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CHARTER ON TRANSPORT, ENVIRONMENT AND HEALTH

Cover illustration by Justyna Harasim, 14 years old, Szkoła Podstawowa, Wisniówie Elcki, Poland.
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EUROPEAN HEALTH21 TARGET 9

REDUCING INJURY FROM VIOLENCE AND ACCIDENTS

By the year 2020, there should be a significant and sustainable decrease in injuries, disability and death arising from accidents and violence in the Region

(Adopted by the WHO Regional Committee for Europe at its forty-eighth session, Copenhagen, September 1998)

EUROPEAN HEALTH21 TARGET 10

A HEALTHY AND SAFE PHYSICAL ENVIRONMENT

By the year 2015, people in the Region should live in a safer physical environment, with exposure to contaminants hazardous to health at levels not exceeding internationally agreed standards

(Adopted by the WHO Regional Committee for Europe at its forty-eighth session, Copenhagen, September 1998)

EUROPEAN HEALTH21 TARGET 11

HEALTHIER LIVING

By the year 2015, people across society should have adopted healthier patterns of living

(Adopted by the WHO Regional Committee for Europe at its forty-eighth session, Copenhagen, September 1998)

Keywords

ENVIRONMENTAL HEALTH – congresses
ENVIRONMENTAL POLICY
TRANSPORTATION
VEHICLE EMISSIONS – adverse effects
ACCIDENTS, TRAFFIC
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Charter on Transport, Environment and Health

Preamble

We, Ministers and representatives of the European Member States of WHO¹ responsible for transport, environment and health:

1. ACKNOWLEDGE that transport activities play a significant part in life today. Transport provides us with access to goods and services, opportunities for individual mobility and better quality of life, and plays an important role in the economic and social development of our communities;
2. ARE CONCERNED that the impacts which decisions about transport have on health and the environment have so far not been fully recognized. We must ensure that the wellbeing of our communities is put first when preparing and making decisions regarding transport and infrastructure policies;
3. RECOGNIZE that:
 - 3.1 Reliance on motorized transport, in particular road transport, continues to increase, resulting in adverse environmental and health effects. These effects may increase in the future if no effective preventive and structural actions are taken;
 - 3.2 Increasing the safety of transport and reducing the health consequences of accidents need to be given high priority;
 - 3.3 Policies on transport, environment and health need to be better coordinated, with a view to integrating them. The potential conflicts between transport and environment and health policies will increase at all levels unless effective action is taken now. There is a need to enhance cooperation and coordination between different sectors in central and local governments, as well as between governments, the public and the private sector;
 - 3.4 Until now, the health effects of transport have been dealt with separately and without regard for their cumulative effect. Further coordination with and within the health sector is needed;
 - 3.5 Consideration of the health impacts of policies has to be better integrated into approval procedures, impact assessments, and evaluations of the costs and benefits of transport plans, land use planning, and infrastructure programmes and investments;
 - 3.6 Motorized transport, and especially road and air transport users, usually do not face the full environmental and health-related costs, which can create adverse incentives and distortions in the transport market;

¹ Reference is made to the supportive statement of the European Commission (EC) in the Declaration of the Third Ministerial Conference on Environment and Health (EUR/ICP/EHCO 02 02 05/18 Rev.5).

- 3.7 The public is generally not sufficiently informed of the adverse environmental and health effects from motorized transport and the importance of taking individual action to alleviate the problems.

We adopt this Charter, which was elaborated by ministries of transport, environment and health. This Charter sets out the principles, strategies and a plan of action to guide our policies towards achieving transport sustainable for health and the environment.

I. Why health is an issue in transport and environment policies: the concerns

We are concerned that current patterns of transport, which are dominated by motorized road transport, have substantial adverse impacts on health (as described in Annex 1).

1. In all Member States, traffic accidents, and in particular road traffic accidents, are a major cause of death and serious injury. However, success in reducing accidents in some countries demonstrates that it is possible to substantially reduce this massive health burden in all countries.
2. Road transport is a major contributor to human exposure to air pollution. Long-term exposure to air pollutants and levels exceeding air quality guideline values is associated with a number of adverse health impacts, including effects on cardiovascular diseases and on respiratory diseases in adults and children. Such exposure may reduce life expectancy. Some pollutants such as benzene and some types of particle, increase cancer risks.
3. A considerable number of people in Europe are exposed to levels of traffic noise that cause not only serious annoyance and sleep loss but also communication problems, and even learning problems in children. There is emerging evidence of an association between hypertension and ischaemic heart diseases and high levels of noise. Ambient noise levels continue to grow due to ever-increasing volumes of traffic.
4. Forms of transport that entail physical activity, like cycling and walking, separately or in conjunction with public transport, offer significant positive health gains; however, these transport modes have often been overlooked in planning and decision-making.
5. Heavy road traffic and major transport infrastructures can divide communities, reduce opportunities for social interactions, and worsen people's quality of life and can be associated with reduced interpersonal networks of support at local level.
6. Transport activities can contaminate soil, water and air, through accidents involving dangerous goods and contamination from transport infrastructures, or by heavy metals from vehicle exhausts, de-icing substances, fuel spillages, release of fuels and other pollutants from road and rail vehicles, ships and aircraft, etc.
7. Everyone is exposed to some degree of health risk from transport, but the adverse health effects fall disproportionately on the most vulnerable groups in our societies: people with disabilities or hearing or sight impairments; older people; the socially excluded; children and young people; and people living or working in areas of intensified and cumulative air pollution and noise.

II. What has happened so far: the state of play

We are encouraged by the initiatives already taken through the adoption of a number of political declarations, conventions and protocols (as listed in Annex 2), and in particular WHO's policy on Health for All, the Helsinki Declaration on Action for Environment and Health in Europe, and the Vienna Declaration and Programme of Joint Action on Transport and the Environment adopted under the auspices of the United Nations Economic Commission for Europe (UN/ECE), as well as the EU legislation in this area. We reaffirm the commitments already made in the fields of transport, environment and health, and we acknowledge the steps already taken towards achieving transport that is sustainable for health and the environment. However, despite these progressive steps we are concerned that the impacts which decisions about transport have on health and the environment have so far not been fully recognized.

1. We recognize the need to strengthen the enforcement of current road safety legislation.
2. We encourage the ratification of UN/ECE legally binding instruments relevant to transport, environment and health by Member States that have not yet done so.
3. We are concerned that more sustainable modes of transport, especially public transport and goods transport by rail, are losing market share to road transport in many countries. This trend is enhanced by the fact that the majority of transport infrastructure investment is allocated to road infrastructures, not least in the countries in transition.

We emphasize the urgent need to take the next step in adding value to efforts to achieve sustainable development in transport, by fully integrating health requirements and involving environment and health authorities in decision-making on transport, land use and infrastructure policies at transnational, national, subnational and local levels.

III. Where do we want to go: principles, approaches and guiding strategies for transport sustainable for health and the environment

We have decided to incorporate the principles and approaches of sustainable development beneficial for health and the environment into our policies with relevance for transport (as described in Annex 3), in particular the following:

- sustainability;
- the precautionary principle;
- prevention;
- protection and promotion of health and safety;
- the “polluter pays” principle, including internalization of externalities;
- multisectoral integration of environment and health requirements and involvement of health authorities in decision-making on transport, land use and infrastructure policies;
- equity;
- public participation and public access to information;
- subsidiarity;
- efficiency.

