



International workshop on “Environmental aspects related to transport and mobility in cities”

DRAFT REPORT

TIME: 14-15 June, 2006

PLACE: Jurmala, Latvia

PARTICIPANTS: Planning, development and environmental specialists from city municipalities in Estonia, Latvia and Lithuania, representatives from Ministry of Environment (Estonia, Latvia); Ministry of Economic Affairs and Communications (Estonia); Latvian Environment, Geology and Meteorology Agency; Riga Environmental Centre “Agenda 21” (Latvia); Latvian Environment Management Association; Latvian National Focal Point of EU 6 Framework Programmes; Environmental Protection Agency (Lithuania); Environmental Centre for Administration and Technology (ECAT) (Lithuania); regional department of Latvian Green Movement; municipal enterprises (Lithuania); health protection institutions (Estonia, Latvia), universities (Estonia, Germany), consulting company (Estonia) as well as experts from Germany and Sweden. In total 57 participants (including BEF team).

The international workshop was organised within the framework of the project titled “Information exchange and promotion of cooperation among municipalities in addressing the urban environment problems at the three Baltic States” supported by the Phare Cross Border Cooperation programme in the Baltic Sea region for Latvia 2003 and German Ministry of Environment, Nature Protection, and Nuclear Safety and German Federal Environmental Agency.

WESTERN EXPERTS:

Mr. Peter Häckelmann City Planning Office, City of Saarbrücken, Germany
Mr. Oliver Mietzsch German Association of Cities and Towns, Germany
Mr. Axel Welge German Association of Cities and Towns, Germany
Ms. Mia Simm Environment and Public Health Office, City of Solna, Sweden

GOAL OF THE WORKSHOP:

To facilitate the experience exchange between Baltic, German and Swedish municipalities on issues related to environmental problems caused by traffic, traffic planning and mobility at municipal level.

PROCEEDINGS:

Wednesday, 14 June

Opening of the workshop and overview on transport and environment related aspects in municipalities in the Baltic States, by Ms. Ingrida Brēmere, Baltic Environmental Forum, Latvia

Ms. Brēmere opened the workshop and briefly introduced to the topic of the seminar- urban environment- followed by the introduction on results of the survey that was out in Estonia, Latvia and Lithuania. This survey aimed to estimate common and possibly specific features, assess actions taken and main problems encountered at municipalities in the field of energy and transport. The results of the survey are compiled in a report and can be found at www.bef.lv. Ms. Brēmere introduced the aim of the workshop, participants, financial supporters and the agenda.

I SESSION – EU POLICIES AND LEGISLATION – INTEGRATION OF ENVIRONMENTAL ASPECTS IN TRANSPORT SECTOR

Reduction of traffic-related pollution in cities – experiences with implementation of air quality directives in European cities, by Mr. Axel Welge, German Association of Cities and Towns, Germany

Mr. Welge gave an overview on the legal basis and implementation of the EU Air Quality Directive (96/62/EC) from the viewpoint of traffic and mobility. He pointed out two main problems in European cities- PM₁₀ and NO_x- and emphasised that EU helps to tackle these problems with legislative requirements. He also stressed that an integrated overall traffic planning is very important in order to shorten distances between living and working places. This requires also regional co-operation. Mr. Welge listed some most important points for advancing the local public transport, bicycle traffic and the control of stationary parking. As an example of improving the public transport system in Germany there are certain cities that have the same ticket system (train, bus, tram etc) thus people can use the same ticket in different cities.

Mr. Welge pointed out that freight traffic is a big problem for Germany and cities, surrounding areas and the companies involved should co-operate for the improvement of freight transport organisation.

Mr. Welge briefly introduced the organisation of transport administration. In Germany there are more than 20 Air Quality action plans put in action but the main problem for implementation is money. He pointed out the usefulness of integrating representatives of legal authorities as well as municipal decision makers into decision process at an early stage of the process.

As a final remark Mr. Welge emphasised that it is very important when new directives are coming to work together from the very first phase. Countries have to think about the measures now, not in 14 years. He also pointed out that health problems will be an important issue for cities in the future.

Thematic strategy on air pollution, by Mr. Armands Plāte, Ministry of Environment, Latvia

Mr. Plāte gave an overview on the Thematic strategy on air pollution that was announced on 23rd of September of 2005 in the frame of the 6th Action Program for Environment. He also briefly introduced the Clean Air for Europe (*CAFE*) program. He emphasised the integrated approach of the strategy- it should be co-ordinated with other EU environmental policies. Both technical and health protection aspects are taken into account in the strategy. Currently the Thematic strategy is under discussion in the European Parliament.

