Developing national action plans on transport, health and environment

A step-by-step manual for policy-makers and planners

SECOND DRAFT – NOT FOR CIRCULATION
05 December 2010
## Status of document development

<table>
<thead>
<tr>
<th>Date</th>
<th>Draft</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 July 2010</td>
<td><strong>First draft</strong></td>
<td>main structure, scope and purpose defined</td>
</tr>
<tr>
<td>29 November 2010</td>
<td><strong>Second draft</strong></td>
<td>main comments from THE PEP Bureau incorporated into main structure and explanation of scope and purpose, added good practices, links to other tools and processes, NOTE: not all sections completed yet</td>
</tr>
</tbody>
</table>

**Next steps:**
- to solicit more/better suited good practices for illustrating the steps in the manual
- to make call for expression of interest of Member States to apply parts of the manual and document the experience to inform the final draft
- to update THE PEP Clearing House and Toolbox, to be used as main repositories for tools
- to complete the inventory of existing NTHEAPs and related action plans (such as NEHAPs that include transport activities)
- to further improve the usability of the manual based on feedback from THE PEP members
Developing national transport, health and environment action plans

Authors

Contributors

Advisory group

Reviewers

Acknowledgements
Swiss Ministry of Health
French Ministry of Health
## Contents

Introduction ...........................................................................................................................................6

1 Part I. Setting the scene ...............................................................................................................8
1.1 Overview of environment and health impacts of transport .........................................................8
1.2 Why is it important to develop a NTHEAP? .............................................................................9
1.3 What is an action plan on national transport, health and environment? .............................10
1.4 The role of international and regional agreements and frameworks .................................11

2 Part II. Towards national action plans ..................................................................................13
2.1 Phase 1: Planning..................................................................................................................13
2.1.1 Step 1: Establish a steering committee and strong leadership ......................................14
2.1.2 Step 2: Assess the transport, health and environment situation ....................................14
2.1.3 Step 3: Involve stakeholders and create ownership of the process ...............................18
2.1.4 Step 4: Raise awareness..................................................................................................20
2.2 Phase 2: Development .........................................................................................................20
2.2.1 Step 5: Define overall goals and timeframe .....................................................................21
2.2.2 Step 6: Define objectives and targets and set priorities ..................................................22
2.2.3 Step 7: Select interventions ............................................................................................24
2.2.4 Step 8: Define responsibilities ........................................................................................28
2.2.5 Step 9: Define resource needs and sources ....................................................................29
2.2.6 Step 10: Define a mechanism for monitoring and evaluation .......................................29
2.3 Phase 3: Implementation .....................................................................................................31
2.3.1 Step 11: Adoption of the NTHEAP ................................................................................31
2.3.2 Step 12: Integrate actions from the NTHEAPs into the work plans of all relevant ministries...32
2.3.3 Step 13: Allocate necessary budget ...............................................................................33
2.3.4 Step 14: Communicate the activities and results .............................................................33
2.4 Phase 4: Monitoring, evaluation and improvement ..............................................................34
2.4.1 Step 15: Establish evaluation team and implement the defined evaluation mechanisms ....34
2.4.2 Step 16: Sustain and improve NTHEAP ........................................................................35

3 Part III. Tools ...........................................................................................................................36
3.1 Phase 1: Planning ..................................................................................................................37
3.2 Phase 2: Development ...........................................................................................................39
3.3 Phase 3: Implementation ......................................................................................................40
3.4 Phase 4: Monitoring, evaluation and improvement .............................................................41

4 References ...............................................................................................................................42

5 Annex I: Template for a NTHEAP .........................................................................................43

6 Annex II: Country case studies ...............................................................................................44
Abbreviations

CIS  Commonwealth of Independent States: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan

EEA32  The 32 member countries of the European Environment Agency (as of 2010): Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom

EECCA  Eastern Europe, Caucasus and Central Asia

EU  European Union

SEE  South-Eastern Europe: Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, and the former Yugoslav Republic of Macedonia

THE  Transport, health and environment

THE PEP  joint UNECE/WHO Transport, Health and Environment Pan-European Programme

UNECE  United Nations Economic Commission for Europe

WHO  World Health Organization

Glossary

Executive summary
Introduction

When general policies on sustainable and healthy transport have been established in a country, the next step in implementing them is to develop a national transport, health and environment action plan (NTHEAP). In January 2009, at the Third High-level meeting on Transport, Health and Environment, the UNECE-WHO/Europe Member States called for the development of NTHEAPs in Article 6 of the Amsterdam Declaration of THE PEP: “NTHEAPs could be developed and implemented by making use of existing mechanisms, plans and programmes in the field of transport, health and environment or by building on national processes across the three sectors; countries should develop initiatives and strategies that best suit the needs of their citizens and the capabilities of their administrations, taking account of different socioeconomic situations; in doing so, they should address transport-related health and environmental impacts and increase transport efficiency, as well as set targets and timetables for implementation; THE PEP Steering Committee, in cooperation with THE PEP secretariat, should develop guidance and assist in the formulation of NTHEAPs.”

The need for a step-by-step manual to develop NTHEAPs stems from requests by Member States to be supported in their efforts to carry out and coordinate the development of NTHEAPs, making use of existing mechanisms, plans and programmes.

The Parma Declaration on Environment and Health in the WHO European Region, adopted by the Fifth Ministerial Conference on Environment and Health (Parma, March 2010), also stresses the importance of national implementation mechanisms. For example, by specifically calling for collaboration with “… local, regional and national authorities to advocate for actions to counteract the adverse effects of urban sprawl that cause socioeconomic, health and environmental consequences.” (Commitment to Act, Paragraph A, RPG II, article 3).

Target audience:

The manual intends to assist policy-makers and planners in the European Region in developing NTHEAPs and it is primarily aimed at representatives of government ministries as well as sub-national/local authorities that are concerned with land transport and its influence on health and environment. In particular, the ministries and authorities for health, environment, transport, interior, consumer affairs, education, finance and spatial planning. The manual can also be of interest to NGOs, academics, international organizations and policy- and decision-makers in public health.

How to use this manual:

The manual highlights how a NTHEAP can be developed in several different ways, including being integrated in existing plans or strategies. The manual is informed by earlier work to develop national action plans on environment and health and aims to highlight how to make cost-effective use of existing mechanisms, plans and programmes. The draft manual is planned to being tested in several demonstration projects throughout 2011. National case studies of existing programmes and some
preliminary results of demonstration projects are planned to be included to illustrate the manual. The manual proposes four phases to follow in developing NTHEAPs: Planning, development, implementation and evaluation. However, this manual does not detail how to establish the general policies or strategies on sustainable and healthy transport, which usually precedes the development of action plans. The manual lists practical advice for each of the phases and steps, highlighting good practices from the European Region. The phases and steps are not meant as an exclusive set of instructions that are applicable in all situations but rather a collection of suggested steps, i.e. an ideal checklist that can be used as a reference as NTHEAPs are developed, and tools that need to be adapted to the national context.

The main drafting of the action plan takes place in phase 2 (development). Each of the 4 phases can be broken down in a series of more specific steps. They are summarized in Figure 1 and explained in more details in part II. Most of the steps do not have to be sequential but can be, and sometimes should be applied simultaneously and most might require special adaptation to the national context. However, it will be noted in the text when certain aspects, activities and considerations are deemed crucial for the success of a NTHEAP and should not be neglected.

Figure 1. The 16 steps towards a national transport, health and environment action plan.
Part I. Setting the scene

1.1 Overview of environment and health impacts of transport

Transport plays an important role in people’s life, both, in providing access to jobs, services education and leisure, and economic growth, as well as in affecting our environment and health. In today’s Europe, cars, trucks and motorcycles are the main means of road transport. The rapid growth of road transport has affected health and environment through congestion, road traffic crashes, air pollution and noise, contributing to sedentary lifestyles, especially in urban areas, and to emissions of greenhouse gases. Current estimates put the costs of these effects at around 8% of GDP [specify reference: EEA indicators]. Pressures from road transport in Europe that need to be addressed are:

- Road infrastructure: In EEA32, the length of road infrastructure has almost tripled between 1975 and 2008 [eurostat transport database, accessed 30 November 2010]. Their use is further increasing, with more and more travelled passenger- and tonne-kilometres every year. This puts more and more pressure on road infrastructure and consumption of land.

- Efficiency of transport systems: The rising pressure on road infrastructure requires higher efficiency of transport systems to reduce congestions.

