From Amsterdam to Paris and beyond:
the Transport, Health and Environment Pan-European Programme (THE PEP) 2009–2020
ABSTRACT

This report encapsulates the past 12 years of progress made under the Transport, Health and Environment Pan-European Programme (THE PEP) since its launch in 2002. Administered jointly by the United Nations Economic Commission for Europe and the WHO Regional Office for Europe, THE PEP encourages transport policy-makers and urban spatial planners to consider the environmental and health impacts of transport and mobility. Through a dynamic network of academics, experts and Member States of UNECE and WHO, THE PEP engages all three sectors on an equal footing in sharing best practices in sustainable and healthy transport and mobility, particularly in urban areas. The report underlines some of the achievements between the adoption of the Amsterdam Declaration in 2009 at the Third High-level Meeting on Transport, Health and Environment and the Fourth High-level Meeting held in Paris, France in 2014. The Amsterdam Declaration made significant inroads in support of green and health-friendly urban environments, largely through the implementation mechanisms of THE PEP Partnerships and THE PEP Staffete, both of which are highlighted in this publication.

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Bicycle parking in Kyiv (June 2011)
Executive summary

In the 12 years since the inception of the Transport, Health and Environment Pan-European Programme (THE PEP), urban environments have evolved to cope with changing patterns of living and working, greater connection through technology, but also greater risks to urban ecosystems, air quality, and physical and psychological health. On the one hand, sedentary lifestyles due to individual car use and reduced opportunities for physical activity contribute to noncommunicable diseases, such as cardiovascular disease and respiratory disorders. On the other hand, the often frenetic pace of urban life, a high-stressed work-life imbalance and solitary living can lead to poor health, alienation and solitude. Transport and mobility choices are a crucial component of urban lives and livelihoods, whether commuting to work or for leisure activities, or walking and cycling to maintain physical and mental well-being.

Ongoing social and demographic changes due to aging populations and immigration as well as environmental changes due to expected increases in extreme weather events mean cities have had to adapt. Adaptation of the 21st century city means not only transport systems and infrastructure, but housing, zoning and spatial planning, green spaces and nature reserves, and ensuring adequate public transport that is accessible to all, including the poor, people with reduced mobility, children and the elderly. Indeed, the long-term vision of THE PEP 2020, as agreed by its Steering Committee is “Green and healthy mobility and transport for sustainable livelihoods for all” (1).

As a unique policy platform, THE PEP has sought to address basic questions of how to best move around in cities, for work, play, human connection and physical activity. Run jointly by the United Nations Economic Commission for Europe (UNECE) and the WHO Regional Office for Europe, THE PEP has made great inroads into achieving the four Amsterdam goals set in 2009 through targeted mechanisms (2).

This report summarizes the state of national implementation of THE PEP and the goals of the Amsterdam Declaration and, in particular, aims to highlight success stories of two of the implementation mechanisms: THE PEP Staffete, or relay race workshop series, intended to share good practices in sustainable and healthy mobility across the UNECE–WHO European Region; and THE PEP Partnerships, which seek to develop projects and forge relationships among concerned stakeholders on a range of topics that support the goals of THE PEP.

The ultimate goal of both the Staffete and the Partnerships is to promote an integrated policy approach where the transport, health and environment sectors work together on an equal footing for green and healthy transport and mobility. This requires both vertical and horizontal integration for the effective translation of national and regional policies into local and municipal action.
The first part of the report showcases success stories across the UNECE–WHO European Region, based on replies to an annual questionnaire. The implementation of THE PEP is seen at national, regional and municipal levels, and the strengths and challenges of THE PEP are examined. The second part is a record of THE PEP Staffete workshop series, highlighting progress made in the host countries and surrounding regions as a result of the technical training workshops. The third part underlines the activities of THE PEP Partnerships.

The report features many case studies championing THE PEP approach and highlighting achievements in attaining the 2009 Amsterdam goals. Similar activities are expected in the upcoming period (2014–2020), depending on the pledges of Member States to support THE PEP workplan in its implementation of the Paris Declaration (1). This report shall serve as a record of THE PEP activities in the past 12 years and an impetus for equally engaging projects over the coming years.
Since 2002, the Transport, Health and Environment Pan-European Programme (THE PEP) has provided a unique policy platform to the Member States of the United Nations Economic Commission for Europe (UNECE) and of the WHO European Region to work in partnership to address the issue of transport in relation to environment and health. Through THE PEP, governments have made progress not only in improving the understanding of challenges posed by transport to health and the environment, but also in taking advantage of the opportunities provided by green and healthy mobility, and transport policies to attain the highest level of health and well-being for all.

THE PEP is also one of the most concrete and lasting results of several inter-governmental processes for transport, health and environment serviced by the WHO Regional Office for Europe and the UNECE. The Charter on Transport, Environment and Health, adopted by the Third Ministerial Conference on Environment and Health in 1999, and the UNECE Programme of Joint Action on Transport and the Environment, adopted by the Conference on Transport and Environment in 1997, laid the groundwork, which gave birth to THE PEP.

Undoubtedly, THE PEP has been and remains a pioneering process, promoting an integrated policy approach where the transport, health and environment sectors work together on an equal footing for green and healthy transport and mobility. THE PEP is also an excellent and resource-efficient means for Member States to fulfil relevant commitments they have made in other fora, notably the WHO European Environment and Health Process and Health 2020, and the UNECE Environment for Europe Process.

The Fourth High-level Meeting on Transport, Health and Environment (Paris, France 14–16 April 2014) marks a milestone in the history of THE PEP, and an occasion to reflect on the achievements as well as the challenges encountered through its implementation, and to set a new agenda and pathway for the years to come.

From Amsterdam to Paris and beyond: THE PEP 2009–2020 highlights how Member States have committed to work under THE PEP framework across sectoral boundaries to advance their national and international agendas, learn from each other through a series of workshops, and join forces to address common challenges or explore new ideas through the development of partnerships. We hope that the many examples and case studies from across the pan-European Region, which have been brought together in this publication, will inspire further action, and renew the commitment of Member States to attain THE PEP Vision of “Green and healthy mobility and transport for sustainable livelihoods for all”.

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Implementing the 2009 Amsterdam Declaration

Assessment of the policy response
Following the Third High-level Meeting on Transport, Health and Environment in January 2009 in Amsterdam, the Netherlands, THE PEP Steering Committee and its Bureau underlined the importance of monitoring the implementation of THE PEP programme and of progress made by Member States at national level towards the attainment of the four Amsterdam goals.

This section highlights the state of national implementation of THE PEP and the goals of the Amsterdam Declaration, the main developments, challenges and enabling factors. It also puts forth recommendations for further strengthening the process. It provides elements to adjust THE PEP work programme to better meet the needs of Member States and sets out good practices across the UNECE–WHO European Region.

The conclusions presented below are based on the answers provided by 24 Member States to a questionnaire developed by THE PEP Secretariat to gather self-assessed qualitative information on the state of national implementation of THE PEP and the goals of the Amsterdam Declaration. THE PEP focal points filled out the questionnaire, which was repeated in 2011, 2012 and 2013. Responding countries represent the whole UNECE–WHO European Region and are pictured in Fig. 1.1.

THE PEP sectors: transport, environment and health
Implementation of THE PEP goals calls for the strong engagement of the national transport, health and environment sectors. THE PEP focal points are the main channel of communication, serving as connectors in identifying relevant strategies, interventions and policies at national level.

The sector distribution of THE PEP focal points can be used as an indicator for the intersectoral cooperation. Across the UNECE–WHO European Region, the environment and, to a lesser extent, health, are the

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1 Responding countries: Albania, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Croatia, France, Georgia, Germany, Israel, Kyrgyzstan, Lithuania, Malta, Monaco, the Netherlands, Norway, the Republic of Moldova, Serbia, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.
leading sectors for reporting THE PEP’s achievements. The transport sector is represented less often in responses to the questionnaire, although some changes can be observed over the past few years. Only half of the reporting countries have focal points representing all three sectors. Nomination of additional focal points for some reporting countries over the period 2011–2013 shows increased efforts to establish stable, institutionalized, intersectoral working mechanisms.

**Achieving the Amsterdam goals**
This section looks at the results attained over the past five years in achieving the four priority goals since the adoption of the 2009 Amsterdam Declaration. Case studies and success stories as provided by Member States are shown in boxes 1–13 below.

**Priority goal 1: to contribute to sustainable economic development and stimulate job creation through investment in environment- and health-friendly transport**
Most reporting countries are addressing goal 1 of THE PEP Amsterdam Declaration to contribute to sustainable economic development and job creation. Investments that promote an environmentally sustainable infrastructure focus on the construction and reconstruction of railway and light rail lines. The main objective is to promote intermodal transport and rail sidings and to provide stimuli for shifting from road transport to rail, including the increase of railroad employment. Maritime connections, where relevant, are explored as alternative transport modes. While investment in rail and light rail are particularly supported in western European countries, reporting countries in central Asia tend to combine investment in rail with the construction or reconstruction of safer highways and inner city roads.