Following these principles and approaches, we will incorporate guiding strategies for moving towards transport sustainable for health and the environment into our transport-related policies, in particular applying synergistic combinations of the following key strategy elements:

1. reducing the need for motorized transport by adaptation of land use policies and of urban and regional planning;
2. shifting transport to environmentally sound and health-promoting modes;
3. implementing best available technologies and best environmental and health standards;
4. applying strategic health and environmental indicators and impact assessments, with the involvement of environmental and health authorities;
5. relating the costs of transport more closely to mileage travelled and internalizing transport-related environmental and health costs and benefits;
6. raising awareness of transport and mobility sustainable for health and the environment, including efficient driving behaviour;
7. applying innovative methodologies and monitoring tools;
8. establishing partnerships at international, national, subnational and local levels;
9. promoting pilot projects and research programmes on transport sustainable for health and the environment;
10. providing information to the public and involving them in relevant decision-making processes.

IV. How will the goals be achieved: a plan of action for moving towards transport sustainable for health and the environment

Having decided to establish this plan of action in order to collaborate and cooperate on making transport sustainable for health and the environment and to further the UN/ECE Vienna Declaration and Programme of Joint Action on Transport and the Environment, following the principles, approaches and guiding strategies listed in section III,

WE WILL PERFORM the actions set out in this plan of action and incorporate the recommendations of WHO into our transport and transport-related policies; and

WE REQUEST the WHO Regional Office for Europe, in collaboration with other international bodies, to perform the international actions as set out in this plan of action and undertake to support those WHO efforts, within the means available.

A. Integration of environment and health requirements and targets in transport and land use policies and plans

We will:

1. Pursue multisectoral cooperation and ensure that environment and health requirements are integrated and their authorities are both involved in transport-related decision-making processes, such as those on transport, water and land use planning, infrastructure investment programmes and policy decisions.
2. Establish the concepts and long-term goals of transport sustainable for health and the environment, building on the work already done in the relevant fora.
3. Adopt targets as listed in Annex 4, based on scientific knowledge and work and the guidelines of WHO and incorporate them into the relevant policies to reduce *inter alia*:
 - mortality, cardiovascular and respiratory problems and cancer risks and neuro-developmental problems from transport-related air pollution;
 - mortality and morbidity from transport accidents;
 - risk of cardiovascular and other diseases from lack of physical exercise;
 - human exposure to noise.
4. Develop measurement methodologies and data collection processes to monitor progress towards achieving the targets in Annex 4. Such monitoring should also underpin the development of policies to reduce the adverse health and environmental impacts of transport.
5. Review and where necessary develop further strategies or introduce national action plans to ensure the proper integration of health and environment concerns into transport, and land use strategies, in particular, through the further development of National Environmental Health Action Plans (NEHAPs), and to promote similar actions at the sub-national and local levels.
6. Ensure that health authorities take full account of the impact on transport of their own policies.
7. Develop further or introduce policies to reduce air, soil and water pollution, accidents and noise, greenhouse gas emissions and the damaging of forests associated with transport and its infrastructures (airports, motorways, railways, terminals, harbours, petrol stations, etc.), in similar ways to other major industrial sources.
8. Ensure that synergistic effects are attained between strategies chosen to pursue the Kyoto targets for reduction of greenhouse gases and strategies for the reduction of other air pollutants of health concern, paying special attention to emissions from diesel engines.

We call on WHO, in cooperation with other international organizations, to

9. Develop scientific guidelines for the attainment of transport sustainable for health and the environment, and in particular for the integration of environment and health requirements and targets into policies and plans, based on knowledge of the full and combined impacts of transport-related health risks, including the establishment of threshold values to protect public health, where possible.

B. Promotion of modes of transport and land use planning which have the best public health impacts

We will:

1. Develop and implement policies to promote modes of transport which lead to health and environment benefits, aiming at a shift to modes of transport with lower specific emissions and accident risks. In particular, we will promote safe and environmentally friendly cycling and walking by providing safe infrastructure and networks, implementing measures for traffic management, enforcing speed controls and speed limits that are appropriate to local circumstances, and designing roads and settlements taking into account the needs of pedestrians and cyclists.
2. Reduce the need for motorized transport by adapting land use policies and urban and regional development plans to enable people to have easy access to settlements, housing and working areas, and shopping and leisure facilities by cycling, walking and public transport.
3. Raise the attractiveness of public transport, walking and cycling, and promote intermodality between them, not least by prioritizing public transport, walking and cycling in connection with the extension of infrastructure.
4. Provide incentives to use the best available technologies and encourage ambitious vehicle emission standards and fuel quality requirements, in order to improve safety and reduce air pollutants, noise and fuel consumption.

We call on WHO, in cooperation with other international organizations, to:

5. Assess and provide information about the public health impacts of different modes of transport, in terms of health benefits and disbenefits.
6. Quantify the consequences for public health of increasing levels of physically active modes of transport, notably walking and cycling.

C. Health and environmental impact assessments

We will:

1. Assess the health and environmental impacts of policies, strategies, programmes, projects and legal measures with implications for transport and mobility, and ensure that public health authorities are involved in these assessments at all levels.
2. Support the implementation of these assessments as part of national and international procedures for making decisions about investments and infrastructure programmes.

We call on the World Bank, the European Investment Bank, the European Bank for Reconstruction and Development and other investment institutions to:

3. Carry out environmental and health impact assessments of infrastructure projects with implications for transport and land use planning supported by them.

We call on WHO to:

4. In cooperation with UN/ECE, the United Nations Environment Programme (UNEP) and other relevant international organizations, develop guidelines for making health impact assessments of policies, strategies, programmes, projects and legal measures with implications for transport.
5. Encourage the greater use and integration of health impact assessments with environmental impact assessments by disseminating tools and methods, sharing good practice, and providing education and expert training.

D. Economic aspects of transport, environment and health

We will:

1. Consider the health cost implications of infrastructure investment and land use planning and their consequences in terms of transport and the need for mobility, taking account not only of direct health costs but also of the costs of not adopting health-promoting alternatives.
2. Promote, implement and review policies designed to internalize the health and environmental externalities (external costs) generated by transport activities. These policies will also include measures to ensure that transport costs more closely reflect marginal costs.
3. Ensure that policies introduced to promote transport that is sustainable for health and the environment are cost-effective, taking all costs into account.
4. Promote the progressive suppression of subsidies for polluting modes of transport.

We call on WHO, in cooperation with other international organizations, to:

5. Develop comprehensive guidance on methods and practical tools to estimate the costs and benefits of the health consequences of transport decisions.

E. Special care of groups at higher risk

We will:

1. Identify groups, time periods, environments and areas at higher risk of experiencing the adverse health impacts of transport, taking into account criteria to be proposed by WHO, and monitor relevant health impacts among these groups as described below.
2. Develop, implement and monitor specific policies and measures to protect these groups at higher risk of experiencing the adverse health impacts of transport.