Mr. Plāte concluded that air pollution is a trans-boundary problem and pointed out the possibility of the arousal of problems regarding non-EU member countries. He also gave examples of possible measures to be taken on a municipality level in order to improve the air quality.

Knowing that the traffic is a major air pollution source in cities, Mr. Plāte suggested several ways on how to avoid high traffic flows:

- paying bills via Internet → not driving to offices (e.g. gas, water company etc.)
- electronic signature and virtual offices
- so-called awareness raising of the citizens- people try to avoid polluted places
- introduction of emission ceilings or thresholds in cities

Role of municipalities

During his presentation Mr. Plāte introduced several measures that could be taken by municipalities. Later on participants were asked to prioritise these measures.

The results were following:

- Increase the share of public transport
- City planning with the goal to reduce the air pollution
- Proper development of the road/street infrastructure
- Car flow optimization
- Awareness raising of inhabitants
- Changed consumers behavior
- Including of green procurement requirements in municipal purchases

- Introduction of low emission zones
- Technical upgrading of private cars and public transport (buses etc.)
- Setting stricter requirements in municipal areas

Discussion

Mr. Plate answered questions from participants on consumer interest (pressure from big companies), green procurement – includes not only environmental and health aspects but as well consumer aspect (organised on national level, no EU policies) and green zones in cities (not mentioned in the strategy directly, but there are structural measures mentioned to lower loads).

Comments from municipalities- which measures are realistic?

Latvia

In Latvia there are some smaller towns that do not have to monitor air quality so it is hard to plan measures in such cases. Problem in Latvia- how to not make air quality worse?

Riga has the Air Strategy, people know about PM₁₀ and dioxide problems and demand acting:

- reducing dust in Riga- this year the washing of streets of sand was carried out
- green procurement- but Riga uses more cheap procurements not green- how to integrate it? Otherwise there will be negative consequences.

Estonia

Smaller cities do not make monitoring but air quality situation can be predicted and seen if there are problems.

Tallinn- important to bring knowledge to higher level but it is hard to explain to Mayor what has to be done. In Tallinn the air quality is bad so there is a need for improvements-

- planning is the cheapest way to improve
- green procurement has been an issue but it is hard to include it in procurements (money counts) especially if the issue is not related to environment

Lithuania

Main problems are in bigger cities- they have monitoring, in smaller cities the situation is the same as in Estonia and Latvia.

In bigger cities the problem is PM₁₀ → special strategic documents to reduce it-

- a lot of efforts to reduce negative effects of traffic/transport
 - organising better planning
 - these measures are slow due to the fact that they need a lot of money
- green procurement – not priority topic at the moment, not legally required, selection of cheapest option is applied

Germany

Green procurement is also problematic but it is more important to concentrate on standards/techniques of cars (EURO 5,6) not on green procurement.

The following discussion brought out that in Lithuania public transport system is financed by municipality, in Latvia by the state (internal railroad lines in cities are not included in the public transport system that state finances) and in Estonia by the city government (city government company) where in Tallinn 60% of the money is given directly by the city government and 40% comes from ticket money and these sums are for running costs, besides that there are also extra investments.

II SESSION – ENVIRONMENTAL NOISE AND AIR POLLUTION RELATED TO TRANSPORT

ENVIRONMENTAL NOISE

Noise mapping in Riga, by Mr. Valters Sprūdžs, Latvia

Mr. Sprūdžs gave a brief overview on Latvian legislation related to noise issues. He stressed that the “polluter pays” principle has been incorporated.

Mr. Sprūdžs introduced 3 projects that Riga City has launched:

- railway noise measurement – no mapping used, concrete points- results were obtained on March 2006
- airport noise mapping – planned to be completed on August 2006
- Riga agglomeration noise map-
 - carried out in 2 stages:
 - First stage → till the end of 2006 (data collection, mapping of local municipalities)
 - Second stage → till the end of 2007 (mapping of the whole territory)
 - for the map it is needed:
 - data of all transport loads
 - average speeds
 - co-operation between different municipalities in the region and inside municipalities
 - problems they are facing are lack of experience and shortage of time

Discussion

During the discussion Mr. Sprūdžs informed that after finalising the maps they will develop noise reduction plans within 1 year, after 5 years a new map will be made where reduction measures should be reflected. This has to be done using the EU money that was allocated.