Investment in eco-tourism is recognized as an important contributor to sustainable economic development and job creation. These actions, however, are defined as general sustainable tourism/development strategies and do not necessarily focus on environment- and health-friendly transport measures and facilities.

An exception is the development of the cycle-tourism infrastructure for sport and leisure activities, which is receiving increased attention by many reporting countries across the UNECE–WHO European Region.

**Priority goal 2: to manage sustainable mobility and promote a more efficient transport system**
Nearly all reporting countries of the UNECE–WHO European Region have measures to promote high-quality integrated public transport and to reduce the need for, and the volume of, car traffic. Progress can be seen since 2011. Countries tend to focus on two approaches, used either independently or in combination: (1) an upgrade of public transportation, including improved information on bus schedules, new routes and fares for public transports, park and ride facilities and alternative transport connections, such as maritime; and (2) regional and urban planning structures designed to reduce traffic and promote cycling and walking.

Awareness raising initiatives and teleworking as well as financial incentives to shift from private car use to integrated public transport or reduce car use are increasingly being applied, in particular in western European countries.
Box 1. Klima:aktiv mobil – achieving the Amsterdam goals through an integrated strategy (Austria)

Klima:aktiv mobil is the national programme of the Federal Ministry of Agriculture, Forestry, Environment and Water Management to motivate and support companies and fleet operators, cities and regions, the tourism and leisure sectors, schools and youth groups to develop and implement climate-friendly mobility projects that reduce carbon dioxide (CO₂) emissions. A central offer is the klima:aktiv mobil funding programme, which is also supported by the Austrian Climate and Energy Fund. Klima:aktiv mobil has been recognized twice as a European best practice by the European Union (EU) Public Sector Award.

The klima:aktiv mobil programme achieved impressive results during its first programme period 2007–2013. More than 4900 mobility projects reduced CO₂ emissions by approximately 570 000 tons per year. The klima:aktiv mobil funding programme has supported eco-mobility projects in cities and companies with €66.6 million, thus inducing investments of about €495 million and creating and saving 5600 green jobs (see Fig. 2). It provided financial support to around 10 000 electric-vehicles for fleets of companies and municipalities. During the programme period, 130 investment projects in cycling infrastructure were co-funded and 1100 eco-driving trainers were certified.

Klima:aktiv mobil’s portfolio comprises advisory programmes, the funding programme for climate friendly mobility of companies and municipalities, awareness raising campaigns, partnerships, training and certification schemes with a focus on:

- mobility management for companies, developers and fleet operators; for cities, municipalities and regions; for tourism, leisure and youth as well as for children, parents and schools;
- eco-driving;
- bicycle infrastructure, bike rental and parking facilities and electric-biking; and
- alternative vehicles and electromobility.

By extending klima:aktiv mobil until 2020, the Federal Ministry of Agriculture, Forestry, Environment and Water Management is ensuring the support of companies and municipalities for the implementation of climate-friendly mobility projects on a long-term basis. The programme is contributing to Austrian and EU-wide policies to reduce CO₂ emissions, increasing renewables and energy efficiency by 2020. It is part of the implementation of the 2011 Austrian Climate Change Act “Klimaschutzgesetz”, the Austrian Master plan for cycling as well as the implementation plan Electromobility in and from Austria. Klima:aktiv mobil is not only aiming at synergies between environment, health and mobility but also providing an essential impetus for a green economy and green jobs. The programme aims to share best practice and develop pan-European co-operation with entities such as the THE PEP and the European Platform on Mobility Management (3–5).
Box 2. The Swiss “transfer policy” – strengthening combined transport systems

With its “transfer policy” (modal shift policy), Switzerland aims to protect its sensitive Alpine region from the negative effects of transalpine heavy goods traffic and to protect the health of people living in this densely populated country. Between 2000 and 2012, the transport of heavy goods by road decreased by 13.9%. The Swiss Government supports combined (multimodal) transport systems with financial subsidies and incentives. Funds are awarded to the operators of combined transport for settling uncovered costs, which makes the transport system competitive. In addition, grants are available for non-Alpine freight transport as well as freight transport on light rail (6).

Box 3. France Vélo Tourism – developing cycle tourism

France Vélo Tourism (France Cycling Tourism) is a group of local authorities, professionals and companies, supported by the State, that aim to strengthen the economic development of cycle tourism in France. France Vélo Tourism launched a programme of complementary actions, i.e., development of a website that helps the public plan and organize cycling holidays; contribution to the launch of a complete collection of guides for bicycle tourism; promotion of the cycling tourism sector in France through public relations and events; improvement in supplying services, including the development of a national charter Accueil Vélo; and support for activities on the harmonization of road signs (7).
Box 4. Green Travel Plan Malta – travelling smart
Transport Malta, together with the Malta Environment and Planning Authority, is encouraging the introduction of a Green Travel Plan where travel is organized through collective transport, car sharing, etc., in order to lessen the impact of private car use. Mobility management plans have been introduced in various office establishments as well as two higher-level education institutions – the Malta College for Arts, Science and Technology and the University of Malta. Key measures identified were the provision of incentives for the public and staff to arrive by public transport and other sustainable modes of travel, improved transport connections and pedestrian links, removal of existing parking areas around the establishment and general promotion of car-free environments (8).

Box 5. Shiluvim project – integrating transport systems (Israel)
The Shiluvim project (Hebrew for “integration”) aims to improve integration between Israel’s national and inner city bus and rail systems. The project consists of four components for improving Israel’s public transport system: improving the connectivity between train stations and bus lines; ameliorating signage and information offered to passengers at stations; introducing a new travel card valid for both train and bus; and applying the same principles and guidelines to new train stations, thus ensuring that every new train station is integrated with the feeding bus system and that signs and information are clear and useful (9).

Box 6. “Support to sustainable transport in the city of Belgrade” – integrating land-use and transport planning (Serbia)
“Support to sustainable transport in the city of Belgrade” is a project implemented in 2010–2014 by the United Nations Development Programme in Serbia; the Serbian Ministry of Environment, Mining and Spatial Planning; and the city of Belgrade (through its Land Development Agency and Secretariat for Transport).

The project is intended to significantly improve the transport management infrastructure and to reduce greenhouse gas emissions while supporting the environment-friendly development of Belgrade. The project activities were grouped into four main categories: integrated land use and urban transport planning at metropolitan level; promotion of cycling as a transport mode; safe access to schools; and capacity building (10).

In all reporting countries of the UNECE–WHO European Region, policies and programmes for the management of sustainable mobility and the promotion of efficient...
transport systems target the public sector. These policies are followed by local policies targeting local communities and, only in a few cases, are policies targeting specific groups and environments such as leisure, school and business. This calls for a further strengthening of the vertical integration, from national policy to local action.

Box 7. “Cities of the Future” – making cities a better place to live (Norway)
The Norwegian national development programme, Cities of the Future (2008–2014), led by the Ministry of Local Government and Modernisation is a collaborative programme between the 13 largest cities, the State and private sector for developing urban areas with the lowest possible levels of greenhouse gas emissions. The main goals are to reduce greenhouse gas emissions from road transport and stationary sources, to reduce consumption and waste in urban areas and to develop strategies to address climate change. A subsidiary goal is to improve the physical urban environment with respect to ecological cycles, security, health, subjective experience and private sector development (11).

Priority goal 3: to reduce emissions of transport-related greenhouse gases, air pollutants and noise
All reporting countries have strategies, policies or measures to support a shift in the vehicle fleet towards zero- or low-emission vehicles and fuels. The national transport sector policies aimed to reduce transport-related greenhouse gases, air pollutants and noise include:

- mandatory fuel economy/CO₂ standards for road transport; a shift to lower-carbon fossil fuels, biofuels, compressed natural gas and hybrid/electric vehicles; and other vehicle design modifications;
- taxes on vehicle purchase, registration, use; taxes on motor fuels; road and parking pricing; congestion/area pricing; and
- influenced mobility needs through land-use design/ regulations and infrastructure planning; prioritization of, and investment in, public transport and non-motorized transport infrastructure and amenities.
Box 8. “Home to work” – traveling free of charge to and from work on public transportation (Belgium)

In its search for a solution to ease the increased morning and evening road traffic, the Belgian Federal Government offers travel by train for free to employees travelling to/from work. Public transportation between work and home is free for federal employees and civil servants. Companies that fund 80% of employee travel costs to Brussels with the STIB and SNCB (Belgian rail) can have the Government pay the remaining 20% of costs. Private employers can enter into a third-party payer agreement with SNCB that allows the Government to pay NMBS/SNCB directly; employers do not need to reimburse employees or seek refunds from the Government for the travel costs (12).