- Road traffic injuries: responsible for about 100,000 deaths and 2.4 million injuries/year in the WHO European Region. Road traffic injuries are the leading cause of death among the young [add reference for further reading]

- Air pollution: road transport is a significant source of air pollution, which was estimated to cause an average loss of 8.6 months of life expectancy in European Union countries (EU25) after May 2004. [add reference for further reading]

- Physical inactivity: lack of adequate physical activity is estimated to be associated with about 900,000 deaths/year in the European Region, where about 20-30% of adults are estimated to be obese. Walking and cycling could help integrate physical activity in daily life. [add reference for further reading]

- Noise: more than 30% of the population in the EU countries before May 2004 (EU15) is exposed to noise levels exceeding 55 dB(A) during night time. [add reference for further reading, update figures]

- Climate change: in the European Union, road transport is responsible for emissions of about 20% of CO2, the main greenhouse gas. [add reference for further reading]
• Nature and landscape effects: transport infrastructure is highly demanding in terms of space. The overall land use of 1 km of motorway is estimated in up to 20 hectares. [add reference for further reading]

It is important to keep in mind that these effects are interlinked, such as physical activity and injuries or noise and air pollution, and narrow policies focusing on only one or few of them could result in reducing one problem by aggravating another. For example, the use of diesel may have a positive impact on greenhouse gas emissions but if cars are not equipped with adequate filters, it will lead to increased emissions of fine particles which are known to be hazardous to health.

Figure 2. Links between transport, health and environment

1.2 Why is it important to develop a NTHEAP?

Integration of transport, health and environment for sustainable and healthy mobility is imperative to solving the environment and health problems of transport. Such integration refers to horizontal integration across sectors (different departments, public authorities) as well as vertical integration across different levels of government.

NTHEAPs primarily aim at fostering integration of the three sectors transport, health and environment, in two ways: (1) through the development process itself as close collaboration is required, and (2) through specific actions in the NTHEAP that aim at establishing and institutionalizing integration between the sectors.

Policy integration between transport, health and environment is on the political agenda in Europe but practical progress has been slow in the past. Independent of country-specific situations, administrative bodies often tend to work independently and fragmented with relatively narrow mandates and decision-making processes and are often in competition for resources. There are a number of benefits from integration of policies which are often not readily apparent. Integration of sectors in mobility planning can, for example [2]:

- Reduce duplication of efforts;
- Promote consistency between sectors and different levels of government;
• Improve the achievement of goals and objectives;
• Give more focus to the overall goals of the government, thus supporting its steering role;
• Promote win-win solutions between sectors;
• Encourage greater understanding of the effects of activities on other sectors;
• Help overcome financial constraints.

1.3 What is an action plan on national transport, health and environment?

NTHEAPs represent a comprehensive, holistic and intersectoral way of planning and implementing transport, environment and health action at the national level. NTHEAPs are not only plans but can be turned into continuous national THE processes. Ultimately, a NTHEAP is a process of developing, adopting, implementing and evaluating integrated transport, health and environment actions. NTHEAPs do not stand alone but are part of a framework of policies and strategies on transport, health and environment (such as public transport strategies and land use policies). For the purpose of this manual, we have adopted the following definition:

**A national transport, health and environment action plan (NTHEAP) is a document that sets out the main goals, objectives, prioritized actions, coordination mechanisms, roles and responsibilities, timelines and budgets, as well as guidance on implementation, monitoring and evaluation for the development of sustainable and healthy transport in a country.**

Top reasons for developing a NTHEAP:

1. Is a tool to bring all relevant national stakeholders around the table
2. Helps defining actions, assigning responsibilities and establishing accountability
3. Links to other national strategies and priorities
4. Uncovers potential conflicts and divergences from other governmental objectives/plans and reduces risk of duplications of efforts (helps avoiding inconsistencies)
5. Is in line with international commitments taken by countries and is a cornerstone for national implementation
6. Is focused, and thus, relatively easy to communicate and implement
7. Is one of the main pillars of sustainable development reducing green house gas emissions
8. Improves health of the population and the quality of life, while meeting the accessibility needs
9. Integrates supply (transport infrastructure) and demand-side (mobility) activities in coherent approach
10. Seeks to achieve “win-win” outcomes through a multi-stakeholder setting, including business
11. Can help to attract funds from donors for projects
12. Initiatives can create jobs and investment and encourage social and business innovation
13. Provides a solid framework for investments of public funds
14. Helps tackle complex THE issues by joining all relevant agencies, at all levels, to work together.

1.4 The role of international and regional agreements and frameworks

International declarations and frameworks, for example THE PEP Amsterdam Declaration or the Parma Declaration on Environment and Health, can have important implications for national efforts in making transport sustainable for environment and health. Such consensus documents could be considered as policy documents. By signing up to such agreements, countries demonstrate their willingness to subscribe to their principles, norms and standards. Table 1 lists a number of examples of international, regional and national documents and legal instruments that are relevant to transport, health and environment. This list is not complete but reflects the range of documents that can be used to guide and shape the development of a NTHEAP.

Table 1. Selected policy documents and legal instruments of relevance to transport, health and environment

<table>
<thead>
<tr>
<th>Scope</th>
<th>Policy documents</th>
<th>Legal instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>Declarations and resolutions</td>
<td>Treaties and conventions</td>
</tr>
<tr>
<td></td>
<td>• Global Strategy on Diet Physical Activity and Health. World Health Organization, 2004</td>
<td>• Framework Convention on Climate Change (UNFCCC), Rio de Janeiro, 1992</td>
</tr>
<tr>
<td></td>
<td>• WHO Air Quality Guidelines, 2006</td>
<td>• UN Convention on Road Traffic, consolidated 2006</td>
</tr>
<tr>
<td></td>
<td>• Millennium Development Goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• UN General Assembly Resolution on road safety, New York, 2010</td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td>Declarations and resolutions</td>
<td>Treaties and conventions</td>
</tr>
<tr>
<td></td>
<td>• Parma Declaration on environment and health</td>
<td>• Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, Aarhus, 1998</td>
</tr>
<tr>
<td></td>
<td>• THE PEP Amsterdam Declaration on transport, health and environment</td>
<td>• Espoo Convention Convention on Environmental Impact Assessment in a Transboundary Context, Espoo, 1991</td>
</tr>
<tr>
<td></td>
<td>• European council recommendation on the prevention of injury and the promotion of safety</td>
<td>• Carpathian Convention, 2003</td>
</tr>
<tr>
<td></td>
<td>• Charter on transport, environment and health, World Health Organization Regional Office for Europe, 1999</td>
<td>• Transport Protocol of the Alpine Convention, 2006</td>
</tr>
<tr>
<td></td>
<td>• A strategic framework for air quality management in Asia, 2004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Harare Resolution. The Harare Resolution on the prevention and control of regional air pollution in Southern Africa and its likely transboundary effects. Regional Air Pollution in Developing Countries (RAPIDC)</td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>Policies</td>
<td>Laws and regulations</td>
</tr>
<tr>
<td></td>
<td>Plans and programmes</td>
<td>• National Ambient Air Quality Standards. United States air quality standards for ozone, particulate matter, sulphur dioxide, carbon monoxide, nitrous oxide and lead. Washington, DC, United States Environmental Protection Agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Amsterdam Declaration of the Third High-level Meeting of THE PEP (2009) calls upon all Member States to use NTHEAPs as the main implementation mechanism to achieve the declarations’ four priority goals (see Box 1).

Box 1. THE PEP Amsterdam Declaration priority goals

- **Priority Goal 1**: to contribute to sustainable economic development and stimulate job creation through investment in environment- and health-friendly transport by directing investment towards the development of transport infrastructure that promotes safety, environment and health and has the highest job creation potential, including rail and light rail; clean and efficient public transport, efficient intermodal connections; safety measures in road transport; and infrastructure for active and environmentally friendly transport;

- **Priority Goal 2**: to manage sustainable mobility and promote a more efficient transport system by promoting mobility management schemes for businesses, schools, leisure activities, communities and cities, raising awareness of mobility choices by improving the coordination between land use and transport planning and promoting the use of information technology;

- **Priority Goal 3**: to reduce emissions of transport-related greenhouse gases, air pollutants and noise by supporting a shift in the vehicle fleet towards zero- or low-emission vehicles and fuels based on renewable energy; promoting a shift towards clean transport modes and fostering electric mobility as well as eco-driving;

- **Priority Goal 4**: to promote policies and actions conducive to healthy and safe modes of transport by designing and modernizing urban areas and human settlements to improve the conditions for safe and physically active mobility, including infrastructure for walking and cycling, and efficient and accessible public transport, particularly focused on vulnerable groups such as children and persons with reduced mobility;

The Parma Declaration on Environment and Health specifically highlights the relevance of transport for health as well as environment in the European Region as one of the key challenges in reducing non-communicable diseases. It further stresses the need for integrating health and environment into transport and mobility planning (including infrastructure). Tackling transport-related health and environment issues through NTHEAPs offers a great opportunity to implement the Parma Declaration as they typically address three out of the four Regional Priority Goals (RPGs): RPG 2 on “obesity and injuries through safe environments, physical activity and healthy diet”, RPG 3 on “preventing disease through improved outdoor and indoor air quality” and RPG 4 on “preventing disease arising from chemical, biological and physical environments” (including noise). Direct reference is made to and the relevant commitments of THE PEP Amsterdam Declaration are re-iterated also in the Parma Declaration.
2 Part II. Towards national action plans

The following steps are the basic tasks normally involved in preparing a NTHEAP. The 16 steps are divided into four phases: planning, development, implementation and evaluation. They represent an iterative process of continuous improvement that is often embedded into existing plans or strategies. It should not be assumed that these steps should be undertaken in a rigid sequence. In practice, in some countries with a specific context, some steps may not be required or will be combined with other steps. Some countries may choose to undertake several steps in parallel. In other cases additional steps will be required. This is a flexible approach to NTHEAP development and local circumstances will dictate the final process to be followed. This manual will also be useful to countries that already have a NTHEAP but are keen to improve and sustain the process. Examples of good practice included below help to underline the different ways countries approach each phase of the process.