We call on WHO, in cooperation with other international organizations, to:

3. Develop methods for assessing and monitoring health effects in groups at higher risk of experiencing adverse transport-related impacts.

4. Provide information and develop guidance on transport-related health targets, threshold values and measures regarding populations at higher risk due to:
 - (a) specific vulnerability (children, the elderly or people suffering from diseases, refugees and immigrants);
 - (b) higher exposure levels resulting from geographical and topographical conditions, settlement characteristics, travel and occupation;
 - (c) disability and social disadvantage as a result of lack of access to facilities, disruption of communities and greater exposure to accident risks.

F. Risks to public health not yet clearly quantified

We will:

1. Promote international collaboration on research and standardized measurement programmes and promote the development of cost-effective measures against the adverse health effects of noise, pollutants and potential carcinogens, such as emissions from diesel engines and fine and ultrafine particles.
2. Promote international collaboration on measurement programmes at the point of exposure and support research into the links between transport indicators, exposures and health.

We call on WHO to:

3. Promote further investigation of the health effects of pollutants, pollutant mixes, noise and other hazards from transport where evidence is incomplete and human exposure is significant (e.g. diesel engine emissions, and especially fine and ultrafine particles), including their possible carcinogenic risk potential.
4. Propose guideline values where possible for ambient levels of and exposure to pollutants and noise, in particular for those pollutants for which guideline values are not yet available, with a view notably to informing the review of the European Community's air quality standards before 2005.
5. Promote investigation of the health effects of exposure to pollutant mixtures, noise and other hazards, including their combined effects inside motor vehicles, on pavements, on bicycles, and due to living and/or working near busy roads, and elaborate guidelines (including guideline values) for these exposure levels.
6. Further develop guidelines regarding the health risks of levels of exposure to fine and ultrafine particles based on assessment of their health effects, with particular attention to their number, mass, size, surface area and composition.
7. Assess the evidence for health risks from soil and water contamination due to transport and its infrastructures, and make recommendations regarding the possibility of establishing safe limits and the need to establish targets.
8. Promote investigation of the health and psychosocial effects of participation in modern traffic.

G. Indicators and monitoring

We will:

1. Implement and, if needed, further develop systems for monitoring transport-related exposures and impacts on environment and health.

We call on WHO, in cooperation with other international organizations, to:

2. Develop indicators and guidelines for measuring and monitoring the health effects of transport on the general population and in groups and areas at higher risk, and assess the effectiveness of interventions to minimize those effects.

H. Pilot actions and research

We will:

1. Promote research programmes and pilot projects and incorporate the results in our transport, environment, land use and health policies, especially in liaison with WHO.

2. Establish conditions for pilot projects where local measures are employed to reduce pollution and other negative impacts from transport, for example by promoting environmentally enhanced vehicles, restricting the circulation of high-polluting vehicles, and promoting cycling, walking and innovative public transport, local speed limits and parking restrictions.

3. Enhance our endeavours to bridge the gap which still exists between our knowledge of strategies that can be used to move towards transport sustainable for health and the environment, on the one hand, and current transport, land use and infrastructure patterns, on the other.

We call on WHO, in cooperation with other international organizations, to:

4. Facilitate the development of a programme of research with a special focus on the adverse health effects of transport and the positive health effects of physically active modes of transport, notably walking and cycling, and promote pilot projects related to these issues.

5. Cooperate with countries on pilot testing health impact assessment methods, evaluating costs and benefits of policy interventions, and supporting training initiatives and information dissemination programmes.

I. Public participation, public awareness, information

We will:

1. Ensure public access to health-related information on and participation in decision-making on transport projects, programmes, policies, plans and regulations, and ensure access to justice in these matters in accordance with the application of the provisions of the Århus Convention. This should apply notably to all actions taken under this Charter.

2. Promote the development and application of:
 - (a) information, education and communication campaigns, including those of international institutions, to raise the awareness among stakeholders and decision-makers of the need for transport sustainable for health and environment;
 - (b) information campaigns targeted at groups using the least environmentally friendly modes of transport.
3. Contribute to WHO's information dissemination efforts and provide and disseminate national and regional public information on transport's environment and health impacts, and on strategies and tools for transport sustainable for health and the environment, targeting specific population groups.

We call on WHO to:

4. Develop an information, education and communication strategy to increase public awareness of the different impacts of transport on human health and to facilitate the choice of modes of transport sustainable for health and the environment.
5. Establish a transnational WHO network for sharing information and disseminating good practice with regard to transport sustainable for health and the environment.

J. Countries in transition and countries with severe problems concerning transport-related health effects

We will:

1. Cooperate with and so far as possible support these countries in promoting transport sustainable for health and the environment.
2. Pay attention to meeting the challenges of integrating transport, environment and health in the economies in transition, in order to avoid and reduce the environmental health impacts of increasing transport.

We call on WHO, in cooperation with other international organizations, to:

3. Direct special guidance and support to these countries.

V. Implementation and follow-up process

We will implement in partnership the plan of action set out in this Charter and make appropriate arrangements for its follow-up, so far as possible using existing mechanisms to follow up and monitor transport, environment and health decisions, such as the European Environment and Health Committee (EEHC), national environmental health action plans (NEHAPs), WHO's European ministerial conferences on environment and health, the UN/ECE Vienna Declaration and Programme of Joint Action on Transport and the Environment, the Organisation for Economic Co-operation and Development (OECD) Transport and Environment Working Group, and the Environment for Europe process.

We will:

1. Collaborate with other countries on transboundary and international issues, taking into account the guidelines and tools proposed by WHO and other international organizations.
2. Promote enhanced cooperation by WHO with other intergovernmental bodies such as UN/ECE, UNEP, the European Community and transnational bodies such as the Central European Initiative (CEI), OECD, the European Conference of Ministers of Transport (ECMT), the European Environment Agency (EEA), nongovernmental organizations (NGOs) and the private sector.
3. Encourage the public, NGOs and the private sector and support local authorities and relevant city networks to engage in efforts to attain transport sustainable for health and the environment that promote and actively contribute to implementation of the plan of action in this Charter.

We will, in cooperation with WHO and other international organizations:

4. Follow up the implementation of the decisions contained in this Charter by:
 - (a) using the national focal points established for the implementation of the UN/ECE Vienna Declaration and Programme of Joint Action on Transport and the Environment and designating additional contact points for health before the end of 1999;
 - (b) ensuring that these focal/contact points link effectively with the follow-up processes of WHO's European ministerial conferences on environment and health, the UN/ECE Vienna Declaration and Programme of Joint Action on Transport and the Environment and, nationally, with Habitat Committees;
 - (c) setting up a steering group of interested Member States and international organizations to push forward the implementation of this Charter and to facilitate cross-sectoral coordination and international cooperation of public and private institutions, and to coordinate and cooperate closely with the UN/ECE Joint Meeting on Transport and Environment (JMTE).
5. Support, where needed, WHO and the other agencies in compiling an overview of existing agreements and legal instruments in the field of transport, environment and health, as specified below, and consider the proposals on further needed action which they make based on this overview.
6. Regularly monitor the links between transport, environment, land use and health using available relevant information and report on the status of these links in the Region.
7. Monitor progress towards targets concerning transport sustainable for health and the environment and towards the integration of health and environment concerns into water, land use and transport policies, as part of existing international review processes (e.g. OECD and UN/ECE environmental performance reviews).