Financial incentives for the purchase or use of low CO₂ emission vehicles are increasingly used by Member States, in particular in western European countries. Various types of incentives exist across the UNECE–WHO European Region both for private car use and for trucks: subsidies for the purchase of low emission, hybrid or electric cars and use of particle filters; tenders for co-financing companies and craftsmen when purchasing new environmentally friendly vehicles; and truck tolls on motorways as an incentive to use cleaner trucks and shift to rail. Strategies aiming at changing behaviours, such as training in eco-driving, are gaining relevance across the whole UNECE–WHO European Region, becoming mandatory for some professional groups in some countries.

Eco-driving training during the International klima:aktivmobil Conference in Vienna (February 2014) © BMLFUW/Helmrich
At the end of the reporting period, almost all reporting countries had taken measures to support a reduction in noise emissions from transport activities.

There is a variety of tools available and used by countries: from town planning and use of sound barriers to improved vehicle technology (cars, trains, planes) to financial penalties, in particular for airplanes with high noise emissions. Addressing transport-related noise pollution is often part of the efforts to transpose the EU regulation on the assessment and management of environmental noise, in particular in EU accession countries (14).

**Priority goal 4: to promote policies and actions conducive to healthy and safe modes of transport**

All reporting countries have policies and actions conducive to healthy and safe modes of transport. The main focus of the policies is on the promotion of road safety, mainly through national strategies, programmes and action plans for road safety; establishment of road safety authorities and coordinating bodies; national traffic code information initiatives and campaigns; vehicle and infrastructure safety improvement; and research on traffic related accidents. Central Asian countries tend to address healthy modes of transport through national environmental action plans. Management of air and noise pollution sources and road safety programmes are currently under development in some of these countries.

**Box 9. Eco-driving pilot projects – supporting the drivers’ choice (Austria and Croatia)**

Austria launched a broad, national eco-driving initiative ranging from eco-driving campaigns to eco-driving courses for drivers of cars, buses, trucks, locomotives and agricultural vehicles. In addition, eco-driving schools’ certification schemes and certified eco-driving training programmes to upgrade driving teachers have been set up. Legislation has been revised to include eco-driving in the education of new drivers. Thus far, 1100 eco-driving trainers have been certified. Together with the national Postbus company, which has trained all 2800 bus drivers saving more than 2 million litres of diesel per year, Austria has implemented an in-depth practical eco-driving project at national level (3).

Another example is the eco-driving pilot project conducted in Croatia in 2013. It was developed by a private company for vehicle sale and maintenance in cooperation with the Ministry of Environmental and Nature Protection; the Ministry of Maritime Affairs, Transport and Infrastructure; and the Environment Protection and Energy Efficiency Fund. It aimed to prove the advantages of eco-driving education, i.e. increased traffic safety, improved driving competency, reduced fuel consumption and maintenance costs, increased social responsibility, reduced stress levels of drivers, and reduced greenhouse gas emissions, air pollutants and noise pollution. The project covered 170 drivers from 18 companies. Savings in fuel consumption and emissions, reduction of engine operation, driving without rapid acceleration and braking without unnecessary idling or downtime reduced maintenance costs and noise pollution, and achieved other environmental and financial impacts (13).
Box 10. Road safety programme – increasing safety education (Lithuania)

Road deaths have decreased by 58% in Lithuania since 2001, the third best reduction in road deaths among EU countries. The results have been achieved through a concerted effort of more efficient traffic controls, activities to educate traffic participants and improvements in infrastructure. According to the National Traffic Safety Development Programme 2011–2017 and the Inter-institutional Action Plan 2012–2014, safety education has been stressed as a national priority. The major objectives of the programme are to improve the skills of traffic safety specialists and driving instructors through training, to introduce traffic safety culture skills in early childhood educational institutions, to improve the quality of driving training (e.g. eco-driving), and to educate society on road safety (15).

National programmes and policies to promote walking and cycling are increasingly reported within urban development policies to create urban barrier-free environments, cycling lanes and recreation facilities, transport policies and health-oriented approaches (e.g. health-in-all policies approaches and national action plans on physical activity).

Nearly all reporting countries of the UNECE–WHO European Region have transport policies and actions focusing on vulnerable groups. Although vulnerable groups are more likely to be addressed by policies in western European countries or EU accession countries, south-eastern European and central Asian countries show increased efforts to address healthy and safe modes of transport for specific target groups.

Box 11. Cycling master plans – joining forces to evolve cycling (Austria and Germany)

The Austrian Master plan for cycling has the target to double the number of cyclists in Austria by 2015 (4). Concrete measures have been set up in order to facilitate its implementation at national level, i.e. a national cycling coordination task force and a national cycling funding scheme to co-finance cycling infrastructure investments, and cycling promotion in regions, cities and companies. One hundred and thirty bicycle projects to improve bicycle infrastructure, logistics and awareness, including the expansion of the bicycle infrastructure in all nine Austrian Federal States and their major cities were co-funded with €31 million by the Austrian klima:aktiv mobil programme, stimulating total investments in cycling of about €208 million (2007–2013) (3,4).

Another example is the German national cycling plan (NCP) 2020, which aims to increase the modal share of cycling in Germany (16). The NCP addresses not only all actors in politics (local authorities, federal states, Federal Government), the economy and society but also individual citizens as active road users. By presenting the NCP, the Federal Government acknowledges its active role as a catalyst and moderator in the promotion of cycling. In the previous NCP 2002–2012, more than 100 innovative projects were funded under the federal non-investment cycling support programme (17). NCP 2020 has been in force since January 2013 and aims to go beyond the promotion of cycling by strengthening the eco-mobility approach, which comprises local public transport, walking and cycling.
Box 12. Bicycle highways – challenging traffic jams (the Netherlands)

A bicycle highway is a separate infrastructure, exclusively for cyclists, with no road crossings and good asphalt, thus ensuring a fast route to work or school. The construction of bicycle highways in the Netherlands showed promising results. The average cycling distance has increased from 7.5 km to 10 km since the bicycle highway opened and 5% of people previously commuting by car along these routes now cycle. Key enablers to bicycle use and bicycle highways are good highway design (protection against wind, etc.) and good parking facilities at companies and schools. The Dutch Government has invested €25 million to build additional bicycle highways across the country (18).
The policies address in particular people with reduced mobility (disabilities) with a large variety of measures, ranging from urban development policies to creating urban barrier-free environments, adaptation of transport infrastructure (bus and train stations, etc.) and of vehicles for specific groups of users (children, people with disabilities, the elderly, etc.).

Across the UNECE–WHO European Region, policies focusing on children address mobility and accident prevention education and road safety measures (traffic codes, etc.).

**Box 13. Pedestrian Paradise in Bishkek – promoting healthy and safe lifestyles (Kyrgyzstan)**

The road safety situation in Kyrgyzstan requires attention. To address this, an event called Pedestrian Paradise aims to improve pedestrian traffic safety and to promote a healthy lifestyle. The second annual Pedestrian Paradise took place on 22 September 2013 in Bishkek. This year’s slogan was “Move to the rhythm of a green city!” Materials for pedestrian safety were distributed and awareness raising activities were held. Road Safety NGO, in partnership with the Bishkek City Development Agency and others, advocated for stronger legislation to define the rights of pedestrians (19).

**Implementing THE PEP**

**Mechanisms**

In the Amsterdam Declaration, Member States called for the development of national transport, health and environment action plans (NTHEAPs) by making use of existing mechanisms, plans and programmes in the fields of transport, health and environment or by building on national processes across the three sectors. Half of the reporting countries have either implemented or adopted a NTHEAP. Finalized and implemented NTHEAPs are more common in the western part of the UNECE–WHO European Region. There are several ways to develop and implement a NTHEAP. With one exception, transport-related interventions are introduced into existing national environment and health action plans or transport actions plans, and are not stand-alone documents. THE PEP is perceived to be useful in offering guidance on the NTHEAPs, in particular in western European countries. Its role, however, is seen as more relevant at the end of the implementation process, rather than during the development phase.

**Box 14. A policy framework for green transportation – gaining from intersectoral and international cooperation (Georgia)**

The Georgian Ministry of Economy and Sustainable Development and the Ministry of Finance, with the support of the World Bank, prepared a draft policy document *A policy framework for green transportation in Georgia: achieving reforms and building infrastructure for sustainability*. The objective of the framework is to strengthen green transportation and reduction of greenhouse gas emissions and local pollutants in Georgia through the reduction of fossil fuel use and increased reliance on indigenous energy sources. This project is the result of a strong cooperation between different national sectors and international organizations (20).

Formal networks of professionals are important for the implementation of THE PEP. The networks can be of a
varying nature and there can also be several networks operating in parallel in a country.