While it is preferable to develop national action plans with the widest possible impact, some countries might choose to set the scope of their first transport, health and environment action plan (THEAP) at a sub-national level. The same steps outlined below still apply, but the transport, environment and health issues might differ and the interventions will be at a different scale. Furthermore, if there are to be more than one sub-national THEAP in a country, coordination among them will be necessary to avoid duplication of efforts and to increase synergies on issues of national priority. Eventually, they would evolve into a national THEAP.

In addition to the 16 steps outline below, special consideration should be given to the cross-cutting step of linking to existing national strategies and action plans.

Crosscutting Step: Link to existing national strategies and action plans

There are several ways to go about developing and implementing a NTHEAP. The action plan can be either integrated in an existing national strategy or action plans, i.e. by introducing transport-related interventions into an existing NEHAP, or developed as a “standalone” action plans. It helps to consider where the NTHEAP should be included in the national framework early on in the process. The decision on how the NTHEAP is to be developed and integrated depends mainly on local conditions. Across most of the 16 steps below it will be necessary to consider how integration and linkages with existing action plans and policies can be pursued at the different phases of the development and implementation process.

2.1 Phase 1: Planning

Initiating the process of developing NTHEAPs requires 4 main steps: establishing a steering committee with a strong sense of leadership and political commitment, an assessment of the current situation, the involvement of all relevant stakeholders and a high-level awareness of the issues. Securing these four steps represents the first phase in the process of developing a NTHEAP and can either be undertaken consecutively or in parallel, depending on the circumstances of individual
Developing national transport, health and environment action plans

countries. In practice, several activities run well in tandem, for instance, the act of carrying out a situation assessment very often simultaneously raises awareness and political interest.

<table>
<thead>
<tr>
<th>Phase 1: Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Establish an steering committee</td>
</tr>
<tr>
<td><strong>2</strong> Assess the situation</td>
</tr>
<tr>
<td>• Epidemiology</td>
</tr>
<tr>
<td>• Existing policies, programmes, interventions</td>
</tr>
<tr>
<td>• Existing frameworks on integration</td>
</tr>
<tr>
<td>• Stakeholders</td>
</tr>
<tr>
<td><strong>3</strong> Involve stakeholders and create ownership</td>
</tr>
<tr>
<td><strong>4</strong> Raise awareness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2: Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Define overall goals and timeframe</td>
</tr>
<tr>
<td>6 Define objectives and targets and set priorities</td>
</tr>
<tr>
<td>7 Select interventions</td>
</tr>
<tr>
<td>8 Define responsibilities</td>
</tr>
<tr>
<td>9 Define resource needs and sources</td>
</tr>
<tr>
<td>10 Define mechanisms for monitoring and evaluation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3: Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Adoption of the NTHEAP</td>
</tr>
<tr>
<td>12 Integrate actions into work plans</td>
</tr>
<tr>
<td>13 Allocate budgets</td>
</tr>
<tr>
<td>14 Communicate the activities and results</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 4: Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Establish evaluation team and implement evaluation mechanisms</td>
</tr>
<tr>
<td>16 Sustain and improve NTHEAP</td>
</tr>
</tbody>
</table>

Integrate with other national action plans

### 2.1.1 Step 1: Establish a steering committee and strong leadership

There are several events that can trigger the start of the development of a NTHEAP. In some circumstances the decision to begin the process comes from the country’s leadership, while in other cases the agenda is driven by a government agency or group of motivated individuals. Generally, a good first step is to form a steering committee to manage the process. The committee can be responsible for only the early steps in the process or the full process from development to the implementation and evaluation. To ensure that the NTHEAP extends beyond the interests of one particular sector, it is of utmost importance to involve at least all relevant government ministries from the beginning. Coordinating the process is a considerable challenge. Therefore, it is recommended to identify a lead agency, foster political commitment and integration of the three sectors and clearly define the roles. The main function of the leadership is to coordinate the input of those involved.

### 2.1.2 Step 2: Assess the transport, health and environment situation

Without a good understanding of the extent of the environment and health effects of transport, a reasonable knowledge of existing policies, laws, regulations and action plans and a fair idea of possible additional interventions and the relevant stakeholders, it is difficult to formulate an effective
Developing national transport, health and environment action plans

action plan on transport, health and environment. It is of utmost importance to identify at the onset of the process all potential stakeholders, in particular from the three involved sectors. A comprehensive situation analysis should cover all of the following aspects:

- Epidemiologic assessment of the environment and health impacts of transport activities
- Assessment of existing policies, programmes, interventions, tools and action plans for development of sustainable and healthy transport
- Assessment of the existing framework on the integration of environment and health into transport policies
- Stakeholder analysis

The decision to develop a NTHEAP is made by the national government and should be followed by the establishing of the above-mentioned intersectoral steering committee to prepare the analysis of THE situation in the country. The analysis may also include the economic sectors, as well as horizontal issues such as environment and health institutions, legislation, information systems and public participation.

The results of the assessment will dictate the scope and overall direction of the action plan. It will further be a requisite for Phase 2 of the development process, for defining the content of the action plan in terms of goals, objectives and priority actions.

Although all four assessment components are important a balance sometimes needs to be struck between collecting enough information on the one hand and not consuming too much resources and time on the other. Therefore, before embarking on costly new data collection it is advisable to review any available information and to exploit this as far as possible, while still bearing in mind any shortcomings it might have.

**Good practice in situation assessment**

The Environmental Performance Review (EPR) Programme of the UNECE is considered an important instrument for countries with economies in transition. EPRs assess a country’s efforts to reduce its overall pollution burden and manage its natural resources; to integrate environmental and socio-economic policies; to strengthen cooperation with the international community; to harmonize environmental conditions and policies throughout Europe and North America; and to contribute to sustainable development in the region. It puts particular emphasis on implementation, integration, financing and the socio-economic interface with the environment. Road transport, as one of the main contributors to air pollution, is one of the main themes in EPRs. Through the peer review process, EPRs also promote dialogue among UNECE member countries and harmonization of environmental conditions and policies throughout the region.

Link: http://www.unece.org/env/epr/

Such a situation assessment can also provide a picture of the feasibility of implementing a NTHEAP in the current framework and with the current stakeholders. This exercise should wherever possible be carried out by an independent body, such as the previously established intersectoral steering committee or consultants.
**Epidemiologic assessment of the environment and health impacts of transport activities**

Identify existing data sources and analyze available information on the current transport-related environment and health situation in a country. Assessments of the environment and health burden of transport activities can be used to estimate the overall possible benefits (short, medium and long term) that can be gained in a country, region or city by creating sustainable and healthy transport through a NTHEAP.

**Good practice in assessing in existing actions for development of sustainable transport**

### Assessment of existing interventions/tools/action plans for development of sustainable transport

In order to obtain a clear view of the range of the existing interventions, tools and action plans to integrate EH into transport policies and provide for the development of sustainable transport, it is necessary to ask the following set of questions [1]:

- What is already being undertaken in the country?
- What is known about possible interventions to address the problems?
- Which interventions have been tested in the country or elsewhere?
- What is their potential effectiveness based on the latest international and national research results?
- Are they relevant for this specific setting or can culturally appropriate modifications be proposed?
- What are the important gaps in current knowledge?
- Is the government already allocating resources to make transport more environment friendly and healthy?
- Who else is devoting resources?
- Which NGOs or other private entities are involved in the development of sustainable and healthy transport?
- Are there university or research institutes that have worked to raise the profile of the environment and health burden of transport or evaluated potential solutions?

**Regional networks of national focal points**: The WHO and UNECE maintain networks of national focal points on various topics that are of relevance to sustainable transport, such as road traffic accidents, environment and health and THE PEP. These focal points can be instrumental in identifying relevant existing strategies, interventions and policies at the national level.