We call on WHO to:

8. Assist the steering group of interested Member States and international organizations within the framework of EEHC.
9. Disseminate information about new scientific evidence concerning the effects of transport on the environment and health, about methods of and experience with environmental health impact assessment, and about economic valuations of transport-related health effects.
10. Update targets, guidelines and other tools relevant to implementation of this Charter, and update Charter-related research priorities, in particular in liaison with the international platform on research.

We call on UN/ECE JMTE to:

11. Coordinate and closely cooperate with the steering group mentioned under sub-paragraph 4(c) above.

We call on WHO, jointly with UN/ECE and in cooperation with other international organizations, to:

12. Provide an overview of relevant existing agreements and legal instruments, with a view to improving and harmonizing their implementation and further developing them as needed. A report on this overview should be submitted at the latest by spring 2000, recommending which further steps are needed. That report should cover the possibility of new non-legally binding actions and the feasibility, necessity and content of a new legally binding instrument (e.g. a convention on transport, environment and health), focusing on bringing added value to, and avoiding overlaps with, existing agreements.

London, 16 June 1999

Tessa Jowell. Michael Meacher

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Annex 1

EVIDENCE FOR THE LINKS BETWEEN TRANSPORT, ENVIRONMENT AND HEALTH² – KEY FACTS AND FIGURES

Transport accidents

Current yearly numbers of road traffic accidents in the WHO European Region are still unacceptably high, with around 2 million accidents with injuries, 120 000 deaths and 2.5 million injured people.

One in every three road traffic deaths involves a person younger than 25 years.

Road accidents account for most fatal transport accidents, both in terms of absolute number of deaths and of deaths per kilometre travelled. For example, in 1995, in the European Union 44 000 people were killed in road accidents, while 936 people died in railway accidents. Death rates per thousand million kilometres travelled were about three times higher for road than for rail transport (11 and 3.4 fatalities per thousand million kilometres, respectively). Worldwide statistics on air safety report that in 1997 there were a total of 916 fatalities in air accidents involving scheduled flights, corresponding to 0.4 fatalities per thousand million kilometres of travel worldwide. As for lives lost at sea, worldwide statistics report a total of 690 fatalities in 1996.

Traffic accident mortality rates have been falling over the past decade across the Region, but there is still an almost ten-fold difference between the highest and lowest rates.

Vulnerable road users such as pedestrians and cyclists account for 30–35% of deaths. The severity of accidents among pedestrians is almost twice as high as that in car occupants.

Air pollution

It is estimated that in European cities around 80 000 adult deaths a year are related to long-term exposure to traffic-related air pollution, using the proportion of ambient PM₁₀ concentration due to traffic as an indicator.

Both short- and long-term WHO air quality guideline values are frequently and considerably exceeded in the European Region, in particular for ozone, NO₂ and particulate matter.

New evidence is emerging that children living near roads with heavy vehicle traffic have about a 50% higher risk of suffering from respiratory symptoms than children living in areas with low traffic.

Car occupants have a significantly higher level of exposure to engine emissions than people outside vehicles.

In 1998, the California Air Resources Board identified diesel exhaust as a “Toxic Air Contaminant” based on a review of animal and epidemiological studies, which strongly suggest a causal relationship between occupational diesel exhaust exposure and lung cancer. Already in 1989, the International Agency for

² The evidence provided in Annex 1 is based on expertise brought together by WHO, in particular through the work of the scientific experts who prepared the summary substantiation paper and the book “Transport, environment and health”, where a detailed discussion of the issues and literature references are presented. The summary substantiation paper and the book will be issued at the time of the Third Ministerial Conference on Environment and Health, and can be ordered from WHO. The summary substantiation paper can also be downloaded from the Internet at <http://www.who.dk/london99>.

Research on Cancer (IARC) had concluded that diesel engine exhaust is “probably carcinogenic to humans” (Group 2A), while gasoline engine exhaust was classified as “possibly carcinogenic to humans” (Group 2B).

Traffic noise

Transport and in particular road traffic, is the main cause of human exposure to ambient noise.

The proportion of the population in the European Region exposed to high noise levels (equivalent to 65 dBLA_{eq} over 24 hours) increased from 15% to 26% between 1980 and 1990.

About 65% of the European population is estimated to be exposed to noise levels leading to serious annoyance, speech interference and sleep disturbance (55–65 dBLA_{eq} over 24 hours).

Children chronically exposed to loud noise (e.g. in the proximity of airports) show impaired acquisition of reading skills, attention and problem-solving ability.

Noise can interfere with mental activities requiring attention, memory and the ability to deal with complex analytical problems. Adaptation strategies (tune out/ignore noise) and the efforts needed to maintain performance have been associated with high levels of stress hormones and blood pressure.

There is emerging evidence of an association between hypertension and ischaemic heart diseases and high levels of noise.

Physical activity

Lack of physical activity is one of the major risk factors for coronary heart disease, which is the leading cause of mortality in Europe. On the other hand, walking and cycling as daily activities can promote health by providing physical activity, decreasing noise and air pollution.

The health benefits of regular physical activity can be summarized as:

- 50% reduction in the risk of developing coronary heart diseases (i.e. a similar effect to not smoking);
- 50% reduction in the risk of developing adult diabetes;
- 50% reduction in the risk of becoming obese;
- 30% reduction in the risk of developing hypertension;
- 10/8 mm Hg decline in blood pressure in hypertensive subjects (i.e. a similar effect to that obtained from antihypertensive drugs).

Other effects include reduced osteoporosis, relief of symptoms of depression and anxiety, and the prevention of falls in the elderly.

A total of 30 minutes’ brisk walking or cycling on most days of the week, even if carried out in 10–15 minute episodes, is effective in providing these health benefits.

The average trip by walking in Europe is about 1.5 km and the average cycling trip is about 3.5 km, each taking about 15 minutes to make: two such trips each day would be enough to provide the recommended “daily dose” of physical activity.

Psychosocial effects

Certain patterns of transport have a broad range of effects on mental health, including risk-taking and aggressive behaviours, depression and post-traumatic psychological effects of accidents.

High levels of traffic can cause social isolation and limit interpersonal networks of support, factors which have been found to be associated with higher mortality and morbidity in the elderly.

Children who have the opportunity of playing unhindered by street traffic and without the presence of adults have been found to have twice as many social contacts with playmates in the immediate neighbourhood as those who could not leave their residence unaccompanied by adults due to heavy traffic.

The fear of accidents is reported by parents as being the main reason for taking children to school by car. This hinders the development of children's independence and reduces their opportunities for social contact. It also has an influence on children's attitudes towards car use and personal mobility in adulthood.

The lack of physical activity, including walking and cycling, is associated with mental ill health, including depression.

Water and soil pollution

Transport accidents with dangerous goods can lead to localized environment and health risks from contamination of air, water and soil.

Transport infrastructures, heavy metals from vehicle exhaust and de-icing substances, vehicle waste (e.g. old cars, tires, batteries), fuel spillages, as well as tire and road abrasion, can cause contamination of soil and groundwater, which may affect the quality of drinking-water and of agricultural products.