Types of networks mentioned are:

- governmental coordination mechanisms mainly focusing on intersectoral work either at national and/or local level;

- environmental health professionals, groups and associations;

- nongovernmental organization (NGO) working groups monitoring THE PEP implementation; and

- other networks operating in the fields of transport, mobility and health, e.g. the WHO European Healthy Cities Networks, national cycling task forces and associations.

Box 15. A bicycle path in Baku – achieving results through informal networks (Azerbaijan)

An informal national working group cooperating with city authorities has been established in Azerbaijan in 2012 with the aim to promote THE PEP’s objectives and the goals of the Amsterdam Declaration. The working group pushed forward a project on the construction of a bicycle path in Baku. The 2 km long path, offering also bicycle and helmet rental, electrical cycle rickshaw, etc., was opened in April 2012. The project, intended to promote leisure activities within the Baku city centre, is one of the first national attempts to promote cycling as a leisure activity and as alternative means of transportation (21).

Coordination networks (governmental and other) are, however, present only in half of the reporting countries and are better represented in western European countries where they receive stronger financial and political support.

Policy and regulatory framework

THE PEP is formally coordinated by a governmental body or structure in half of the reporting countries, with no geographical disparity. Most national coordinating bodies are composed of representatives of the environment, health and transport sectors. The sectors’ representation in coordination body is often in line with the number of THE PEP focal points, underlying the importance of nominating three focal points per country. Urban planning is more often part of the coordinating bodies than it was in the past. NGOs do also play an important role, not only in central Asian countries but also in western European and south-eastern European countries. Other sectors such as interior, finance, agriculture, education and academia are less often represented.

Possible types of policy documents are:

- NEHAPs/children’s environment and health action plans (CEHAPs)

- sustainable development plans

- policies on climate change

- environmental management plans and policies at national and/or local levels

- transport strategies and transport safety plans
Environmental policies or plans, as well as sustainable development plans, appear to be the documents mostly reflecting integrated policy-making of the three sectors. Awareness raising on the need to increase and foster integration of the three sectors is addressed in national documents of only less than half of the Member States, but is increasingly addressed. The documents appear to be mostly from western European and south-eastern European countries and to be part of action plans with a coordination function (CEHAPs and development strategies).
Challenges of THE PEP
Some of the main challenges in implementing THE PEP are identified below.

Voluntary nature of THE PEP
THE PEP is not a legally binding instrument and its voluntary nature makes it difficult to implement. Implementation of voluntary tools and agreements is felt to be less a priority, in particular for EU accession countries where priority is given to meet legally binding EU standards, norms and regulations.

Difficulty in achieving intersectoral work
The lack of cooperation and communication between THE PEP’s relevant sectors is felt to be a key challenge for the national processes. Missing coordination bodies, limited focal points and lack of involvement of professionals are strong barriers to the achievement of the priority goals of the Amsterdam Declaration and THE PEP.

Budget constraints
The UNECE and the WHO European Region do not provide direct financial support for the implementation of THE PEP and, at national level, funding sources are often limited. In addition, the financial crises have made the situation even more difficult.

Structural difficulties
Changing personnel and administrative structures as well as lack of time by national staff to participate in international workshops, conferences, etc. pose a concern and hinder national structures from being able to implement the goals of THE PEP and to retain institutional memory.

Monitoring and evaluation
Clearly defined indicators for monitoring and reporting on implementation of THE PEP are lacking. THE PEP’s objectives are long-term goals that are difficult to gauge over the short-term. Short-, medium- and long-term targets would help assess progress made.

Enablers of THE PEP
In response to the above mentioned challenges, key factors as well as recommendations for further strengthening the process at national level and for providing elements to adjust THE PEP work programme to better meet the needs of Member States are outlined below.

Strengthening the implementation mechanisms
The establishment of a coordinating body at national level with defined terms of reference, defined responsibilities and a clear structure for the flow of information is key to the success of THE PEP. Nomination of focal points from all relevant sectors (transport, health and environment) needs to be ensured in all countries in order to guarantee a formal consultation and cooperation process. Working groups organized around key thematic areas and the priority goals of the Amsterdam Declaration would be beneficial not only to the overall achievement of the process but would also reduce the work burden on national officials. THE PEP could encourage this by requesting the (re-)appointment of focal points and coordinating bodies.

Policy frameworks
The integration of transport policies with other policy sectors should be a priority and the creation of NTHEAPs or the adaptation of existing national
CEHAPs/NEHAPs should be further promoted and supported by THE PEP.

Knowledge exchange and capacity building
Capacity-building workshops
Workshops to build capacity, share best practices and raise awareness have been one of the most successful tools of THE PEP, in particular the Staffete (relay race) workshop series launched in Amsterdam, the Netherlands.

THE PEP Toolbox
Member States suggested to further develop THE PEP Toolbox (22) containing good practices, policy briefs on selected topics and relevant assessment tools, such as the health economic assessment tool (HEAT) (23), etc.

THE PEP Clearing House
The overarching goals of THE PEP Clearing House (24) should be strengthened and the information technology enhanced, in order to better promote, disseminate and exchange focused and comprehensive information and data on all topics relevant to the interrelationship between transport, health and the environment. Emphasis should be put, in particular, on the needs of national and local authorities.

Increasing accountability of three sectors
There is the need to better highlight the potential benefits (health, jobs, etc.) of a radical shift to a more integrated approach between the sectors. In this context, Member States suggested to promote the concept of “beyond mobility”, including the definition of common indicators for the three sectors ensuring a clear accountability of transport developments in terms of specific health and environment criteria (indicators).

Involve larger number of relevant actors at different policy levels
The success of THE PEP relies on the commitment of actors beyond environment, health and transport. The integration of urban transport management and policies for land-use planning has increasingly been recognized by Member States with calls for a stronger involvement of the urban planning sector. Urban environments need to prepare for demographic, social and environmental changes in supporting green and health-friendly urban and suburban mobility and livelihoods.

Direct technical support by THE PEP Secretariat towards countries
Countries need more direct support in order to tackle national priorities and challenges. Member States ask for more targeted activities reflecting specific country needs.

Funding strategies
Member States suggest that THE PEP could support them in defining and drafting funding strategies, in building capacity to identify possible funding mechanisms (e.g. EU-projects) and in fundraising with international funding bodies.

Communication and awareness-raising
There is a need to have THE PEP be more visible during international events/activities related to the transport sector. Elements of THE PEP Communication Strategy should be implemented (25).
Summing up THE PEP policy response

Major achievements in the national implementation of THE PEP and the goals of the Amsterdam Declaration have been met. The intersectoral nature of THE PEP is often cited as a good example of cooperation among sectors and at different levels of government. This has been mirrored at national level through the setting up of several transversal working committees, the implementation of policies and strategies, and the organization of national and local programmes and capacity-building workshops.

The achievements do, however, still vary across the UNECE–WHO European Region reflecting unequal availability of funds, political support and tools. There are still challenges in creating a shared understanding of the main pillars of sustainable transport.

The former THE PEP chair Robert Thaler (Austria) and THE PEP focal point Jiri Bendl during an e-biking demonstration at THE PEP workshop in Pruhonice, Czech Republic (September 2009)
THE PEP Staffete (relay race) workshop series 2009–2013

THE PEP Staffete (relay race) workshop series was launched at the Third High-level Meeting on Transport, Health and Environment on 22–23 January 2009 in Amsterdam, the Netherlands, as one of the main implementation mechanisms for the Amsterdam goals. The Staffete is a relay race of capacity-building workshops intended to “pass the baton” of best practices and lessons learnt from city to city and region to region. The workshops aim to share experience and spread knowledge across the pan-European region on the best ways to encourage an integrated policy approach to sustainable and healthy urban transport and mobility. The six workshops held under the auspices of THE PEP Staffete from 2009 through 2013 were:

1. Safe and healthy walking and cycling in urban areas on 24–25 September 2009 in Pruhonice, Czech Republic;

2. Sustainable and healthy urban transport policies on 7–8 June 2010 in Skopje, The former Yugoslav Republic of Macedonia;

3. Safe and healthy walking and cycling in urban areas on 30 September–1 October 2010 in Batumi, Georgia;


5. Sustainable development of urban transport: challenges and opportunities on 7–8 June 2012 in Moscow, Russian Federation; and


Challenges
The six workshops that took place from 2009 through 2013 were held in very different environments, with different sized cities and at different levels of urban development. Thus, the priority issues and the political focus were often dissimilar.

Each workshop concluded with a list of action points for policy-makers. Although the wording of the action points differs from city to city, the core problems are basically the same. Some of the main challenges are outlined below.