**Hungary**: As part of the country’s efforts to develop a national policy on unintentional injury prevention, including road traffic crashes, a through identification of all relevant stakeholders has been conducted (http://193.225.50.35/dokumentum/2009/ANG_0602.pdf). It covered ministries, institutions, health care sector, NGOs and manufactures and distributors specialized in safety.
Assessment of the existing framework on the integration of environment and health into transport policies

An assessment of the existing relevant policies (health, environment, transport, development, social etc), laws, decrees and regulations will highlight gaps in achieving sustainable and healthy transport that need to be addressed in NTHEAPs. Additionally, this assessment step will also examine current policy-making mechanism. How are policies formulated, adopted, endorsed and implemented? In summary, this assessment will provide information on:

- Political commitments of legally or non-legally binding nature
- Existing national and international policy and institutional frameworks
- Existing legal framework (hard and soft law)
- Degree and structural functioning of intersectoral collaboration (between transport, health and environment) and policy making
- Existing strategies on transport, health and environment

As outlined in chapter 0, international frameworks can serve as motivators for national action. For example, NTHEAPs offer a mechanism for national governments to implement the Parma Declaration on Environment and Health.

Stakeholder analysis

The primary function of the stakeholder analysis is to identify all possible partners who might have an interest in developing sustainable and healthy transport. This includes those who might (initially) also oppose such efforts. It is important to identify stakeholders in at least two dimensions: horizontally across sectors and vertically across different levels of responsibility and government. The latter is of particular importance as most implementation activities of a NTHEAP typically take place at the sub-national and local level. Potential stakeholders include the state and government at all levels, academics, civil society (NGOs and non-profit entities), formal or informal interest groups and private for-profit entities.

Table 2. Potential stakeholders in transport, health and environment action plans

<table>
<thead>
<tr>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private sector:</strong> chamber of commerce, insurance industry, road construction companies, automobile industry, bicycle industry, tourism industry, transport management system providers</td>
</tr>
<tr>
<td><strong>Civil society:</strong> NGOs and non-profit entities focusing on environment, health and transport, community-based organisations, international NGOs and foundations, transport user interest groups (car owners, public transport users, pedestrians and cyclist, women, physically disabled)</td>
</tr>
<tr>
<td><strong>Government:</strong> national, regional and local government entities dealing with health, environment, transport, finance, spatial planning, public works, commerce, law enforcement</td>
</tr>
<tr>
<td><strong>Academia:</strong> health and environment impact assessment research, mobility management research</td>
</tr>
<tr>
<td><strong>Media:</strong> print, TV, internet, radio</td>
</tr>
</tbody>
</table>

The second function of the stakeholder analysis is to examine the strengths and weaknesses of each stakeholder and the relationships among them. It is very important to identify supporters as well as
opponents and to understand the motivations of each stakeholder in order to develop an action plan that satisfies the involved partners. In regards to potential opponents, efforts should be undertaken to develop reasoning to counteract their resistance. The key objectives are:

- To identify stakeholders
- To assess their potential influence
- To understand their relationships
- To assess their capacities in the development and implementation of the NTHEAP
- To decide, based on the above, how to involve them (nature, form and mode of their participation)

### Good practice in stakeholder analysis

Stakeholder Analysis in the Latin America and Caribbean Regional Health Sector Reform Initiative (LACHSR): The experience from health reform exercises in Latin America and literature reviews help develop comprehensive and practical guidelines on how to conduct a stakeholder analysis. It provides templates for interviewing and mapping stakeholders to help identify and analyse the strengths and weaknesses of relevant stakeholders.

http://www.lachsr.org/documents/policytoolkitforstrengtheninghealthsectorreformpartii-EN.pdf

In summary, this exercise will provide information on the following as a basis for the next steps:

- Evaluation of impacts of transport activities on environment and health in the national context
- Clarification of benefits of an NTHEAP in the national context
- Overview of recently completed and ongoing national programmes and activities for sustainable transport
- Evaluation of compatibility of various existing programmes and action plans (i.e. some actions may impact negatively on the objectives of other actions and some actions may be repeated unnecessarily by different bodies)
- Identification of possible stakeholders that should be involved in the process
- Study of good practices on action plan development (e.g. guidelines and case studies developed by regional and international bodies)
- Identification and discussion of possible priority areas
- Review of enabling factors to implement a NTHEAP and possible obstacles to overcome in the development and implementation process

### 2.1.3 Step 3: Involve stakeholders and create ownership of the process

The higher the involvement of relevant stakeholders from the beginning of the process, the greater their sense of ownership. It is therefore of high importance to involve those empowered to solve the issues of sustainable and healthy transport from the onset of the process. Even if some participants are not willing or able to join at the beginning, it is a good idea to keep them informed about the process in the hope they may be persuaded to join at a later stage.

As many of the interventions are likely to be implemented at the community level (e.g. in the field of public transport, spatial planning, road safety etc), community participation is also important.
Developing national transport, health and environment action plans

Given the range of environment and health issues related to transport, the various stakeholders in this process will most likely represent diverse sectors. Adopting such a multisectoral approach will require working in multidisciplinary groups and understanding how other professions and sectors perceive and respond to the problems. Ultimately, success will require recognizing and complementing the competence and skills of each potential player. Stakeholders must first identify together the priority problems and focus on how to solve them. They then decide on how best to use their respective competencies. Once such a consensus is reached, it will be much easier for the stakeholders to operate on a common ground and within a neutral and action-oriented effort to tackle the issues.

It is important at this stage to formalize the framework of the process. The responsibilities and mechanisms for developing, implementing and monitoring the NTHEAP must now be agreed within the steering committee. Such a framework ideally should include the following components:

1. Coordination mechanism for contributions of relevant stakeholders
2. Mechanism for ensuring the participation of relevant stakeholders
3. Mandate and policy basis for the development of the NTHEAP

While at this point, many of these components might already be in place, it is important to remember that an agreed platform should be in place before proceeding further with the process.

Some countries choose to give the responsibilities to a single government agency. However, inter-ministerial cooperation needs to be encouraged due to the cross-sectoral nature of a NTHEAP. The incorporation in the functions of the Finance Ministry is also often a good choice given its ability to ensure appropriate resources are allocated to the proposed actions. The importance of the multi-stakeholder orientation cannot be underestimated. Only by effectively engaging stakeholders through a formalized process can their perspectives be reflected in the decision-making process.

Effective coordination at the governmental level is often one of the biggest challenges, especially when it comes to implementation. Therefore, it is important to involve a number of different ministries early on in the process. Broad government participation also provides the basis to discuss potential conflicts between different policies and activities being undertaken by different ministries and at different levels of government. The situation analysis should have identified the possible conflicts and potential overlaps of the prevailing action plans, policies, activities and strategies. However, making decisions on which priority areas or policies to select will require negotiation. A participatory approach is the best way to make the negotiated outcomes workable in the long-term.

Good practices in involving stakeholders

**Montenegro**: In December 2009, Montenegro organized a kick-off workshop with previously identified relevant stakeholders to initiate the development of a national Children’s environment and health action plan. The stakeholders involved all relevant national partners as well as international organizations that could play a role in the action plan. By December 2010, the action plan was finalized and adopted by the government. The PEP Partnership can provide assistance to organize such kick-off workshops.

Good practice in establishing leadership and political support

**France**: Since the 2002 Bastille Day speech of President Chirac, the President’s personal political commitments have secured a new approach to road safety in France. This new approach was given the highest level of political impetus.
at a seminar in September 2002 that involved all the relevant ministers, including the Prime Minister. The new approach rejects the acceptability of traffic casualties as a by-product of road transport with action on four themes:

- better enforcement of traffic laws
- reform of the highway code
- safer vehicles
- increased action by all actors.

All relevant actors have been engaged in the process, serving the common purpose of fighting the causes of road casualties. Overall political commitment to achieving road safety has been increased at all levels. Traffic-police departments, for example, have been renamed road safety departments and greater resources placed at their disposal. The enforcement of traffic law has also been facilitated by legal changes that allow the automated control of speed. Widespread use of speed cameras has produced a massive increase in the number of speeding fines issued. It has also reduced average speeds and, more importantly, reduced crash rates. This decrease in crashes has also been aided by a crackdown on other traffic violations, especially drink-driving.

Provisional figures for 2003 show that, in one year, crash rates have declined by 17.5%, serious injuries are down by 19.4% and deaths are 20.9% lower than in 2002, although caution is needed in assessing the magnitude of effects based on very short-term results. Nevertheless, the authorities note that combating road traffic crashes is a long-term activity and that 5732 people died in road traffic crashes in France in 2003.


### 2.1.4 Step 4: Raise awareness

Awareness-raising and communication aims at influencing public opinion and policy-makers and thus are important forces for mobilizing the political commitment and resources that are needed to drive the development of NTHEAPs forward. Results from step 1 (the situation assessment) can be used to raise awareness and do targeted lobbying, especially among key decision-makers. In parallel, the general public also needs to be targeted and made aware that the issues of transport, health and environment are critical to their and future generations’ well-being. The first steps in successful awareness raising entail the establishing of partnerships, definition of the target audience, understanding the baseline perception of the issues in the target audience and corresponding definition of the main message.

#### Good practice in raising awareness on transport-related health and environment issues

**Germany:** A text-based and city-focused campaign, “Brain on. Engine off.”, targeted drivers to throughout cities in Germany to raise their awareness on the benefits of walking and cycling for health and climate change.