In making the Riga agglomeration map the following aspects will be considered-

- vehicle transport
- industrial sources (e.g. Riga Port)
- railway noise pollution
- map of airport noise

The Riga agglomeration was formed based on a survey that was made in smaller municipalities near Riga (those who had noise pollution) and based on the two aspects- density of population and noise sources- relevant municipalities where asked to join.

Mr. Sprūdžs also explained that after mapping the investments for noise reduction will be made in the case of industrial sources (e.g. railway) by polluter („polluter pays“ principle) and in case of motorways by municipalities. He emphasised that the noise map will be adopted as a binding document in all concerned municipalities.

A comment was made by Germany that EU directive requires that noise maps are made in the cities with more than 250 000 inhabitants. Noise maps similar as in Riga have been made in many cities in Germany. The results of the noise maps have to be shown to EU in order to get co-financing for carrying out the reduction measures. Very important is to keep in mind that everybody- state, industry etc.- has to participate in carrying out of reduction measures.

Environmental noise, by Mr. Madis Kõrvits, Tallinn Environment Department, Estonia

Mr. Kõrvits gave a short overview on the tasks of Tallinn Environment Department and noise legislation in Estonia. He pointed out that the main institution dealing with noise problems in Estonia is Health Inspectorate. He also stressed that from municipalities` perspective the most important preventive measure is planning. This can also solve/help to avoid two big problems related to traffic in Estonia - new residential areas are too close to traffic and new roads are too close to residential areas.

Mr. Kõrvits introduced the situation considering Tallinn noise map – the date to finalise the map is 2007 and this is problematic for Tallinn although all necessary data for making the noise map are available (better situation compared to Riga) → good co-operation with strategic companies but in Tallinn the problem is money (e.g. to buy a software). Another aspect is related to the municipal experts capacity – currently it is necessary to educate a specialist for this work as at the moment the city municipality is relying on consultants.

Mr. Kõrvits showed some examples of noise reduction measures in Tallinn: noise walls and greenery.

As a positive aspect Mr. Kõrvits pointed out that Tallinn has the airport strategic noise map that was made few years ago. Based on the noise map it has been possible to ban building of houses too close to the airport so the usability of the noise map in planning process has been proven.

Discussion

During the following discussion Mr. Kõrvits pointed out that city sprawl is a problem in Tallinn, although building near airport has been successfully banned based on the noise map people are still building houses near tram ways where noise is a big problem. He emphasised that co-operation between transport and environmental department is essential to improve the living conditions in Tallinn.

Considering the involvement of public Mr. Kõrvits said that no particular program/events to let inhabitants know about noise have been made. It was proposed that public should be involved after the map is ready to give them a possibility to suggest reduction measures. The same situation is in Riga.

Lithuania

According to the Lithuanian noise legislation (Noise Management Law) Vilnius, Klaipeda and Kaunas have to develop noise maps. 2 other cities are also thinking about making noise maps, so the process is going on.

Germany

Problems are quite similar to Estonia, Latvia and Lithuania. Cities in Germany are still in the process of making noise maps. The key problem of noise mapping is to be careful in not frustrating population.

There are no limit values for noise mapping/reduction given on EU level as Member States did not want that so the first stage is setting limit values and second stage is setting reduction values. It is important to make noise maps but this is just the first step.

TRANSPORT RELATED AIR POLLUTION IN THE BALTIC STATES

Transport impact assessment, by Ms. Aiva Eindorfa, Latvian Agency of Environment, Geology and Meteorology, Latvia

Ms. Eindorfa gave an overview on polluting substances, legislation, monitoring and modelling. In Latvia there are 5 monitoring points for assessing impacts from transport- one point in Ventspils, Liepaja, Rēzeknē and 2 points in Riga. Based on the results monthly and annually (by 31st of June every year) reports are compiled. The results of monitoring can be found at www.meteo.lv.

Ms. Eindorfa introduced the EnviMan software that is used for calculating polluting substance dispersions. She also pointed out that it takes approximately 2 weeks to make a simulated model.

Ms. Eindorfa gave an example demonstrating usefulness of the modelling. An air quality model without by-pass and a model with by-pass was made for Kekava parish. The results showed that with by-pass the air quality (NO₂) improved in Riga 4,5 times.

Discussion

During the following discussion Ms. Eindorfa explained that also some consulting companies are making such models (e.g. Statoil). She pointed out that the lack of data is a problem for making a model.