Impact of transport on health and environment: policy challenges
The impact of transport on human health and the urban environment are local as well as global (e.g. the health impacts of air pollution and the environmental and climate change impacts of greenhouse gas emissions). By the same token, the health benefits of reduction in individual car use and an increase in physical activity, for example, through active mobility such as walking and cycling have co-benefits to both human health (through...
the reduction in non-communicable diseases such as cardiovascular disease, respiratory disease and obesity) and to the environment (improvement in land use and the resilience and attractiveness of urban areas by promoting various options for transport). The ultimate aim is to make stakeholders aware that sustainable urban transport contributes to healthy environments and helps in preventing accidents as well.

**Sustainable mobility: an integrated policy approach**

Decision-making for sustainable urban transport policy happens at national, regional and local levels. Each country has its own institutional system. The competences of the various authorities vary greatly in the fields of transport, health and environment policies. In this respect, data collection regarding urban mobility, emissions and their impact on human health needs to be improved, in particular to ascertain the consistency of data available at the various levels. Surveys carried out at regular intervals on patterns of urban mobility, especially on public transport use, should identify critical points and measures to be implemented to improve urban mobility.

For better coordination in decision-making, attention should be paid to sharing good practices at all levels (local, national and international). This is where THE PEP comes in, with its toolbox and partnership mechanisms, including the Staffete relay race as a platform for international cooperation on sustainable and health-friendly urban mobility.

**Involving all stakeholders: vertical and horizontal integration**

Involving all stakeholders implies that all stakeholders work together in a collaborative and constructive manner. This involves national authorities, local governments, the transport and health sectors, town planners, the business community and civil society. This requires both vertical integration (from ministerial level down to grass roots and community, civil society organizations that play an important role in sustainable development policy, public participation, access to environmental information and awareness-raising); and horizontal integration: a coordinated policy approach among the three sectors – transport, health and environment – ideally, through joint meetings.

Other entry points to a successful integrated policy approach include:

- recognizing and supporting forward-looking initiatives by private citizens and NGOs; and
- involving all stakeholders from an early stage and in a constant manner in order to influence the mobility behaviour and to encourage sustainable consumption patterns of consumers, a prerequisite to the implementation of sustainable urban transport.

**Gathering support: awareness-raising and public participation**

Before modifying their mobility behaviour, people have to identify themselves with the policy objectives. Communication and awareness-raising campaigns are therefore strategic for gaining public support, in
particular regarding demand management policies, for example through different approaches.

- Liaise with local and municipal authorities and make public the results of surveys and follow-up of policies in order to foster transparency in decision-making.

- Make the best use of local and national health systems in order to highlight health impacts and benefits of transport policy.

- Devise and support awareness-raising campaigns aimed at the public at large regarding the advantages of “human-powered mobility” as a viable, healthy and safe alternative to private car use. Reach out to parents and children through demonstrations and rallies in order to raise awareness and promote walking and cycling.

- Work with the media in order to raise awareness of walking and cycling through public events such as the opening to the public of pedestrian areas and cycling paths.

**Highlighting all impacts: local and global**
The expected effects/impacts of sustainable transportation policies are local (reduction of air pollution) as well as global (reduction of greenhouse gas emissions), and apply to people (improved health) as well as to territories (land use).

Such policies also bear indirect effects and the so-called virtuous cycle they generate should be highlighted. Encouraging walking and cycling in cities can lead to accidents if the appropriate safety measures and infrastructures are not in place; but promotion of active mobility can also reduce accidents, by gradually making motorists aware that they are sharing the road with pedestrians and cyclists, and eventually affording them the same rights to use the roads. Moreover, a modal shift from private car use to public transportation, walking and cycling allows both a decrease of car-related stresses and an improvement in health through physical activity and a reduction in sedentary lifestyles. Furthermore, promoting various options for transport and land use may reinforce the resilience of urban areas.

**Recommendations and opportunities**

**THE PEP tools: developing technical solutions**
In order to improve the performance and efficiency of transport systems in urban areas, THE PEP workshops recommend to:

- set up technical standards for private cars and public transport vehicles;

- develop low cost measures in order to make existing bus fleets cleaner;

- support technological changes in order to reduce the ecological footprint and increase the efficient use of transportation;

- promote innovating transport technologies and solutions aimed at improving urban mobility such as intelligent transport systems, including traffic management, monitoring and signals;

- promote technological cooperation; and
• make e-bikes (electric bikes) an innovative action within cycling development strategies in order to promote their attractiveness and accessibility, reach new users previously uninterested in cycling and promote cycling in hilly areas.

Furthermore, with a view towards improving services and supply for sustainable mobility, the workshops recommended Governments and municipalities to:

• provide bicycle parking areas and relay parking areas that are safe and well lit in order to prevent theft;

Historical tram ride at THE PEP workshop on working together for sustainable and healthy urban transport in Kyiv (June 2011)
• develop fast and dedicated cycling lanes and infrastructure adapted to the needs of faster cyclists;

• introduce magnetic transport card devices in order to simplify the multimodal use of the public transport system; and

• publicize in the media the cycling paths and their accessibility through the use of mapping information technologies (geographic information systems/global positioning systems).

**Communication: public awareness of green and healthy transport**

Opportunities as well as prevention campaigns and exercises should be created in order to reach the public at large, and promote a systemic global and integrated culture of cycling and walking. In that respect, public places – schools, town halls and institutions – might be used to increase the general public’s awareness of methods and models used to assess the impact of transportation on health and environment.

Furthermore, campaigns to improve driving behaviour, energy efficiency and road safety should be promoted within specific programmes, such as eco-driving activities.

Last but not least, the promotion of use of THE PEP material – HEAT and THE PEP toolbox – at national, regional and local levels is essential.

**THE PEP-related guidebooks and guidelines**

THE PEP workshops gave rise to the development of a range of guidebooks and guidelines, covering a wide spectrum, such as a manual for the development of NTHEAPs, *Unlocking new opportunities: jobs in green and healthy transport*, A pocket guidebook of funding for sustainable transport through the EU, and *Working together for sustainable and healthy transport* (26–29).

Further guidebooks could focus on human-powered mobility, for example, to set forth certain principles to underline the importance and viability of walking and cycling as legitimate and feasible modes of urban mobility. As an illustration, principles governing the definition of walking and cycling infrastructure might be the following:

• safe and perceived as such in all weather conditions, day and night;

• accessible with an uninterrupted network connected with public transport services;

• convenient in order to enable direct and well-signalled access to housing, commercial areas and workplaces;

• comfortable in order to meet the needs of all users including children, the elderly and people with reduced mobility; and

• attractive with regards to cleanliness, low noise level and quality of infrastructure (including bicycle parking lots).

**Active mobility and sustainable land-use planning**

National policies for sustainable urban transport should influence and support the objectives set for land use, health and environment. Such policies should be consistent as a whole (investments, traffic and mobility
Box 16. Batumi three years on (Georgia)

Georgia hosted THE PEP Staffete workshop on “Safe and healthy walking and cycling in urban areas” in 2010 in Batumi. Batumi is a seaside city on the Black Sea coast of Georgia in the Caucasus. While Batumi has some industry, such as shipbuilding, food processing and light manufacturing, most of its economy revolves around tourism. The workshop brought together 65 representatives, including governmental officials; national and local authorities; representatives of private sector, academia and NGOs; and international experts from more than 16 countries.

At the time of the workshop, the infrastructure of Batumi was undergoing revitalization. Thus, the recommendations provided by the meeting participants, as well as involved foreign experts, lent support to the revitalization process.

An awareness-raising rally on cycling and walking was held along the city centre and an excursion to discover Batumi’s walking and cycling potential took place along the existing infrastructure. Batumi launched its first walking school bus – a group of children walking to school with one or more adults.

The workshop raised awareness and led to: the construction of cycling lanes in many cities (Batumi, Kutaisi, Rustavi, Kvareli); development of road infrastructure that improves safe walking and cycling; revised legislation to include new road safety measures; and the renovation of public transport.

Children’s drawing of their idea of a healthy environment in Batumi, Georgia (October 2010)

A walking school bus was initiated through THE PEP workshop on safe and healthy walking and cycling in urban areas in Batumi, Georgia (October 2010)
management) and consistent with other public policies, such as environment, health, land use and finance.

States should therefore develop NTHEAPs in order to coordinate national policies across the different domains. Local actions may also produce tangible results worthy to be taken into account at national level; they may serve as good practice to induce other local governments to develop similar actions.