Possible international events to use at national level for raising awareness include the “No car day” or the “Move for health day”.

### 2.2 Phase 2: Development

Priorities for environmental health actions are being set on the basis of the analysis, interdepartmental and public consultation (Phase 1). The ministries of health, the environment and transport organize consultation with key stakeholders, such as other ministries, business and industry, local authorities, non-governmental organizations, new media, and academia.
The development of a NTHEAP is usually preceded by and a direct follow-up to policies and strategies on sustainable and healthy transport. In some countries, a single policy or strategy for this purpose might exist, while in other countries, several policies and strategies together on sustainable development, transport and health might provide a comprehensive framework. In either case, international consensus documents of binding and non-binding nature can also provide a policy background for NTHEAPs.

The actions identified are weighted in terms of their technical and economic feasibility and their expected impact.

The actual task of formulating the action plan is usually undertaken by an individual or small group assigned this role by the steering committee. A six-step process is proposed to draft a national action plan on transport, health and environment.

2.2.1 **Step 5: Define overall goals and timeframe**

It is recommended to write an action plan by establishing the overall shape and direction it will have. This will provide a framework for the remainder of the document. The opening part should therefore set out the goals, a time frame and guiding principles (ethical and/or operational). This part of the action plan should also highlight the main reasons for the need for an action plan (based on results...
from Phase 1). Such an introductory section of the NTHEAP document should seek to answer the questions “Where are we?”, “Where do we want to be?” and, in broad terms, “How do we get there?”.

A NTHEAP should include such a main statement, i.e. a mission statement or a vision, which conveys a sense of the NTHEAP ultimate goal. Such a goal is often idealistic/visionary and does not specify a timeline or a quantified target. The Amsterdam Goals might serve as a framework or starting point for such goals (see Box 1).

In addition, there should be a general statement about the timeframe within which the action plan is expected to deliver results. This provides a reference point against which progress made can be measured.

2.2.2 Step 6: Define objectives and targets and set priorities

The broad goals stated above should then be broken down into more specific objectives, including specific timelines and quantifiable targets. Objectives describe outcomes that the action plan is expected to achieve. In areas of public health, for example, this often relates to morbidity, mortality or inequities related to transport, or the prevalence of risk factors (air pollution, noise, road traffic crashes etc). Transport-specific outcomes often concern efficiency of public transport systems, congestions, access to mobility etc. Environment relevant outcomes usually refer to emissions from transport alone. However, objectives in NTHEAPs can also refer to institutional indicators on policy integration, for example. They can also be more process-oriented.

It is generally important to set measurable, time-limited and easy-to-understand objectives. It is extremely relevant for the monitoring and evaluation phase that the objectives’ target values are verifiable and measurable. Baseline data are needed to quantify an objective. In many, low- and middle-income countries and at sub-national level, such data is often not available. In these cases, the objectives might have to be formulated in a more descriptive way. It is also suggested, in such cases, to include actions in the action plan that aim at closing these knowledge gaps. The more specific and understandable objectives and targets are the easier it is to engage the relevant stakeholders. Targets are usually broken down in short, medium and long term. For example, an objective of a NTHEAP might be to increase the use of bicycles in urban environments. Targets could then be defined as specific percentages of bicycles among all trips in cities in the short, medium and long term. Targets are often difficult to determine and agree on. While they can be adjusted through continuous improvements of the NTHEAP, they should be as realistic, while still posing a challenge to society, as possible from the beginning. Stakeholder involvement plays a very important role at this stage. The targets need to address the political and economic realities of the country, as well as the
prevailing method for defining and communicating national targets. These targets should be in line with relevant targets in other national action plans, policies and strategies. The situation assessment in Phase 1 should have unearthed all related objectives and targets in other action plans so that all competing and complementary targets can be efficiently integrated.

<table>
<thead>
<tr>
<th>Good practice in setting objectives and targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Serbia:</strong> In 2009, Serbia developed a national children’s environment and health action plan which also includes transport-specific interventions. The drafting group structured the action plan around 4 long term objectives (10 years) that are broken down into 4 to 5 mid term objectives (5 years). Each of them had clearly defined expected results, indicators as well as proposals for data source to verify the indicators.</td>
</tr>
</tbody>
</table>

To ensure that the action plan is comprehensive and coherent, it is recommended that a hierarchical approach is to be used in developing NTHEAPs. This means that for each action plan goal, a number of objectives should be defined. Each objective can have a set of sub-objectives. Such sub-objectives are often directed at mechanisms that are expected to influence the superordinate objectives.

**Setting priorities**

At this stage in the process, it is also very important to set priorities. This may also include a differentiation between short-term and longer-term priorities. Priority areas may also vary as the NTHEAP undergoes improvement cycles over the years.

The setting of priorities should always be a collaborative process, involving all relevant stakeholders. A transparent consultative process, supported by scientific evidence should help in making priority setting acceptable by all involved parties. Priorities for transport, environment and health actions are being set on the basis of the situation analysis (Phase 1), interdepartmental and public consultation. The ministries of transport, health and the environment organize consultation with key stakeholders, such as business and industry, local authorities, non-governmental organizations, new media, and academia. Some questions that should be addressed in such consultations include:

- What areas have been covered by existing policies, strategies and action plans?
- What areas have been covered by discontinued or completed policies, strategies and action plans?
- What have other similar countries used as their priority areas?
- What areas would be the most challenging to implement?
- What important areas have yet to be covered at all?

Careful consideration and lengthy negotiations will normally be required before a final set of priority areas can be identified. In many cases a country may arrive at only one or two short to medium-term priority areas.
As transport, health and environment addresses a broad range of issues, a common reaction by stakeholders might be that the proposed objectives and interventions are too much and cannot be achieved in a single action plan. It is then necessary to decide what should come first and what should be left for a later stage of the action plan, when and if more resources will become available. It is very important to aim for short and medium term tangible results to keep the stakeholders’ interest. The public might also be less inclined to support a NTHEAP that is complex and overly ambitious. As resources are often the limiting factor, it may be recommended that priority is given to the issues that affect the largest proportion of the population or for which the greatest political support and commitment can be gained. Generally, priorities are determined by:

- Scope of the burden (environment-, health- and transport-specific)
- Expected impact on population (including economic aspects)
- Feasibility of potential interventions (technical, acceptance etc)
- Resource-intensity of potential interventions
- Political support (i.e. political agenda and timetable)
- Strengths and weaknesses of existing programmes (synergies and overlap with existing action plans)
- Visibility of results in the short and medium term

While priorities might differ at national, regional and local level, policy integration between transport, health and environment should always be a main objective of a NTHEAP. It is of utmost importance to create coherence in policies and establish the provision of a national supportive framework for local action and implementation.

### 2.2.3 Step 7: Select interventions

The core part of a NTHEAP is made up of the interventions, i.e. actions, combined with responsibilities, resources and timelines.

The full range of interventions should be considered in order to determine which are going to be useful and successful in the national context. The action plan should support proven or promising interventions and advocate withdrawing support for interventions that are shown to be ineffective. By drawing on national or international experience, the most relevant interventions should be identified for each (sub)objective, bearing in mind their likely effectiveness under local circumstances, and also their feasibility, measurability and cost-effectiveness. Evidence-based research needs to be harnessed to ensure the most effective interventions are chosen. The expected impact on the economy should also be considered. Potential win-win opportunities, such as investments in “green jobs”, could be particularly favoured in times of economic crisis and should be highlighted. Furthermore, the same criteria as for the priority setting of objectives (see chapter 2.2.2) should also be applied in selecting interventions. In particular, a NTHEAP should ideally complement existing action plans and avoid any duplication of efforts. Some interventions, such as information campaigns, might already be in place and only require modifications to meet the objectives of the NTHEAP. As
Developing national transport, health and environment action plans

mentioned in the previous chapter, it is also important to ensure including interventions that are expected to yield visible results in a short time frame. This helps keeping motivation of involved stakeholders high and is politically rewarding.

There are many interventions and instruments in existence and it is necessary to use a mix of them. Several publications and other material are available to help identify and implement suitable THE interventions. THE PEP, for example, maintains two websites on healthy and environmentally sustainable transport: THE PEP Clearing House (http://www.thepep.org/CHWebSite/) and THE PEP Toolbox (http://www.healthytransport.com/). UNEP’s Environmentally sustainable transport project (EST) provides a clearing house with good practices that have a special focus on central and eastern European countries (http://esteast.unep.ch/). A few examples of interventions are given below.