Overview on air quality in Estonia, by Mr. Madis Kõrvits, Tallinn Environment Department, Estonia

Mr. Kõrvits presented that in Estonia there are 7 automatic stations - 4 of them are in cities (3 in Tallinn, 1 in Kohtla-Järve) and 3 are background stations. Main problems with traffic are in bigger cities/towns- Tallinn, Tartu, Pärnu, Narva and Rakvere. Mr. Kõrvits introduced shortly the situation of traffic related air pollution in Tallinn. He pointed out that 10 % of the pollution comes from industry and 90 % from traffic. The number of vehicles per 1000 inhabitants is 400. Today there are ca 170 000 passenger cars registered in Tallinn but Mr. Kõrvits emphasised that this number does not include cars that are coming to Tallinn from other areas. He pointed out that the limit values for O₃ and PM₁₀ are exceeded. The situation is getting close to critical in the case of NO₂.

Mr. Kõrvits introduced shortly the use of passive samplers in Estonia in the frame of campaigns and the highway experiment (in the busiest highway that could be found). He also stressed that samples are the cheapest way to judge on modelling as automatic monitoring is very expensive.

Mr. Kõrvits also gave an overview on the development of Estonian Air quality management system – e.g. the Airviro System (internet application) which covers the whole country and is easy to use and Ambient Air Quality Data- real time data collection which helps to get quick and adequate info about the air quality in cities.

Discussion

The question was posed considering the amount of cars per 1000 inhabitants in other cities-

- in Berlin 320 cars
- in Riga 335 cars
- in Vilnius 415 cars

Overview on air quality in Lithuania, by Mindaugas Bernatonis, Environmental Protection Agency, Lithuania

Mr. Bernatonis introduced the main goals of ambient air monitoring in Lithuania. The mentioned Air Quality Monitoring Network consists of 14 automatic stations. He pointed out that there are more stations but these belong to municipalities. 5 stations of these 14 are meant for monitoring of traffic impact.

Mr. Bernatonis presented the results of the campaign on passive sampling that lasted for 2 years. It covered 11 towns and in every town there were 3 samplers set in different places besides Vilnius – there were 30 measuring points.

Mr. Bernatonis also gave a short overview of mobile laboratories that use the same equipment as stationary laboratories. The conclusion is that for example wind can increase the pollution concentration even for 60% → if wind speed is higher then concentrations are lower.

The results of air quality monitoring can be found from <http://gamta.lt> - info about all stations and all pollutants.

Discussion

During the discussion Mr. Bernatonis explained that Vilnius has made a program to reduce PM₁₀. During spring there are twice bigger exceedings, also in dry summers and cold winters (house heating). The recommendations for municipalities to tackle this problem would be cleaning the streets by vacuum cleaning or washing. In the program there are more ways to solve the problem:

- more bicycle roads
- more green areas
- more public buses (EURO 3, 4 standard)
- automatic traffic lighters

The same situation is in Kaunas but they are a step behind Vilnius in solving the problem.

Mr. Bernatonis stressed the concept behind monitoring stations – you have to take into account all different influences.

IMPLEMENTATION OF ACTION PLANS AND PROGRAMS TO IMPROVE AIR QUALITY IN MUNICIPALITIES

Action program for air quality improvement and program implementation- Riga experience and future perspectives, by Mr. Jānis Kleperis, Riga City Council, Latvia

Mr. Kleperis introduced the Action program for air quality improvement in Riga for 2004-2009 and described the activities planned. He gave more specific attention to the results and problems of the program at current stage (2006). Mr. Kleperis pointed out that for the reduction of pollution in Riga historical centre a new bridge (“Southern bridge”) will be built by 2009 – estimated air pollution reduction is 30%.

Comment by the representative of the Traffic Department of Riga City Council

The decreasing of total number of vehicles in the historical centre of Riga by 35% to be reached in 2009 (as presented in the Action Program) is absolutely unrealistic. Also the Park & Ride systems today are not feasible while the city hasn't a possibility to introduce public transport lines to make public transport more efficient as a private car. For first it would be necessary to give an alternative to car users and only after to make strong restrictions.

Traffic Department suggests that there would be the other possibility how to remove main traffic from inner city- bridges, barriers can be built, to increase a parking price. Until there is a lack of alternatives, people still have to come to the city with cars (no P&R system established yet but the city looks for some places). As a positive aspect it was brought out that a new type of tram - low floor tram will be introduced. It was pointed out that since 1990s in Riga there is a 3-4% increase in using public transport every year.

Public information on air quality in Riga, by Mr. Jānis Kleperis, Riga City Council, Latvia

Mr. Kleperis introduced the situation considering informing the public. A survey that was carried out in Internet at the beginning of 2006 showed that 54% of respondents are interested in info on the air quality in Riga. There has been different actions carried out- e.g. public information through press, TV and radio, Internet (info can be found from www.agenda21riga.lv and www.riga.lv) and posting information on air quality on monitoring posts: at the moment about NO₂ and PM₁₀ - green or red square depending on air quality- but in future the goal is to have 4 different pollutants and more colours.