Sewage released from ships can cause microbiological contamination of water and shellfish. Release of ballast water (i.e. water which fills empty oil tanks) leads to contamination of water by hydrocarbons.

Groups at higher risk

The impacts of transport on health fall disproportionately on certain groups of the population. Some are more vulnerable to traffic risks, due to old or young age, to illness or disability. Others use modes of transport associated with greater risks (e.g. motorcycles). Some are more exposed because the areas they live, work or move in have higher levels of pollutants and noise (e.g. due to the intensifying effect of specific geographical and topographical conditions and settlement characteristics) or other risks, or restrict cycling and walking. Many disbenefits of transport can accumulate in the same communities, often those that already have the poorest socioeconomic and health status.

Annex 2

RELEVANT INTERNATIONAL ACTIONS – STATUS AS OF MARCH 1999

*(Note: This Annex is **not** a complete inventory of all international actions developed in the fields of Transport, Environment and Health. It has been developed as a “living document”, open to further improvements. It is meant solely to provide readers of the Charter on Transport, Environment and Health with a list of identified relevant references.)*

Legally binding documents ³

United Nations Economic Commission for Europe (UN/ECE)

Air pollution

The 1979 Convention on Long-range Transboundary Air Pollution and its Protocols, and:

- the 1984 Protocol on the Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of Long-range Transboundary Air Pollution
- the 1988 Protocol on the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes
- the 1991 Protocol on the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes
- the 1994 Protocol on Further Reduction of Sulphur Emissions
- the 1998 Protocol on Heavy Metals
- the 1998 Protocol on Persistent Organic Pollutants

Environmental impact assessment

The 1991 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)

Public information and participation

The 1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Århus Convention)

Transport of dangerous goods

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), of 30 September 1957

Protocol amending Article 1 (a), Article 14 (1) and Article 14 (3) of the European Agreement of 30 September 1957 concerning the International Carriage of Dangerous Goods by Road (ADR), of 28 October 1993

Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD), of 10 October 1989

³ Turkey has a reservation on the Conventions and Agreements to which it is not a signatory party.

Transport of perishable foodstuffs

Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP), of 1 September 1970

Road traffic and road signs and signals

Convention on Road Traffic, of 19 September 1949

Convention on Road Traffic, of 8 November 1968

Protocol on Road Signs and Signals, of 19 September 1949

Convention on Road Signs and Signals, of 8 November 1968

European Agreement supplementing the Convention on Road Traffic (1968), of 1 May 1971

European Agreement supplementing the Convention on Road Signs and Signals (1968), of 1 May 1971

European Agreement on the application of Article 23 of the Convention on Road Traffic (1949) concerning the dimensions and weights of vehicles permitted to travel on certain roads of the contracting parties, of 16 September 1950

European Agreement supplementing the Convention on Road Traffic (1949) and the Protocol on Road Signs and Signals (1949), of 16 September 1950

European Agreement on Road Markings, of 13 December 1957

Protocol on Road Markings, additional to the European Agreement supplementing the Convention on Road Signs and Signals, of 1 March 1973

Agreement on Minimum Requirements for the Issue and Validity of Driving Permits (APC), of 1 April 1975

Road vehicles

Agreement concerning the Adoption of Uniform Technical Prescriptions of Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals granted on the basis of these Prescriptions, of 20 March 1958. This includes the relevant technical regulations listed in the Agreement

Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspection of Wheeled Vehicles and the Reciprocal Recognition of such Inspections, of 1997

Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles

Transport infrastructures

Declaration on the construction of main international traffic arteries, of 16 September 1950

European Agreement on Main International Traffic Arteries (AGR), of 15 November 1975

European Agreement on Main International Railway Lines (AGC), of 31 May 1985

European Agreement on Important International Combined Transport Lines and Related Installations (AGTC), of 1 February 1991

Protocol on Combined Transport on Inland Waterways to the European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) of 1991, of 1997

European Agreement on Main Inland Waterways of International Importance (AGN), of 19 January 1996

Working conditions

European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport (AETR), of 1 July 1970

Taxation

Convention on the Taxation of Road Vehicles for Private Use in International Traffic, of 18 May 1956

Convention on the Taxation of Road Vehicles engaged in International Passenger Transport, of 14 December 1956

Convention on the Taxation of Road Vehicles Engaged in International Goods Transport, of 14 December 1956

Private law

Convention on the Contract for the International Carriage of Goods by Road (CMR), of 19 May 1956

Protocol to the Convention on the Contract for the International Carriage of Goods by Road (CMR), of 5 July 1978

Convention on the Contract for the International Carriage of Passengers and Luggage by Road (CVR), of 1 March 1973

Protocol to the Convention on the Contract for the International Carriage of Passengers and Luggage by Road (CVR), of 5 July 1978

Economic regulations

General Agreement on Economic Regulations for International Road Transport, of 17 May 1954

Inland navigation

Convention relating to the Unification of Certain Rules concerning Collisions in Inland Navigation, of 15 March 1960

Convention on the Registration of Inland Navigation Vessels, of 25 January 1965

Convention on the Measurement of Inland Navigation Vessels, of 15 February 1966

Convention relating to the Limitation of Liability of Owners of Inland Navigation Vessels (CLN), of 1 March 1973

Protocol to the Convention relating to the Limitation of the Liability of Owners of Inland Navigation Vessels (CLN), of 5 July 1978

Convention on the Contract for the International Carriage of Passengers and Luggage by Inland Waterways (CVN), of 6 February 1976

Protocol to the Convention on the Contract for the International Carriage of Passengers and Luggage by Inland Waterways (CVN), of 5 July 1978

Water protection

Convention on the Protection and Use of Transboundary Watercourses and International Lakes, of 17 March 1992 (Helsinki)

Rail transportation

Convention Concerning International Carriage by Rail (COTIF), 9 May 1980 (Berne), including:

- Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV)
- Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM)
- Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)

United Nations (UN)

Climate change

Framework Convention on Climate Change, of 9 May 1992 (New York)

Kyoto Protocol to the Framework Convention on Climate Change, of 11 December 1997

United Nations Environmental Programme (UNEP)

Protection of the ozone layer

Vienna Convention for the Protection of the Ozone Layer, of 22 March 1985

Montreal Protocol on Substances that Deplete the Ozone Layer, of 16 September 1987 and adjustments adopted in London (1990), Copenhagen (1992), Vienna (1995) and Montreal (1997)

Transboundary movements of hazardous wastes and chemicals

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, of 22 March 1989

Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC Convention), 1998 (Rotterdam)

European Union (EU)

Environmental impact assessment

Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

Road safety

Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to type-approval of motor vehicles and their trailers, as amended

Directive 71/320/EEC of 26 July 1971 on the approximation of the laws of the Member States relating to the braking devices of certain categories of motor vehicles and of their trailers, as amended

Directive 74/408/EEC relating to the interior fittings of motor vehicles (strengths of seats and of their anchorages), as amended

Directive 76/115/EEC relating to anchorages for motor vehicle safety belts, as amended

Directive 77/541/EEC relating to safety belts and restraint systems for motor vehicles, as amended

Council Regulation 3820/85/EEC of 20 December 1985 on the harmonisation of certain social legislation relating to road transport