In general, successful options for actions for creating healthy and sustainable transport consist of a combination of spatial planning, modal split policies, technical solutions and campaigns aimed at influencing behaviour as well as financial instruments. Some of the main topics to keep in mind include:

- THE integration: strategies, institutional mechanisms, monitoring and assessment tools, capacity building
- Urban transport: public transport, private cars, walking and cycling, urban traffic safety, integrated urban planning, intermodality
- Demand management: modal split, transport planning, taxation and regulation, eco-driving
- Cross-cutting issues: ecologically sensitive areas, children and other vulnerable road users, specific issues of EECCA and SEE countries, investments in green jobs, behavioural change and public acceptance, pricing of infrastructure use

Within the framework of THE PEP key ways have been formulated to capture the breadth of areas for action (http://www.healthytransport.com/athena/site/file_database/key_messages.pdf):

- Regulatory
  - Reduce and control emissions
  - Give priority to speed reduction and control
  - Inclusion HIA in transport and urban planning policies, plans and programmes
  - Inclusion of health and environmental effects in economic valuations of transport initiatives
  - Local and regional spatial planning
  - Taxation (e.g. emission-based, congestion charges) and financial incentives (e.g. subsidies for public transport, low-emission vehicles) for demand management

- Infrastructure
  - Invest in infrastructure with a focus on traffic safety
  - Invest in a cycling and walking friendly infrastructure
  - Invest in clean and efficient public transport
  - Improve inter-modal changes
Developing national transport, health and environment action plans

- Discourage car use for demand management (e.g. reduce number of parking facilities, reduce accessibility of city centers for cars)

- Promotion
  - Promote walking and cycling, specifically also for children
  - Promote schools and company mobility plans with a focus on walking and cycling
  - Promote environmentally friendly public transport
  - Safeguard the competitive position of rail transport
  - Encourage the use of Intelligent Transport Systems
  - Changing attitudes towards transport modes
  - Develop cycling and pedestrian skills (e.g. in schools)

Adoption of a suitable and promising mix of THE interventions will take careful considerations and negotiations between the involved stakeholders. Selecting a limited set of well considered pilot activities could help in keeping the NTHEAP focused for short term action. It is to be expected that there will be conflicts over the best way to meet a certain objective or target. The steering committee should keep in mind that simply placating the concerns of all stakeholders by selecting actions of the lowest common denominator may not success in reaching the desired medium and long term targets. While it is important to balance the views of all stakeholders as much as possible toward a shared outcome, it will sometimes be unavoidable that some stakeholders emerge unsatisfied with a certain intervention.

---

**Good practice in intermodality for freight transport**

**Italy:** The need for regional cooperation to promote intermodality by obtaining “critical mass” has been recognised and lead to the development of a number of Freight Villages. The concept is generally based on the concentration of freight traffic flows by the self-settlement of the transport companies inside a dedicated area, highly efficient intermodal systems inside the same area and support from the government (e.g. co-financing). The advantages materialise in terms of less congestion (less heavy traffic inside the residential areas) and increased productivity (strategic construction of logistics infrastructures).


Specific recommendations on action points for policy makers were formulated for achieving the goals of THE PEP Amsterdam Declaration and can also serve as an inspiration for identifying THE interventions (http://www.unece.org/thepep/en/commitee/documents/2009/ece.ac.21.sc.2009.7.e.pdf).

Some of the interventions might depend on others and are only effective when combined, either in parallel or subsequently. In addition to interventions targeting specific transport, environment and health problems, a NTHEAP may typically also include the following areas of horizontal activities:

- Strengthening environmental health issues in economic sectors, usually through environmental health impact assessment of transport projects;
- Development of transport-related environment and health information system;
- Public participation and consultation; and
• Communication on the action plan itself and the achieved results.

To achieve the objective of policy integration between transport, health and environment, the following mechanisms are recommended to be included as interventions in a NTHEAP [2]:

• Setting up organizational arrangements such as interdepartmental committees, commissions etc to bring members of different departments and ministries together.
• Assign a permanent central steering role (as mediator and to monitor) to help coordinate the outcome of such organizational arrangements
• Embed collaboration in the professional culture of the involved ministries through intersectoral strategies, programmes and policies, including cross-sectoral objectives.
• Support joint accountability:
  o include financial incentives for joint programmes, budgets for cross-sectoral implementation of common policies
  o introduce common analytical indicators and parameters
  o involve public debates on the issues as NGOs and the public often perceive issues in a more holistic manner
• Support capacity-building and awareness-raising:
  o National and international exchange of good practices on how to build intersectoral capacity and overcome barriers (new methods, ideas, tools)
  o Regular workshops and trainings on good governance, management and integrative decision-making
  o Job rotation to promote vertical and horizontal working relationships, if supported by the administrative culture of the country.
  o Create and train multi-disciplinary teams in ministries to monitor and assess cross-cutting issues
  o Introduce benchmarking and competition for good practices in policy integration
  o Use monitoring and reporting processes to promote dialogue and exchange of information between sectors
• Introduce benchmarking, monitoring and reporting tools to assess the progress towards better policy integration between transport, health and environment

<table>
<thead>
<tr>
<th>Good practice in THE integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belgium</strong>: In 2003, Belgium has put in action a co-operative agreement on environment and health, integrating government agencies dealing with health and the environment across all levels of government. It helped institutionalize coordinated policy making and was officially endorsed by the parliament. Integrated policy making is no longer seen as an end in itself but rather recognized as a way of achieving practical outcomes that simultaneously fulfil the goals of more than one stakeholder. In addition to mechanisms and institutional conditions, political will and allocation of resources are just as important. Public participation has also helped enhance policy coordination, leading to better performance and reception of activities and thus improving trust and confidence of the public in political decisions.</td>
</tr>
<tr>
<td><strong>London, United Kingdom</strong>: As part of an integrated transport strategy, nine new 20 mph zones were introduced in residential areas and near schools in Camden. The number of traffic injuries in these areas dropped by 58 per cent after introduction. The Camden walking plan in London is an example of integrated transport plans. To achieve an integrated transport strategy, intersectoral collaboration is crucial. In the walking plan, stakeholders from the transport sector and the health care sector helped make the plan a success.</td>
</tr>
</tbody>
</table>
Further reading on THE integration:

- Working together for Sustainable and Healthy Transport
- Integration of environment into transport policy – from strategies to good practice

2.2.4 Step 8: Define responsibilities

The success of a NTHEAP greatly depends on defining institutional responsibilities and coordination mechanisms between ministries and other national entities in the action plan. This requires assigning overall leadership and responsibilities for the various objectives and interventions.

Relevance of sub-national and local authorities:

In countries with a decentralized public system, it will be very important to involve the regional and district authorities in the development phase, as their collaboration is required in any case for the implementation of the NTHEAP. This might prove difficult due to logistical and administrative reasons. Given their likely responsibility in implementing, it would be advisable to sensitize regional and local authorities from early on (e.g. through a series of consultative meetings and workshops). Additional support, through trainings for example, might be needed during the implementation phase. As mentioned in chapter 2.2.2, it is important to provide a coherent and supportive national policy framework for local action and implementation.

The ultimate responsibility for protecting health and the environment from harmful effects of transport lies mainly at the national level. Most of the action, however, is usually taken at the sub-national/local level. If such action is to be effective, the national authorities need to establish supportive frameworks and mechanisms to help sub-national and local organizations and authorities. The national government usually takes the lead in the preparation of NTHEAPs, but ultimately, a NTHEAP is ideally made up of several local THEAPs. The support from the national government can be to [3]:

- provide the legal framework for local action
- set priorities
- help develop national indicators for local use and information systems that are also adapted to the local level
- promote integration across sectors at all levels of government
- encourage involvement of the academic sector in risk assessment and cost-benefit analysis
- provide funding
- delegate authority to sub-national and local levels
- accept ultimate responsibility for THE issues
- assist with trans-boundary issue.
2.2.5 Step 9: Define resource needs and sources

Successful implementation of a NTHEAP will be impossible without adequate financial and human resources. As part of the NTHEAP development, it is important to:

a) estimate the required human resource needs, including trainings;
b) break down the costs of implementing the NTHEAP by intervention;
c) and identify national and international funding sources.

Ministries and national agencies involved in the implementation of the NTHEAP should adjust their budgets accordingly and secure additional financial support from donors. Synergies between ministries should be identified to share and increase funding. Capacity building in applying for financial support from international funding institutions and organizations might be necessary and existing expertise should be shared across the involved ministries.

Developing a robust action plan which includes well thought out partnerships and initiatives (e.g. pilot activities) from the outset will certainly help mobilise the required resources. Bilateral donors and international funding bodies will be more inclined to support the action plan’s activities once an integrated and measurable NTHEAP has been developed.