**Assessing progress: benchmarks and indicators**

Reliable and robust data form an empirical basis for urban mobility policies. Data are not easily accessible

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**Box 17. Improvements after 2010 Skopje workshop (The former Yugoslav Republic of Macedonia)**

Following the 2010 Staffete workshop on “Sustainable and healthy urban transport policies”, the city of Skopje saw improvements in public transport and conditions for walking and cycling. Similar efforts are being made in other cities in The former Yugoslav Republic of Macedonia and in rural areas including:

- improved cycling routes for safe cycling in urban areas;
- improved walking routes to provide safe pedestrian access to recreation areas;
- cable lifts to increase accessibility to mountain areas, in particular for the young and the elderly;
- boulevard modernization to decrease road traffic congestion and reduce air pollution in urban areas;
- modernization of traffic semaphores, including use of remote controls and video cameras to eliminate congestion at road crossings and reduce air pollution; and
- improvement in public transportation, such as new buses that increase rider comfort and reduce pollution (using modern eco-engines), and improved public awareness on the benefits of public transport.
Box 18. Sustainable mobility in Kyiv (Ukraine)

THE PEP capacity-building workshop “Working together for sustainable and healthy urban transport” was held in June 2011 in Kyiv, Ukraine. One of the most significant achievements of the workshop was the improved cooperation between the different sectors. Over the past two years, officials from the Ministry of Infrastructure and the Ministry of Ecology and Natural Resources worked together to create strategic documents, such as the Implementation of the European neighbourhood policy in Ukraine (30), and participated in the public assessment process to review the national environmental policy.

The Kyiv City State Administration (KCSA) further developed its activities on traffic management, showing good collaboration between KCSA, businesses and NGOs involved in the field of sustainable mobility. Improvements included the opening of parking lots near underground stations and the installation of trams in Kyiv. A project to launch electric buses in Kyiv is in the pilot stage.

KCSA arranged another pilot project on sustainable mobility and has partnered with the company Bio Auto, which develops electric vehicles for different types of transportation services, such as taxis. KCSA is preparing an electric vehicle infrastructure which is expected to include 20 quick charging stations in Kyiv and about 200 electric vehicles to be used in public service.

Cycling communities and infrastructures are developing, starting in Lviv and Kyiv. The projects are assisted by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and by the cities’ administrations. Events such as European Mobility Week and a competition to identify the best bike-friendly employer are gaining in popularity. The cycling community of Kyiv participates in these events and advocates for the development of cycling infrastructure in Kyiv.
Box 19. Developments in Moscow following THE PEP workshop 2012 (Russian Federation)

The city of Moscow hosted THE PEP Staffete workshop on “Sustainable development of urban transport: challenges and opportunities” in June 2012. Since the workshop was held, progress has been made in Moscow and in other big cities in the Russian Federation, including:

- further improvement of public transport systems (especially in Moscow, St Petersburg, Kazan, Sochi), e.g. metro, special bus lanes and light rail transit;

- implementation of parking enforcement by the Moscow police;

- development of cycling zones (Moscow, St Petersburg) and expansion of pedestrian zones (Moscow);

- a governmental decision that by 2020, the percentage of public transport and municipal trucks using compressed natural gas will be 50% in cities with more than 1 million inhabitants and 30% in cities with more than 100 000 inhabitants;

- discussion to introduce restricted access areas in connection with the environmental classification of vehicles (Moscow); and

- requirements on fuel quality (Moscow – European Emission Standards [Euro 4, 98/69/EC and 2002/80/EC and higher]).
Large international participation in THE PEP workshop on green and health-friendly sustainable mobility: focus on urban central Asia in Almaty, Kazakhstan (September 2013)

Handing over the Baton of THE PEP relay race from Moscow to Almaty at THE PEP workshop in Almaty, Kazakhstan (September 2013)
and, as such, make benchmarking difficult. Measuring properly means identifying the main transport-related factors that define quality of life in urban areas. These could include employment availability, safety, and urban amenities and services. Effective implementation of urban mobility policies requires an integration with environmental and health objectives.

Assessments are important because they underscore policy objectives that have been set, such as reducing air pollution and noise levels, and improving safety (by limiting driving speeds) and quality of life. Assessments may include, for example, checking whether transport infrastructure provides enough space for non-motorized traffic or to calculate the health benefits of walking and cycling.

**Strengthening governance to support green and healthy transport**

Coordination between institutional levels should be improved in order to foster work in common, and improve coordination and communication. Partnerships that enhance new synergies between health, environment and transport policies should be supported. Likewise, the implementation of principles and mechanisms to favour the integration of transport, environment and health policies should be promoted.

The governance scheme could be strengthened to cover all institutional levels. National governments should provide an institutional framework in order to prompt cities to include emission abatement targets in its transport policies. On the other hand, local and regional governments should submit their concerns at national level in order to enable proper coordination of local and national policies.

Technical governance should be performed through practice exchange; it must e.g. meet the needs of development of consistent data collection methodologies. Technical cooperation should also be promoted through joint action of business, public authorities, research and development communities, and technology suppliers.

**Financing sustainable urban transport systems: investment and incentives**

Financing public transport rather than road infrastructure requires awareness of all beneficial effects – including financial – of investment in public transport. Proper tuning of investment requires taking into account health and environmental objectives and land-use priorities in case funds are allocated by the State to local governments. Investment should not be concentrated in capital cities to avoid missing breakthrough opportunities in other key urban areas. Where competence over urban transport belongs to local government, financial issues should be handled in a transparent manner. This will allow local governments, at town or regional level, to effectively carry out their competence over development of sustainable transport and mobility.

Developing sustainable transport systems implies research and development, testing solutions that promote sustainable urban transport and land planning solutions.

Pricing and fiscal policies should, in all areas, aim to promote sustainable urban transport. In particular,
housing and real estate development policies should not induce congestion and urban sprawl.

Resources generated by such policies should be allocated to strengthen environment and health promoting policies. Furthermore, revenue stemming largely from motorist taxation should be allocated at local government level in order to facilitate the political acceptability of the charges. Private sector involvement through public-private partnerships (PPPs) should define competition and market rules as well as services and service quality. PPPs in public transport should be regulated in order to provide balanced benefits between partners with complementary functions. Employers should be incentivized towards sustainable urban mobility policies, in particular the setting-up of company mobility plans. Employers, whether private or public, should be made aware of the relevance of financing bike-commuting through economic incentives and infrastructure, such as bicycle-parking lots and showers. Bike-sharing systems at urban and regional levels should be acknowledged as improving mobility in city centres and may be attractive for PPP financing schemes.

Progress made
Boxes 16–20 show examples of progress made and lessons learnt by Member States that hosted THE PEP Staffete workshops.

Encouraging the next generation of cyclists in Almaty, Kazakhstan (September 2013)
Box 20. THE PEP workshop in Almaty: impact on urban central Asia (Kazakhstan)

The uniqueness of THE PEP initiative is that it provides an excellent platform to discuss and develop practical recommendations for a city’s transport infrastructure. THE PEP Staffete workshops also help to promote understanding of sustainable development of urban transport systems and change the way people think about transport and mobility and healthy lifestyles.

The workshop on “Green and health-friendly sustainable mobility: focus on urban central Asia” held in September 2013 in Almaty, Kazakhstan provided a unique opportunity for central Asian countries to learn about and discuss green and sustainable mobility principles. The workshop was organized in cooperation with the Ministry of Transport and Communications, the Government of Kazakhstan, Akimat (municipal authority of Almaty), UNECE, the WHO Regional Office for Europe and the United Nations Development Programme (UNDP)/Global Environment Facility (GEF) project – City of Almaty Sustainable Transport (CAST). It brought together over 100 experts from national and municipal authorities, private sector, civil society and academia to develop strategies and measures to promote sustainable urban transport and, at the same time, to ensure healthier and environmentally cleaner urban areas.

Following THE PEP workshop and discussions about non-motorized transport, UNDP commissioned an international engineering company to perform a pilot project to expand the cycling infrastructure in Almaty. International experts with knowledge of bicycle planning and design standards will assist the city in developing the pilot route. In Kazakhstan, especially from a recreational and sports (physical activity) perspective, the interest in cycling is great. However, the lack of cycling infrastructure prevents the use of bicycles as a mode of daily transportation. The project has an important role in increasing the possibilities for cycling through the design of pilot routes.

Work to improve the transport situation in Almaty is under way. The UNDP/GEF CAST project, run jointly with the Almaty City Administration, developed the forthcoming city of Almaty sustainable transport strategy for 2013–2023. The core of the project is a shift from private car use to more sustainable forms of mobility. The strategy envisions a more integrated approach, combining various modes of transport into a single system, and coordinating the transportation system with urban development plans. If the strategy is implemented, sustainable transport in Almaty (public transport, walking and cycling) could increase by up to 55% by 2023. The city is also pursuing the development of a modern mass rapid transit system in the next five years (31).
This section showcases projects and activities that have been developed since the adoption of the Amsterdam Declaration in 2009 and THE PEP Partnerships as one of the key implementation mechanisms for the Declaration. It looks at plans for forthcoming Partnerships as THE PEP launches its second decade.

**Purpose**

THE PEP Partnerships are one of the mechanisms adopted by the Third High Level Meeting on Transport, Environment and Health to carry out the implementation of the Amsterdam Declaration and its four priority goals over the period 2009–2014.