Council Regulation 3821/85/EEC of 20 December 1985 on recording equipment in road transport

Directive 89/459/EEC of 18 July 1989 on the approximation of the laws of the Member States relating to the tread depth of tyres of certain categories of motor vehicles and their trailers, as amended

Directive 91/671/EEC on the approximation of laws relating to compulsory use of safety belts in vehicles of less than 3.5 tonnes

Directive 92/6/EEC on the installation and use of speed limitation devices

Directive 96/53/EC of 25 July 1996 laying down for certain vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic

Directive 96/96/EC of 20 December 1996 on the approximation of the laws of the Member States relating to roadworthiness tests for motor vehicles and their trailers

Driving licences

Council Directive 76/914/EEC of 16 December 1976 on the minimum level of training for some road transport drivers

Council Directive 91/439/EEC of 29 July 1991 on driving licences, amended by:

Council Directive 94/72/EC of 19 December 1994

Council Directive 96/47/EC of 23 July 1996

Council Directive 97/26/EC of 2 June 1997

Air quality

Directive 70/220/EEC on measures to be taken against air pollution by gases from positive ignition engines of motor vehicles, as amended, including:

Directive 74/209/EEC; Directive 77/102/EEC; Directive 78/665/EEC; Directive 83/351/EEC; Directive 88/76/EEC; Directive 88/609/EEC; Directive 89/458/EEC; Directive 91/441/EEC (the “Consolidated Directive”); Directive 94/12/EC; Directive 96/69/EC; Directive 98/69/EC

Directive 72/306/EEC on measures to be taken against emissions of pollutants from diesel engines for use in motor vehicles, as amended

Directive 75/716/EEC on the approximation of the laws of the Member States on the sulphur content of certain liquid fuels, as amended by Directive 87/219/EEC

Directive 78/611/EEC on the lead content of petrol

Directive 80/779/EEC on air quality limit values and guide values for sulphur dioxide and suspended particulates

Directive 82/884/EEC on limit values for lead in the air

Directive 85/203/EEC on air quality standards for nitrogen dioxide

Directive 85/210/EEC on the approximation of the Member States' legislation on the lead content of petrol, and the introduction of lead-free petrol

Directive 85/536/EEC of 5 December 1985 on crude-oil savings through the use of substitute fuel components in petrol, as amended

Directive 88/77/EEC on the approximation of the laws of the Member States relating to the measures to be taken against the emissions of gaseous pollutants from diesel engines for use in vehicles, as amended by Directive 91/542/EEC

Directive 89/427/EEC on limit values and guide values of air quality for sulphur dioxide and suspended particulates

Directive 92/55/EC on inspection and maintenance

Directive 92/72/EEC on air pollution by ozone

Directive 93/12/EEC on the quality of petrol and diesel fuels, as amended by Directive 98/70/EC

Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations

Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management (Air quality framework directive), with its daughter directives

Council Decision 97/101/EC of 27 January 1997 establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States

Noise

Directive 70/157/EEC of 6 February 1970 on the approximation of the laws of the Member States regarding permissible sound levels and exhaust systems of motor vehicles, as amended by Directive 84/424/EEC

Directive 78/1015/EEC of 23 November 1978 on the approximation of the laws of the Member States regarding permissible sound levels and exhaust systems of motor-cycles, as amended by Directive 89/235/EEC; Directive 92/97/EEC

Directive 80/51/EEC of 20 December 1979 on the approximation of the laws of the Member States regarding permissible sound levels of subsonic airplanes

Directive 89/629/EEC of 4 December 1989 regarding permissible sound levels of subsonic airplanes for civil aviation

Directive 92/14/EEC of 2 March 1992 regarding limitations to the exploitation of airplanes, relevant to Annex 16 of the Convention on International Civil Aviation, volume 1, second part, chapter 2, second edition (1988), as amended by Directive 98/20/EC of 30 March 1998

Directive 96/20/EC of 27 March 1996 to adapt in the light of technical progress Directive 70/157/EEC of 6 February 1970 on the approximation of the laws of the Member States regarding permissible sound levels and exhaust systems of motor vehicles

Two- or three-wheel motor vehicles

Directive 97/24/EC of 17 June 1997 on certain components and characteristics of two- or three-wheel motor vehicles

Inland waterways

Directive 76/135/EEC of 20 January 1976 on reciprocal recognition of navigability licences for inland waterway vessels

Directive 82/714/EEC of 4 October 1982 laying down technical requirements for inland waterway vessels

Maritime safety and protection of the marine environment

Directive 79/115/EEC of 21 December 1978 concerning pilotage of vessels by deep-sea pilots in the North Sea and English Channel

Regulation (EEC) No. 613/91 of 4 March 1991 on the transfer of ships from one register to another within the Community, as amended by Commission Regulation (EEC) No. 2158/93

Council Decision 92/143/EEC of 25 February 1992 concerning radio navigation systems for Europe

Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods, as amended by Directive 96/39/EC of 19 June 1996; Directive 97/34/EC of 6 June 1997; Directive 98/55/EC of 17 July 1998; Directive 98/74/EC of 1 October 1998

List of competent authorities designated by Member States to which the information and notifications provided for in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods, shall be addressed (OJ No. C 65 of 1 March 1997, p.3, and modification of the list in OJ No. C 150 of 16 May 1998, p.3)

Council Regulation (EC) No. 2978/94 of 21 November 1994 on the implementation of IMO resolution A.747(18) on the application of tonnage measurement of ballast spaces in segregated ballast oil tankers

Directive 94/57/EC of 22 November 1994 on common rules and standards for ship inspection and survey organizations and for the relevant activities of maritime administrations, as amended by Commission Directive 97/58 of 26 September 1997

Commission Decision 96/587/EC of 30 September 1996 on the publication of the list of recognized organizations which have been notified by Member States in accordance with Directive 94/57/EC, as amended by Commission Decision 98/403/EC of 12 June 1998

Commission Decision of 22 April 1998 on the recognition of the Hellenic Register of Shipping in accordance with Council Directive 94/57/EC

Directive 94/58/EC of 22 November 1994 on the minimum level of training of seafarers, as amended by Directive 98/35/EC of 25 May 1998

Directive 95/21/EC of 19 June 1995 concerning the enforcement, in respect of shipping using Community ports and sailing in the waters under the jurisdiction of the Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (port State control), as amended by Directive 98/25/EC of 27 April 1998; Directive 98/42/EC of 19 June 1998

Directive 96/40/EC of 25 June 1996 establishing a common model for an identity card for inspectors carrying out port State control

Council Regulation (EC) No. 3051/95 of 8 December 1995 on the safety management of roll-on/roll-off passenger ferries (ro-ro ferries), as amended by Commission Regulation (EC) No. 179/98 of 23 January 1998

Directive 96/98/EC of 20 December 1996 on marine equipment, as amended by Directive 98/85/EC of 11 November 1998

Directive 97/70/EC of 11 December 1997 setting up a harmonised safety regime for fishing vessels of 24 metres in length and over

Directive 98/18/EC of 17 March 1998 on safety rules and standards for passenger ships

Directive 98/41/EC of 18 June 1998 on the registration of persons on board passenger ships

International Civil Aviation Organization (ICAO/OACI)