Some examples of international organizations and financial institutions that are active in the field of transport, health and environment:

- European Commission
- World Bank
- European Bank for Reconstruction and Development
- Germany’s Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
- Other Member States of the European Region
- […]

2.2.6 Step 10: Define a mechanism for monitoring and evaluation

The action plan should also address the question of monitoring and evaluation. The monitoring usually covers 4 levels [ref]: process, products, outcomes and impacts. The process can be monitored throughout the development phase as well as after its inception. The other three elements are generally monitored as implementation gets underway. The process of monitoring is ongoing and should be updated as better methodologies and data become available. While there often is a wish to evaluate the development process of the NTHEAP, the focus should nevertheless be clearly be on monitoring and evaluating the implementation. The NTHEAP should:

- state the need for documenting the progress;
- define adequate resources needed for the monitoring and evaluation activities;
- define a review process, including:
  - responsibilities for evaluating the implementation and impact of the action plan
  - reporting intervals
  - reporting hierarchy
  - possibilities for enforcing implementation;
• define a feedback mechanism to allow for regular revision of the action plan to improve its accuracy and relevance; and
• define the information (i.e. qualitative and/or quantitative indicators) and methodology that should be used.

Monitoring an NTHEAP in particular in quantitative terms of the impacts of certain interventions and their links to objectives and targets is not an easy task. Each objective, target and intervention in the action plan should be complemented with indications of relevant and measurable information that will allow for their evaluation. There are several sets of proposed indicators to monitor sustainable transport in general. However, data quality and availability is often the limiting factor. This could be specifically addressed in the NTHEAP itself.

Possible quantitative and qualitative ways to monitor and evaluate a NTHEAP could include:
• national peer reviews
• internal reviews
• external auditing
• parliamentary reviews
• budgetary reviews
• indicator-based monitoring
• public/local monitoring
• international monitoring
• monitoring of related existing programmes (e.g. NEAP)

A combination of several of the above might yield the best results. Whatever approach a country ultimately will choose for monitoring and evaluation of its NTHEAP needs to be clearly reflected in the NTHEAP and appropriate information requirements stated.

Communicating the results of the monitoring and evaluation to all stakeholders and the general public is important for sustaining the action plan. For example, government websites might be used to display NTHEAP indicators and brief awareness-raising brochures could be produced regularly.

<table>
<thead>
<tr>
<th>Good practice in monitoring and evaluating an action plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>France</strong>: From 2004 to 2008, the first environment and health action plan (PNSE 1) was implemented and subsequently evaluated. The evaluation critically appraised the impact of the PNSE 1 in various areas, for example policy making, environmental quality and education and derived recommendations for the second action plan.</td>
</tr>
</tbody>
</table>
2.3 Phase 3: Implementation

The steering committee oversees the NTHEAP implementation. The ministries of transport, health and the environment, representatives of other governmental departments and agencies, scientists, and representatives of the major stakeholders and implementers compose the committee. The steering committee may wish to further elaborate the work plan laid out in the NTHEAP.

2.3.1 Step 11: Adoption of the NTHEAP

Seeking official approval of the action plan is reflective of the local political conditions. Approval and endorsement of a NTHEAP should ideally be sought sequentially from stakeholders and then ideally from the government. The adoption should be accompanied by public relations activities, such as launching publicly the action plan, press conferences and other events to increase public awareness. It can obviously take some time for a plan to be ratified by the government or other decision making body. But this can vary greatly.

2.3.1.1 Stakeholder approval

The draft NTHEAP should be circulated for comments to the other governmental departments.
2.3.1.2 Government approval

Some countries have action plans approved by ministers while others require them to be submitted to more senior officials or bodies. Sometimes a programme may be endorsed by a group of ministers or a committee instead of being put forward for official government approval. Depending on the government system, the final text of the NTHEAP is ideally approved jointly by the involved ministers of transport, health and the environment, by the national government or by the president. In some countries, NTHEAPs are also endorsed by the parliament.

It is possible that it may be easier to obtain official approval when the NTHEAP is linked to another new or existing national mechanism such as a national plan on climate change, national programme on sustainable consumption and production or national environment and health action plan. This could possibly also have the effect of raising the profile of the NTHEAP. In any case, it is highly preferable to have the NTHEAP approved by all involved ministries. This will also help in the goal of integrating NTHEAP themes in all government policies. In this process, it will be important to demonstrate to the decision making body that a thorough and participatory process has been followed in the development of the NTHEAP. The objectives, targets and interventions of the action plan will need to fit with the country’s overall priorities. Therefore, highlighting links to all relevant existing strategies, policies and action plans and delineating the complementary status of the NTHEAP’s actions will be crucial. The NTHEAP should clearly define its short, medium and long-term goals and benefits to the country.

Given that NTHEAP implementation requires the collaboration of several ministries and that its impact is dependent on long-term commitment, it is highly desirable that the action plan also be ratified by the legislative body (usually the parliament) and given a legal basis. This makes the action plan more resistant to changes in the political climate. As such processes can take a long time, advocacy, lobbying and media communication can be pivotal also during the approval process. In fact, it can be very helpful in the implementation of the NTHEAP if the adoption of the NTHEAP is accompanied with press coverage or other means of public information.

If official approval is not obtained at this stage further modifications to the NTHEAP may be required before re-submission to the appropriate decision making body. This could require the steering committee to go back to Phase II and re-follow the steps accordingly.

2.3.2 Step 12: Integrate actions from the NTHEAPs into the work plans of all relevant ministries

Once the NTHEAP is officially approved the actual implementation of the action plan can begin. The actual process will depend on the operating conditions of the country. As much as possible the actions proposed in the NTHEAP should be followed. As a NTHEAP usually covers more than one planning phase of government agencies the short, medium and long term targets and the
corresponding interventions and activities of the NTHEAP will need to be integrated in the work plans of all involved stakeholders and actors. For this purpose, the steering committee might need to task specific working groups with elaborating the specific work plans.

In case it becomes necessary to change the originally proposed interventions during this phase, any adjustments should be made in respect to the overall goal, objectives and targets of the NTHEAP.

2.3.3 Step 13: Allocate necessary budget

Allocating necessary budget for implementation is crucial and often challenging step in the implementation. The state budget may provide part of the funds needed for NTHEAP implementation, if the government or the parliament has approved it. Otherwise, involved ministries allocate some portion of their budget for implementation of activities under NTHEAP and/or undertake resource mobilization initiatives to raise the required funds from external sponsors, such as bilateral donors.

2.3.4 Step 14: Communicate the activities and results

It is important to continue to advocate for and communicate the NTHEAP to the public and stakeholders also after the development has finished and the plan is adopted by the government. For this purpose, a communication plan should be developed to support the implementation. In addition, once the first results from the evaluation phase become available, these should also be communicated and used for further advocacy and awareness raising. This can be very helpful in sustaining the NTHEAP. There are several ways to communicate the NTHEAP to the stakeholders including through a range of different media such as internet, print, television and radio. The communication campaign can target specific stakeholders on certain topics, provide general information about the NTHEAP or a combination of both.
2.4 Phase 4: Monitoring, evaluation and improvement

The steering committee should start monitoring and evaluating the NTHEAP from very early on. At every stage of the development documentation should be produced for monitoring, compliance learning and sharing of information. As sometimes, steps will need to be repeated later the availability of existing documentation can be very useful. The steering committee may wish to maintain a library of documentation of the planning, development and implementation phase. This can also be very useful for other countries interested in learning from experiences.

2.4.1 Step 15: Establish evaluation team and implement the defined evaluation mechanisms

The steering committee decides on evaluation of the NTHEAP and defines the terms of reference of the evaluation (see Phase 2 – Step 10).

Internal and external experts who have appropriate background and skills compose the evaluation team. The evaluation team develops a detailed plan and instruments for the monitoring and evaluation already during the development phase. Some of the usual tools for the evaluation are:

- Analysis of transport, environment and health indicators, as defined in the NTHEAP
- Interviewing people who represent the major stakeholders in NTHEAP development and implementation and who have been involved in the process,
• Focus groups to discuss the strengths, weaknesses, opportunities and constraints of the NTHEAP with a special focus on the lessons learned from the implementation
• Qualitative review of documents related to NTHEAP, such as other national action plans on transport, environment or health, national health programmes, strategies for development of sustainable transport etc

2.4.2 Step 16: Sustain and improve NTHEAP

From the beginning of the process to develop a NTHEAP, a mechanism should be put in place to ensure that the NTHEAP can and will be updated. For example, a schedule to update the NTHEAP should be included. Mainly based on the results from the evaluation step 15 above, the NTHEAP should periodically be revised as needed to improve its impact. For this purpose, some of the steps of Phase 1 and 2 will need to be repeated. However, there might also be more complex reasons that require an update, such as changes in the political, social and economic context of a country.

However, there is more to sustaining a NTHEAP than setting a schedule to update it. The steering committee together with all implementing agencies will also need to continuously foster interest in the NTHEAP. There are a number of ways to do this. These include:

• ongoing multi-stakeholder meetings to report on progress and discuss improvements
• regular information and communication campaigns targeted at all stakeholders including the general public;
• ongoing attempts by the steering committee to secure additional funding and political support of the NTHEAP by other stakeholders, including the government; and
• engaging business and industry.
3 Part III. Tools

For each phase and step in developing a NTHEAP, there are a range of tools and sources of information available at the international, national as well as sub-national and local level. THE PEP maintains two main collections of useful information and tools and provides a framework to offer support in developing a NTHEAP:

- THE PEP Toolbox (http://www.healthytransport.com/) provides a repository of such information that is constantly being updated. The Toolbox was developed to help policymakers and local professionals solve transport problems that affect health and the environment. In addition to tools and promising practices, it contains policy briefs on selected topics and provides access to information from relevant sources. It provides guidance on transport-related health impacts and sustainable solutions with a focus on issues such as road-traffic injuries, air pollution, noise, climate change and physical activity.