THE PEP Partnerships serve three main purposes.

1. Provide THE PEP with an effective mechanism to support the implementation of its workplan in aspects related to the development of tools and methods as well as to provide technical capacity to support Member States in implementing THE PEP at national level.

2. Strengthen ownership among potential partners (including Member States as well as international financial institutions, NGOs and intergovernmental organizations, and relevant academic and technical institutions) that would be closely involved in the work to be carried out under the umbrella of the Partnerships.

3. Provide a more solid and sustainable basis for human and financial resources made available to implement THE PEP workplan at national and international levels, thereby overcoming one of the key weaknesses of THE PEP (i.e. lack of sustained resources).

The Partnerships coordinate its activities in close contact with other NGOs and international and governmental organizations, and cooperates with international financial and donor organizations that provide funds for programmes and projects related to the implementation of THE PEP activities and of the Amsterdam Declaration.

The Partnerships encourage collaboration between the public and private sectors and their involvement in the implementation of activities in line with THE PEP programme of work. They also encourage cooperation with academic and educational institutions to enhance capacity-building activities in areas relevant to the achievement of sustainable and healthy transport.

**Experience to date**

Since the launch of THE PEP Partnerships in 2009, this mechanism has proven to be flexible and adaptable, allowing different partners (interested Member States, intergovernmental organizations and NGOs as well as academic institutions) to work together towards implementing specific projects and activities. The main benefits of THE PEP Partnerships are that they can
be easily launched at the initiative of the interested partner(s), with the endorsement of THE PEP Steering Committee and can accommodate new partners during different phases of implementation.

THE PEP Partnerships offer an excellent platform for international collaborative efforts of diverse partners, and can mobilize resources and capacities from different disciplines while supporting the achievement of one of the four goals of the Amsterdam Declaration. The Partnerships have clearly defined scope, fill identified gaps in knowledge and practice, are action oriented and targeted at providing Member States with high quality products, and provide value added through the development of tools, methodological approaches, and sharing of good practices. THE PEP Partnerships are open-ended in terms of membership and can benefit from both financial and in-kind contributions.

**Overview**

**Jobs in green and healthy transport (JGHT)**

**Scope**

The JGHT Partnership supports the implementation of goal 1 of the Amsterdam Declaration, which focuses on contributing to sustainable economic development and stimulating job creation through investment in environment- and health-friendly transport. Its purpose is to:

- stimulate a debate and a shared understanding of jobs in green and healthy transport by bringing environmental and health considerations into the existing discussion on green jobs creation;
- document the breadth of existing experiences in Europe and other parts of the world with new policies and approaches for creating jobs in green and healthy transport;
- analyse the potential of greening “old jobs” and creating “new green jobs” in transport and mobility and assessing the qualitative and quantitative impact of these approaches on the environment, health, transport and the economy; and
- share good practice and disseminate experiences, policies and approaches.

In its initial phase, through a review of existing studies, the JGHT Partnership has uncovered a sizable potential for the creation of new jobs through the promotion of cycling, walking and public transport. Encouraged by these initial findings, the JGHT Partnership will explore the feasibility of developing new approaches to quantify more precisely the potential for jobs creation across Europe.

**Partners**

Partners that have joined the JGHT Partnership are Austria, France and the United Nations Environment Programme.

**Main outcomes**

The main outcomes are:

- launch of a brochure on green and healthy jobs in transport at a side event at the Seventh Environment for Europe Ministerial Conference held on 21–23 September 2011 in Astana, Kazakhstan;
• development of a report entitled Jobs in green and healthy transport: strengthening the economic case for environment-friendly and health-promoting transport policies. A scoping study on the potential for job creation through green and healthy transport (32); and

• launch of a publication entitled Unlocking new opportunities: jobs in green and healthy transport (27).

Future plans
Future work should focus on identifying the current level of green and healthy transport jobs, and the potential additional jobs that might be created from further investment. This work will need to take a consistent and coherent approach by defining and applying a common methodology, including definitions, to estimate the number of jobs in green and healthy transport.

Signs and signals
Scope
The Signs and Signals Partnership supports the implementation of goal 2 of the Amsterdam Declaration with the objective to promote a more efficient transport system through inclusive and innovative environment- and health-friendly urban mobility schemes.

It aims to increase the attractiveness of walking and cycling, by improving the safety, accessibility and comfort of infrastructure for all users. Easily recognizable and familiar signs and signals that provide clear directions and information on distances and travel times are important tools to make walking and, in particular, cycling more attractive, and provide users with the necessary orientation in a complex urban space. But there is not yet a harmonized approach to signs and signals for cyclists and pedestrians, which are mainly developed at local level. The specific scope of the Signs and Signals Partnership is to:

• prepare an inventory of existing or planned rules and regulations as well as best practices on signs and signals for cyclists and pedestrians in UNECE and WHO European Region Member States;

• provide a scientific basis as a starting point for the harmonization of signs and signals for walking and cycling at national and international levels; and

• contribute to the current review of the global United Nations Vienna Convention on Road Signs and Signals (1968) and the European Agreement supplementing the Convention on Road Signs and Signals (1971) towards promotion of active mobility.
and the facilitation of pedestrian and bicycle tourism (33,34).

**Partners**
The Signs and Signals Partnership was initiated by the Government of France following the 2010 THE PEP Workshop on “Safe and healthy walking and cycling in urban areas” in Batumi, Georgia.

**Main outcomes**
The French Ministry of Ecology, Sustainable Development and Energy – in cooperation with THE PEP Secretariat – organized an inventory study based on questionnaires developed by French experts and the UNECE Transport Division (35). Countries that provided input and expertise for the study were: Belgium, Denmark, France, Germany, Italy, Norway, Poland, the Russian Federation, Spain, Switzerland, the United Kingdom and the United States of America.

**Future plans**
Following publication in English, French and Russian of the inventory and best practice study at the Fourth High-level Meeting on Transport, Health and Environment (14–16 April 2014 in Paris, France), the study will be transmitted to the UNECE Working Party on Road Traffic Safety (WP.1), which is the guardian of several United Nations legal instruments harmonizing road traffic rules and regulations for consideration and follow-up action at pan-European and global levels. The information and the examples in the study could be referred to by local authorities or Member States wishing to develop similar types of signs and signals.

**Eco-driving**

**Scope**
The Eco-driving Partnership supports the implementation of goal 3 of the Amsterdam Declaration, which focuses on reducing emissions of transport-related greenhouse gases, air pollutants and noise. It aims to develop capacity with a view to adopting a driving style that significantly contributes to reducing emissions of pollutants (“eco-driving”). In particular, the scope of the Eco-driving Partnership is to:

- disseminate knowledge and best practices about the concept of eco-driving and approaches to its implementation with cars, trucks and buses and agricultural tractors;

- exchange experiences among partners interested in the promotion of eco-driving for professional and non-professional drivers;

- provide opportunities for testing eco-driving approaches, notably within the context of THE PEP relay/race events, other international and national conferences and events;

- promote the establishment of technical twinning programmes between interested partners;

- promote the development of harmonized criteria for certification schemes and training materials for trainers and driving schools; and

- develop approaches to the assessment of the effectiveness of eco-driving and the successful continuation of eco-driving behaviour over time.
Partners

Partners that have joined the Eco-driving Partnership are Austria, Bosnia and Herzegovina, Czech Republic, Kazakhstan and the Russian Federation.

Main outcomes

Within the scope of THE PEP, there were certain eco-driving activities, which culminated in the official launch of the Eco-driving Partnership.

Launching THE PEP Partnership on eco-driving at the International klima:aktivmobil Conference in Vienna (February 2014) with David Stanners (Head of International Cooperation at the European Environment Agency), Guénaël Rodier (Director of the Division of Communicable Diseases, Health Security & Environment at the WHO Regional Office for Europe), Andrä Rupprechtner (Austrian Federal Minister of Agriculture, Forestry, Environment and Water Management), Marco Keiner (Director of the UNECE Environment Division) and Mr Alexander Klacska (Chairman of the Division Transport and Logistics, Austrian Federal Economic Chamber)
Eco-driving demonstrations were held at THE PEP workshop on “Sustainable development of urban transport” in Moscow, Russian Federation (June 2012).

The eco-driving concept and approaches were presented at the THE PEP workshop on “Green and health-friendly sustainable mobility” in Almaty, Kazakhstan (September 2013).

The Eco-driving Partnership was officially launched at the International klima:aktiv mobil Conference and Kick Off workshop in Vienna, Austria on 24–26 February 2014, The Conference was hosted by the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management and the Austrian Federal Economic Chamber, in cooperation with the umbrella organization of driving schools and the Austrian automobile club. The Conference highlighted the potential of eco-driving for saving energy, emissions and costs and underlined the positive results of EU projects and the Austrian klima:aktiv mobil eco-driving initiative, targeting
drivers of cars, trucks, buses and agricultural tractors, in particular teachers at driving schools and novice drivers.