Convention on International Civil Aviation, signed at Chicago on 7 December 1944, and relevant protocols and agreements, and in particular its Annex 16 on Environmental protection

International Maritime Organization (IMO)

Maritime safety

International Convention for the Safety of Life at Sea (SOLAS), 1960 and 1974

International Convention on Load Lines (LL), 1966

Special Trade Passenger Ships Agreement (STP), 1971

International Regulations for Preventing Collisions at Sea (COLREG), 1972

International Convention for Safe Containers (CSC), 1972

Convention on the International Maritime Satellite Organization (INMARSAT), 1976

The Torremolinos International Convention for the Safety of Fishing Vessels (SFV), 1977

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978

International Convention on Maritime Search and Rescue (SAR), 1979

International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F), 1995

Marine pollution

International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL), 1954 (replaced by the MARPOL Convention)

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (LDC), 1972

International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)

International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (INTERVENTION), 1969

International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC), 1990

Liability and compensation

International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND), 1971

Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Materials (NUCLEAR), 1971

Athens Convention relating to the Carriage of Passengers and their Luggage by Sea (PAL), 1974

Convention on Limitation of Liability for Maritime Claims (LLMC), 1976

International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996

Other subjects

Convention on Facilitation of International Maritime Traffic (FAL), 1965

International Convention on Tonnage Measurement of Ships (TONNAGE), 1969

Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA), 1988

Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (SUAPROT), 1988

International Convention on Salvage (SALVAGE), 1989

Not legally binding documents

World Health Organization (WHO)

European Charter on Environment and Health (1989)

Helsinki Declaration on Environment and Health (1994)

Environmental Health Action Plan for Europe (1994)

HEALTH21 – Health for All Policy Framework for the European Region for the 21st Century (1998)

Air Quality Guidelines (1998)

Guidelines for drinking-water quality (1993)

Community noise guidelines (forthcoming)

Guidelines for safe recreational water environments (forthcoming)

The Athens Declaration for Healthy Cities (1998)

Resolution on Healthy Cities – Strengthening action for health for all at local and city levels in the European Region of WHO (EUR/RC48/R3)

European Union (EU)

Communication from the Commission: “The future development of the common transport policy – A global approach to the construction of a Community framework for sustainable mobility”, Supplement 3/93 to the Bulletin of the European Communities, drawn up on the basis of COM(1992) 494 final

“Towards sustainability – A European Community programme of policy and action in relation to the environment and sustainable development”, OJ No. C138/5, 17 May 1993

“Community Action Programme for Accessible Public Transport” – Report from the Commission to the Council concerning the actions to be taken in the Community regarding the accessibility of transport to persons with reduced mobility, 26 November 1993

“The citizens’ network – Fulfilling the potential of public passenger transport in Europe”, European Commission Green Paper, 1996

Communication from the Commission: “Promoting road safety in the European Union: the programme for 1997–2001”, COM(1997) 131 final of 9 April 1997

Communication from the Commission: “A strategy for integrating environment into EU policies”, Cardiff, June 1998, COM(1998) 333 final of 27 May 1998

Conclusions of the European Council, Cardiff, June 1998

Conclusions of the joint Transport and Environment Council, Luxembourg, June 1998

Communication from the Commission: “The common transport policy – Sustainable mobility: Perspectives for the future”, COM(1998) 333 final of 25 May 1998

International Union of Railways (UIC)

Relevant regulations concerning safety and environmental matters in the UIC Code

European Civil Aviation Conference (ECAC)

Manual of ECAC Recommendations and Resolutions relating to Facilitation and Security Matters, ECAC Doc. No. 30 (7th ed.), April 1998 – Section 5: Facilitation of the transport of persons with reduced mobility

International Maritime Organization (IMO)

Recommendation on the design and operation of passenger ships to respond to elderly and disabled persons’ needs, 24 June 1996

European Conference of the Ministers of Transport (ECMT) Resolutions

- No. 94/6 On the Promotion of Combined Transport
- No. 97/6 On the Development of Combined Transport
- No. 97/3 Comprehensive Resolution on Transport for People with Mobility Handicaps
- No. 66 On Transport and the Environment
- No. 98/1 On the Policy Approach to Internalising the External Costs of Transport
- No. 34 On Pedestrian Safety (1975)
- No. 39 On the Road Safety of Children and Young People
- No. 43 On Monitoring Compliance with Speed Limits and Traffic Lights
- No. 44 On Making Cycling Safer
- No. 50 On Road Safety of Children
- No. 90/4 On Access to Buses, Trains and Coaches for People with Mobility Handicaps

- No. 91/3 On the Improvement of Road Safety for the Elderly
- No. 92/3 On Decentralised Road Safety Policies
- No. 93/5 On Drink as a Factor in Road Accidents
- No. 97/5 On Cyclists
- No. 68 On Transport for People with Mobility Handicaps
- No. 91/8 On Information and Communication
- No. 94/2 On Access to Taxis for People with Reduced Mobility

Comprehensive Resolution on Persons with Mobility Handicaps, 21 April 1997

Declaration on “Vulnerable” Transport Users, 21 April 1997

Resolution on Phasing Out Lead in Petrol (forthcoming)

Organisation for Economic Co-operation and Development (OECD)

Vancouver Principles for Sustainable Transport (1996)

United Nations Economic Commission for Europe (UN/ECE)

The Vienna Declaration and the Programme of Joint Action adopted by the UN/ECE Regional Conference on Transport and the Environment at the Ministerial Level, November 1997

Århus Declaration on the Phase-out of Added Lead in Petrol, adopted on 24 June 1998 in Århus (Denmark)

United Nations Conference on Environment and Development (UNCED)

Agenda 21: Programme of Action for Sustainable Development, United Nations Conference on Environment and Development (UNCED) (1992)

United Nations Centre for Human Settlements (UNCHS)

HABITAT Agenda on Human Settlements (1996)

Central European Initiative (CEI)

Ministerial Declaration of the Central European Initiative (CEI): “Towards sustainable Transport in the CEI Countries” (1997)

United Nations Environmental Programme (UNEP)

UNEP International Declaration on Cleaner Production (1998)

European Sustainable Cities and Towns

Charter of European Cities and Towns Towards Sustainability (The Ålborg Charter) (1994)

Annex 3

DESCRIPTION OF PRINCIPLES, APPROACHES AND GUIDING STRATEGIES FOR TRANSPORT SUSTAINABLE FOR HEALTH AND THE ENVIRONMENT

Principles and approaches ⁴

Sustainability. Transport activities shall be managed so that the needs of the present generation are met without compromising the ability of future generations to meet their own needs.

The precautionary principle. Action to prevent, control or reduce the release of transport emissions harmful to health and the environment should not be postponed on the ground that scientific research has not fully proved a causal link between those emissions at which such action is aimed, on the one hand, and their potentially harmful impact on health and the environment, on the other.

Prevention of transport-related adverse health effects. This entails reducing air, soil and water pollution, accident risks and noise, greenhouse gases emission and damaging of forests below harmful levels, and assessing and managing the risks from hazardous substances, technologies or processes so that their harmful effects are minimized, including not bringing them into use or phasing them out as soon as possible.