- THE PEP Clearing House (http://www.thepep.org/CHWebSite/) is a web portal designed to facilitate exchange of information and knowledge across the transport, environment and health sectors in the pan-European region. It aims to address, in particular, the needs of countries of Eastern Europe, the Caucasus and Central Asia (EECCA) and of South-Eastern Europe (SEE). It serves to collect, disseminate and exchange information on sustainable transport policies, legislation, research and good practices. Its information content covers more than 100 topics relevant to the transport, environment and health sectors, including as priorities: health and environmental effects of transport, policy integration, urban transport and transport demand management. The Clearing House has a very practical organization and intuitive method to access information on air pollution or noise in urban area, policies regarding the effects of private cars or any other topics covered by THE PEP.

- THE PEP Partnership is THE PEP “factory” or facility, capable to provide technical assistance for the development of NTHEAPs and to produce tools, methods, resources and other substantive materials for THE PEP relay race workshops. The main objective of THE PEP Partnership is providing capacity-building for countries in EECCA and SEE countries. As such, THE PEP Partnership can play a central role in supporting countries in the development and the implementation of a NTHEAP.

Additional sources for exchanging experiences and disseminating good practice:

- POLIS - European Cities and Regions Networking for New Transport Solutions:
  http://www.polis-online.org
Developing national transport, health and environment action plans

- ACCESS – EUROCITIES for a New Mobility Culture: http://www.access-eurocities.org
- CPMR – the Conference of Peripheral Maritime Regions of Europe: http://www.cpmr.org
- BEST - Benchmarking European Sustainable Transport: http://www.besttransport.org
- The EU Transport Research Programme Knowledge Center: http://www.europa.eu.int/comm/transport/extra
- ELTIS - European Local Transport Information Service : http://www.eltis.org
- European training programme for urban transport professionals : http://www.transport-training.org
- Database on Good Practice in Urban Management and Sustainability: http://europa.eu.int/comm/urban/
- OECD EST Project – Environmentally Sustainable Transport : http://www.oecd.org/document/58/0,3343,en_2649_34363_2346490_1_1_1_1,00.html

The following pages list several additional tools, sources of information and further reading opportunities for each phase and step described in this manual.

3.1 Phase 1: Planning

Situation analysis for health and environment impacts of transport
- EEA’s transport and environment reporting mechanism (TERM): http://www.eea.europa.eu/themes/transport/indicators
- EUROSTAT: http://epp.eurostat.ec.europa.eu/
Developing national transport, health and environment action plans

- WHO Environmental burden of disease country profiles:
- Country profiles in the European status report on road safety. Towards safer roads and healthier transport choices:
- DG TREN transport research knowledge centre's country profiles: http://www.transport-research.info/web/
- HIT (health impact of transport)
- Guidance on economic valuation of transport-related health effects
- Health Economic Assessment Tool (HEAT) for cycling:
- Guidance on strategic environmental assessment for transport plans and programmes:
- ENHIS guidelines on health impact assessment of outdoor air pollution:
- ENHIS guidelines on health impact assessment of children exposure to road traffic noise:
- ENHIS guidelines on health impact assessment of blood lead levels:
- HI Air tool for assessing the health impact of urban air pollution: http://www.hiair.eu/

International policies related to health and environmental impact assessment:
- UNECE Protocol on Strategic Environmental Assessment (SEA):
- LRTAP convention

Awareness raising:
- TEACH-VIP module on advocacy (http://teach-vip.edc.org/) and new TEACH-VIP modules on advocacy and media (TBD)
3.2 Phase 2: Development

Sources for interventions in transport, health and environment:

- THE PEP relay race on sustainable and healthy urban transport (workshop series)
- TEACH-VIP core (one) and advanced (three) modules on road traffic (risk factors, interventions, good practices, developing interventions)
- WHO’s capacity building tool on road traffic injury prevention: TEACH-VIP, core module 20
- Possible frameworks for interventions in transport, health and environment:
  - DPSEEA (updated DPSEAA by Morris)
  - MEME
- Case studies and good practices in transport, health and environment in developing countries: http://www.who.int/heli/risks/urban/transpdirectory/en/index2.html
- Policy instruments to avoid, shift and improve transport emissions:
  - planning, regulatory, economic, information and technology
- UNEP Environmentally sustainable transport Clearing House for central and eastern Europe: http://esteast.unep.ch/
- CEHAPE (Children’s Environment and Health Action Plan for Europe) is a document for policymakers that contains examples of successful experiences with mobility and transport for children in Europe.
- ELTIS: The European Local Transport Information Service is a portal that provides information on local transport such as news and events, transport measures, policies and case studies that have been implemented in cities and regions across Europe.
- EPOMM: The European Platform on Mobility Management is a network of governments in European countries that are engaged in Mobility Management. They are represented by the ministries that are responsible for mobility management in their countries.
- ADD HOME: ADD HOME transfers the means to manage mobility into an area that has so far been ignored: the home.
- OSMOSE: OSMOSE, Open Source for MOBILE and Sustainable city, is a new portal that aims to provide comprehensive information to people interested in innovative urban transport and mobility concepts.
• SMILE: Sustainable Mobility aims to reconcile citizens’ mobility needs with quality of life and the environment. SMILE aims to help local authorities cope with this challenge by presenting good practices and introducing innovative approaches on a permanent basis.

• Sustenergy: The Sustainable Energy Europe Campaign showcases activities dedicated to energy efficiency and renewable energy solutions. The site informs about more than 300 sustainable projects.

• EST goes EAST: The EST goes EAST Clearing House (EgE) seeks to promote Environmentally Sustainable Transport (EST) in Central and Eastern Europe by acting as a portal and platform where interested parties can exchange information, knowledge, news and experience.

• HEPA Europe: Case studies have been collected on ‘Collaboration between Physical Activity Promotion and the Transport Sector: Examples from European Countries’. This collection of 48 practical examples from 11 countries aims to support member states in the intersectoral promotion of physical activity on the form of cycling and walking.

• Transport interventions promoting safe cycling and walking:

• “preventing injuries and violence in Europe” DG SANCO book

• DG TREN Green Paper on Urban Mobility - Stakeholder Consultation Report:

• DG TREN Sustainable Urban Transport Plans:
  Annex:

• DG TREN sustainable transport policies: http://ec.europa.eu/transport/sustainable/index_en.htm

• ‘Developing Sustainable Urban Land Use and Transport Strategies - A Decision Makers Guidebook’, PROSPECTS project funded by the European Commission, January 2003:

• UNEP Environmentally sustainable transport Clearing House for central and eastern Europe:
  http://esteast.unep.ch/


3.3 Phase 3: Implementation

• Working together for Sustainable and Healthy Transport, THE PEP, 2008
• Guidance, training/capacity building:
• Advocacy and community participation:
• EU Funding for Environment: A handbook for the 2007–13 programming period:

3.4 Phase 4: Monitoring, evaluation and improvement
• EEA’s transport and environment reporting mechanism (TERM):
  http://www.eea.europa.eu/themes/transport/indicators
• Surveillance and monitoring of transport trends:
• Surveillance and monitoring of transport-related environment and health indicators:
4 References


5  Annex I: Template for a NTHEAP

Template for the structure of a NTHEAP document:

- Preamble (justification for the NTHEAP: description of the current transport, health and environment situation, the goals and guiding principles of the action plan)
- Objectives and indicators
- Interventions
  - Objective(s) / Intervention description / lead agency / involved partners / budget / timeframe
- timetable
- roles and responsibilities
- budgets
- communication plan
- performance management processes
- monitoring and evaluation
6 Annex II: Country case studies

Country and regional resources / Country case studies

Below is a list of some resources available from countries that have developed or are developing NTHEAPs. For updated information, see the online THE PEP clearing house at: http://www.thepep.org/chwebsite/

<table>
<thead>
<tr>
<th>Country</th>
<th>Action plan document</th>
<th>Document location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main portal: <a href="http://www.nehap.be">www.nehap.be</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>Environment and health action plan, 1999, German only</td>
<td><a href="http://www.apug.de">http://www.apug.de</a></td>
</tr>
<tr>
<td>Portugal</td>
<td>National environment and health action plan, Portuguese only</td>
<td><a href="http://www.apambiente.pt/politicasambiente/AmbienteSaude/emp">http://www.apambiente.pt/politicasambiente/AmbienteSaude/emp</a> ortugal/Paginas/default.aspx</td>
</tr>
</tbody>
</table>