taking also into account the differences in the data collection and availability, as well as in methodological approaches to research. The Bureau encouraged involving representatives from these countries closely in the development of the workshops.

26. Among the means for financing the workshops, it was suggested that delegates should be advised back in their capitals of potential opportunities for harnessing national development funds.

27. The Committee is invited to provide its views on the organization of further workshops in the EECCA and South East European countries. It is particularly important that the representatives from these countries clearly indicate their views on the usefulness of further national/sub-regional workshops. They are also invited to single out specific topics in relation to urban transport that they would wish to see addressed in particular.

28. The Committee is also expected to discuss financing of the workshops. The example below presents costs involved in a 3 day workshop organized recently in Ukraine for 30 people.

<table>
<thead>
<tr>
<th>Meeting venue</th>
<th>Provided by the host country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel + accommodation for national and international experts (from “the West”)</td>
<td>Covered by the Western countries themselves</td>
</tr>
<tr>
<td>Travel of experts from EECCA</td>
<td>US$ 15,000 (30 x US$ 500)</td>
</tr>
<tr>
<td>Accommodation for EECCA experts</td>
<td>US$ 2,700 (30 X 3 nights, 30 US$/night)</td>
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<tr>
<td>Per diem for EECCA experts</td>
<td>US$ 900 (30X US$ 30)</td>
</tr>
<tr>
<td>Simultaneous interpretation (E-RU)</td>
<td>US$ 2,400 (24 h, 4 interpreters)</td>
</tr>
<tr>
<td>Meals (50 X US$ 20/day, 3 days)</td>
<td>US$ 3,000</td>
</tr>
<tr>
<td>Total</td>
<td>US$ 24,000</td>
</tr>
</tbody>
</table>

29. Upon decisions by the Committee, an informal working group composed of the interested EECCA and South East European countries, donor countries and other interested stakeholders, should be set up in order to prepare the substantive and organizational aspects of the possible next workshop.