Protection and promotion of health. This covers the physical, mental and social wellbeing and safety of all people, paying particular attention to those groups of the population who are more likely to be harmed by the effects of transport, such as children and women, the elderly, the disabled and those with impaired hearing, as well as to the population most exposed to transport risks such as those living in urban or “sensitive” areas, where pollution and noise are intensified due to geographic and topographic circumstances.

The “polluter pays” principle, including the internalization of externalities, by virtue of which the costs of pollution prevention, control and reduction should be borne by the polluter. The full health and environmental costs of transport should be borne by the polluters as far as possible.

Multisectoral integration. Environment and health requirements shall be properly integrated into transport, water and land use policies, infrastructure programmes and investments and other transport-related planning activities. Environment and health authorities shall be fully involved in all levels of decision-making, and international cooperation on sustainable and health-promoting transport shall be encouraged.

Equity. The health benefits from transport shall be accessible to all, and the disbenefits shall not fall disproportionately on certain groups of the population, in particular children and women, the disabled and the socially excluded, certain generations or certain regions.

Public participation and information. Public access to the relevant information on transport-related health and environmental risks and broad dissemination of this information shall be ensured at an early stage. The public, NGOs, the private sector, municipalities and regions shall be encouraged to participate in taking environment- and health-related transport decisions.

⁴ These definitions have been developed specifically for the purpose of this Charter.

Subsidiarity. Decisions and actions to manage activities relevant for transport should be taken at the adequate administrative level and as closely as possible to the citizens.

Efficiency. Efficient use of transport should be promoted through economic instruments and awareness-building measures.

Guiding strategies

Reduce the need for motorized transport and car dependency, by orienting land use policies and urban and regional planning towards shortening transport distances and providing easier access to health-promoting modes of transport, on the one hand, and towards making fuller use of existing capacities, on the other.

Shift transport volumes to environmentally sound and health-promoting transport, by promoting those modes which are linked with high levels of physical activity, can be the safest, cause the lowest specific emissions and noise, and best conserve resources, and in parallel by discouraging the use of modes of transport and technologies which damage health and the environment.

Implement the best available technologies and best environmental and health standards, best planning methods and best practices for transport involving all relevant sectors and scientific approaches, e.g. transport and land use planners, technologists, and environmental, public health and communication experts.

Apply health and environmental indicators and impact assessments as a basis for transport, water and land use policies, urban and regional development planning, location decisions, infrastructure planning and investment programmes, with the full involvement of environmental and health authorities.

Resolve market distortions by: internalizing transport-related environmental and health costs and benefits; bringing the costs of transport into relation with the mileage travelled; implementing economic instruments to stimulate health-promoting mobility behaviour and shifts in use of different modes of transport.

Raise awareness of health-promoting transport and mobility, consumption and production patterns, communicating the benefits of healthy transport through public relations activities and information campaigns and the dissemination of information on transport-related health impacts to the public, important target groups and stakeholders.

Develop and apply innovative methodologies such as “backcasting” and impact assessment, as well as indicators and other tools for monitoring the health and environmental impacts of transport, thus providing objective guidance to policy-makers and stakeholders.

Establish partnerships at international, national, subnational and local levels between governmental and intergovernmental bodies, the public, environmental, health and transport NGOs, industry, the private sector, etc., ensuring that synergistic actions are taken and that measures at one level do not increase transport-related adverse effects at other levels. In particular, intensify cooperation with economies in transition, with the aim of fostering good practices related to health-promoting transport.

Launch and promote pilot projects and research programmes on transport sustainable for health and the environment.

Provide broad public information on the environmental health impacts of transport and promote public participation in decision-making processes with relevance to transport, land use and infrastructure policies and planning.

Annex 4

HEALTH TARGETS FOR TRANSPORT, ENVIRONMENT AND HEALTH

As soon as possible, and at the latest by the year 2004, each Member State will define national quantitative or, where technically not feasible, qualitative health targets to make progress towards attainment of the regional health targets set out below. When defining these targets, Member States will take due account of their existing international obligations and relevant ongoing international work in other fora. Member States will also take account of cost-effectiveness and practicability.

Air quality

To reduce emissions of and human exposure to air pollutants from transport, as a contribution to achieving levels safe for human health, in compliance with WHO's *Air quality guidelines*.

- (a) To reduce as much as possible transport emissions of and human exposure to air pollutants identified in WHO's *Air quality guidelines* as having no safe limits. These include particles, identified hazardous volatile organic compounds (VOCs) like benzene, and persistent organic pollutants such as polyaromatic hydrocarbons, dioxins, furans and polychlorinated biphenyls.
- (b) To reduce emissions of and human exposure to CO, NO₂ and SO₂ where transport is a major contributor.
- (c) To lower ambient ozone concentrations by reducing emissions of VOCs and NO_x from transport.

To reduce exposure to fine and ultrafine particles from transport by setting targets that take into account recommendations to be developed by WHO regarding the number, mass, size, surface area and composition of these particles.

To reduce human exposure to transport-related lead emissions by phasing out leaded petrol, in line with the Århus Declaration.

Traffic deaths and serious injuries

Without delay, to strive to reduce the rate of death and serious injuries from transport, in particular road traffic accidents, to match or improve on existing best performance in the European Region. Member States should set demanding intermediate quantitative targets to help attain this goal.

Without delay, to strive to reduce rates of death and serious injuries from transport, in particular road traffic accidents among pedestrians and cyclists, while at the same time encouraging an increase in the amount of walking and cycling.

Promoting cycling and walking for physical activity

To contribute towards the reduction of several common and serious diseases (notably cardiovascular diseases) and functional deterioration through substantial increases in regular physical exercise and through physically active modes of transport, notably walking and cycling.

To create supportive environmental conditions, settlement patterns, land use planning conditions and public transport infrastructures and services that permit and stimulate a substantial increase in the number of short trips undertaken by these physically active modes of transport.

Noise

To improve human health and wellbeing by reducing exposure to noise from transport, by:

- (a) introducing targets that take into account recommendations contained in WHO guidelines on noise (1980, 1993, 1999), including concern for specific environments where quietness should prevail (residential areas, schools, hospitals), environments where the noise of transport activities should be reduced (areas within range of airports, highways, railways, terminals, petrol stations) and sensitive time periods (nights, evenings, weekends);
- (b) reversing the trend towards an overall increase in noise pollution through a combination of noise emission and noise immission control measures;
- (c) keeping night-time sound levels in residential areas within WHO recommended night-time values and, where these values are currently exceeded, striving to reduce them to recommended sound levels;
- (d) protecting existing quiet parkland and conservation areas and promoting quietness in such areas, by keeping down the ratio of noisy transport activities relative to background sound levels in these areas.

The need for a session on transport at the Third Ministerial Conference on Environment and Health was identified in a questionnaire survey by WHO in 1996 of Member States in its European Region. The European Environment and Health Committee endorsed that need and proposed the development of a charter; Austria agreed to act as lead country. The text of the charter was negotiated at a series of intergovernmental meetings attended by representatives of ministries of transport, the environment and health of Member States in WHO's European Region, international organizations, the European Commission and nongovernmental organizations. The drafts discussed at those meetings were prepared by drafting groups established at the first intergovernmental meeting.

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