- The partnership carried out further eco-driving training with practical tests for passenger car drivers and bus drivers during the International klima:aktiv mobil Conference in Vienna.

**Future plans**
The partnership will hold a hands-on eco-driving training seminar for driving school instructors and bus drivers in Almaty, Kazakhstan (April 2014). The training will include theoretical background and education materials in the context of the Eco-driving Partnership as well as eco-driving trainings for driving school instructors and bus driver instructors.

The Eco-driving Partnership will strive to recruit additional partners with the objective of supporting the development of national/regional eco-driving programmes, including technical twinning programmes and exchange of experiences, as well as the development and implementation of capacity-building initiatives to promote the development and use of eco-driving by professional and non-professional drivers.

**Health economic assessment tools (HEAT) for walking and cycling**

**Scope**
The HEAT Partnership supports the implementation of goal 4 of the Amsterdam Declaration, which focuses on promoting policies and actions conducive to healthy and safe modes of transport. The Partnership supports the implementation of a web-based, user-friendly tool for estimating the economic value of the impact of regular walking or cycling on mortality. The first HEAT tool was originally launched in 2008 for cycling only. Since then, the tool was expanded to support the development of a new module for walking, which was launched at a side event of the International Transport Forum in Leipzig, Germany on 25–27 May 2011. HEAT is based on the best available evidence, with parameters that can be adapted to fit specific situations. Default parameters are valid for the European context. HEAT can be applied in many situations.

Plan a new piece of cycling or walking infrastructure. It models the impact of different levels of cycling or walking, and attaches a value to the estimated level when the new infrastructure is in place. The value can be compared to the costs to produce a cost–benefit ratio (and help make the case for investment), or as an input into a more comprehensive cost–benefit analysis.

Value the mortality benefits from current levels of cycling or walking, such as benefits from cycling or walking to a specific workplace, across a city or in a country.

Provide input into more comprehensive cost–benefit analyses, or prospective health impact assessments. For instance, it can be used to estimate the mortality benefits from achieving national targets to increase cycling or walking, or to illustrate potential cost consequences of a decline in current levels of cycling or walking.

**Partners**
Support for the HEAT Partnership is provided by Austria, Germany, Switzerland, the United Kingdom and the European Commission.
Main outcomes
The main outcomes are:

- HEAT online tool for cycling and walking (23);
- launch event at the International Transport Forum in May 2011 in Leipzig, Germany;
- publication entitled *Health economic assessment tools (HEAT) for walking and for cycling. Methodology and user guide*, which is available in English, Finnish, French, German, Russian and Spanish (36);
- online training programme to support HEAT users based on monthly webinars (23); and
update of the dose-response functions for HEAT both for cycling and walking and of the approach to conduct economic assessments to reflect new scientific developments.

Future plans
Important opportunities to further expand the functionality of the HEAT tool will be provided by a project supported by the European Commission – Physical activity through sustainable transport approaches (PASTA). PASTA is expected to lead to the development of new modules that undertake more comprehensive impact assessments of the benefits of cycling and walking interventions, which will also take into account the effects of air pollution, injuries and emissions of greenhouse gases.

**TRANSDANUBE and ACCESS2MOUNTAIN**

 Scope
The partnership supports the implementation of goals 1 and 4 of the Amsterdam Declaration by promoting the development and practical implementation of concepts and measures for environmentally healthy mobility in leisure and tourism with a focus on major European subregions – the Danube, and the Alpine and Carpathians. It contributes to the EU Strategy for the Danube Region, the Alpine Convention and the Carpathian Convention (37).

The partnership is focused on creating a common vision and action plans for sustainable mobility in tourism, and developing pilot and demonstration projects on environmentally sound mobility offers and tourist packages.

**Partners**
The partnership is formed by two EU projects: Sustainable Transport and Tourism along the Danube (TRANSDANUBE); and Sustainable Mobility and Tourism in Sensitive Areas of the Alps and the Carpathians (ACCESS2MOUNTAIN). Austria initiated the TRANSDANUBE and ACCESS2MOUNTAIN Partnership. Within the TRANSDANUBE project, 14 partners are cooperating from the following 8 countries: Austria, Bulgaria, Germany, Hungary, Republic of Moldova, Romania, Serbia and Slovakia, as well as 35 observing partners. The ACCESS2MOUNTAIN project focuses on sustainable mobility in mountainous tourism regions and includes partners from: Austria, Hungary, Italy, Poland, Romania, Serbia, Slovakia and Ukraine. In addition, there are around 20 observers from 11 countries including the focal points of the Carpathian Convention (37).

**Main outcomes**
Outcomes include:

- sharing good practice about sustainable mobility offers (e.g. regional railways, in particular concerning multimodal transport);
- development of a common vision for sustainable mobility in tourism in the Danube region;
- regional action plans guiding the implementation of sustainable mobility offers and tourist packages;
- development of sustainable mobility packages in the different pilot regions; and
Future plans
The focus lies on pilot actions for environmentally healthy mobility offers and tourist packages in the partner regions. The final conferences for ACCESS2MOUNTAIN will be held on 1–2 April 2014 in the Gesäuse National Park region in Austria and for TRANSDANUBE on 8–9 September 2014 in Belgrade, Serbia. Based on the lessons learnt and practical results, follow-up projects will be developed and applications prepared for future EU co-funding. Widening of the project-oriented and subregional scope to environmentally healthy mobility in leisure and tourism is under discussion.

Cycling promotion
Scope
The proposed Cycling Promotion Partnership will be launched at the Fourth High-level Meeting on Transport, Health and Environment. The proposed new partnership supports implementation of goal 4 of the Amsterdam Declaration, to promote policies and actions conducive to healthy and safe modes of transport. It aims at initiating the development of a pan-European master plan for cycling promotion, supported by guidelines and tools to assist in the development of cycling promotion policies at national level.

Its purpose is to support strategies for the promotion of cycling at national and international levels by bringing together interested national cycling officers/national cycling representatives of Member States to:

- conduct needs assessments (infrastructure, information, financing, safety) in order to identify the key areas of action at pan-European level;
- develop a pan-European master plan for cycling promotion to support joint action for the integration of cycling issues into national and pan-European policies and to tap existing funding schemes of international financial institutions and pan-European infrastructure plans;
- facilitate cycling promotion policies at national level by developing guidelines and tools based on existing knowledge;
- share good practices, build capacity and develop training and twinning projects; and
- establish a network of national cycling officers (and/or national cycling representatives nominated by
Member States) to facilitate the implementation of the proposed activities.

**Partners**
The partnership was proposed by Austria and is to be launched at the Fourth High-level Meeting on Transport, Health and Environment, to be held in Paris, France on 14–16 April 2014. The first meeting of THE PEP Partnership on the promotion of cycling will take place on 17 April 2014 after the High-level Meeting.

**Main outcomes**
In June 2013, an initial meeting was held in Vienna, Austria in the context of the Velo-city 2013 Conference. It was attended by national cycling officers and cycling representatives from Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Luxembourg, the Netherlands, Norway, Slovakia, Sweden, Switzerland and the European Cyclists’ Federation.

**Future plans**
Future plans include an implementation strategy and programme of work for the partnership as well as proposals to mobilize necessary resources; establishment of a network of national cycling officers; needs assessment; development of guidelines; development and elaboration of a pan-European master plan for cycling promotion; and development of a concept to build capacity for cycling.

**Reflections and way forward**
The Partnerships have provided THE PEP with an effective mechanism to address priority elements of the Amsterdam goals and THE PEP Programme of Work through international collaboration. The main strengths of the Partnerships lay in its capacity to develop action in areas where knowledge and practice need to be further explored.

The Partnerships have facilitated the dialogue between policy-makers, particularly at the level of Member States, and technical experts, taking a pragmatic approach to developing user-friendly and evidence-based tools addressing the challenges of integrating environment and health considerations into transport policies, particularly in urban areas. The focus on public transport, cycling and walking, which often have been marginalized in the mainstream discussions about transport, has allowed THE PEP to explore innovative and promising areas, uncovering the potential of healthy and sustainable transport policies to contribute to economic, health, environmental and social objectives. The capacity to identify topics of high relevance to policy-makers has been the spark for the initiation of new partnerships and the success of resource mobilization efforts.

An important follow-up to the Paris Fourth High-level Meeting on Transport, Environment and Health, will be the effort to take advantage of the benefits provided by the Partnership as an implementation mechanism for THE PEP while addressing the present challenges to its sustainability.

**References**
1. Paris Declaration: “City in motion - people first!”.

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2 All websites accessed on 18 March 2014.


The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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