Mr. Kleperis also explained the essence of AQI- air quality index and illustrated it with several graphics.

Municipal action plans and programs, by Mr. Madis Kõrvits, Tallinn Environment Department, Estonia

Mr. Kõrvits gave a short overview on responsible bodies and legislation. He emphasised at the Estonian Ambient Air Law does not give any responsibilities on local government (except for local monitoring). In Tallinn city government only state laboratory does the monitoring. He pointed out that Tallinn is also using the Air Quality Index.

Mr. Kõrvits introduced different ways of informing people about air quality but stressed that people are not interested if there are no accidents. In case of accidents over interest can be noticed. Newspapers are a way of informing mainly in case of accidents. Internet is a passive way of informing and it is important to make the information easy to find. Mr. Kõrvits said that 3 years ago infoscreens with air quality information were used in Tallinn but people still did not notice them. Finally the action was finished because at night-time the screens were too bright and people could not sleep.

Mr. Kõrvits also stressed that information to public should be disseminated in a structured way in order to avoid panic and speaking with people is essential → encouraging to use public transport.

Survey among participants: In which way and what information you would like to receive about air quality?

All participants were handed out stickers and asked to write down in which way and what information they would like to receive about air quality from a viewpoint of a usual inhabitant.

The results

Mainly it was pointed out that information should be given in a simple and easily understandable way (not scientific but simply good/bad) preferably via TV, radio and newspapers. Also street displays and store windows were mentioned as a way to receive information. In several cases it was stressed that people would like to know about exceeding and the reasons why they appear. It was also brought out that “in case you do not say that bad air kills me, it does not matter what info is spread”.

More detailed answers are listed in the Annex 1.

Practical experience of municipalities in Sweden, by Ms. Mia Simm, City of Solna, Sweden

Ms. Mia Simm introduced two projects- the district Solna Business park and congestion charge trials in Stockholm.

The district Solna Business Park - in Solna the major environmental problem is traffic. In order to reduce the negative impacts caused by traffic the mobility management became essential. Ms. Simm described different recommendations for employees (informing about public transport system), companies (car sharing) and considering business travels (EcoDriving).

Ms. Simm explained that in order to inspire people to go to work by bicycle they are organising campaigns. Last year 4 companies from the Business Park joined the campaign - ca. 200 participants. They were given helmets, computers for the bicycle and maps about cycling tracks in Solna and Stockholm.

In 2005 a Pilot Action about sustainable lifestyle was carried out in the frame of European project ChangeLab– a supermarket was built in densely populated area in Solna Business Park. The aim is to investigate customers` journeys and shopping behaviour when they go to that supermarket. More information about the project ChangeLab can be found from www.changelabproject.org.

Trial Implementation of Congestion Charging in Stockholm – the aim of the trial was to reduce traffic by 10-15%, increase average speeds, reduce emissions, allocate more resources to public transport and improve environment. The trial had three parts:

1. Public transport- starting from August 2005 → 16 new bus lines and 60 new buses
2. Park & Ride system → a large number of parking places
3. Congestion Tax → applies to all registered Swedish cars → on workdays during day-time
There are 18 control points where car licence plates are photographed. There has already been a decrease in traffic flows during taxed hours comparing the results from April 2005 to April 2006.

More information about the Congestion Charging in Stockholm can be found from www.stockholmsforsoket.se.

Discussion

Discussion was mainly based on the questions considering Congestion Tax. Ms. Simm explained that at first people were not satisfied but after they realised that the system works many people have admitted that this is the best thing that has happened for city people. There will be also a referendum to decide if the system should continue or not.

Ms. Simm stressed that the Congestion Tax is meant only for Swedes, foreigners do not have to pay.

The money from Congestion Tax will be devoted to public transport system.

A question was posed considering the parking problems outside the inner city area (cars parked in border areas) - Ms. Simm replied that there might be a slight increase of cars in Solna but there is a charge point also in Solna so it is not a big problem.

Ms. Simm pointed out noise as a large problem in Solna- it is densely populated and expensive area (so people are interested to go to live there) but as there are also trains etc then currently a lack of land where to build blocks of houses without noise problem is emerging. The solution is to build offices near roads in order to block noise. Although silent spots are added to noise map the challenge is- how to keep them silent?

Thursday, 15 June

III SESSION – TRANSPORT DEVELOPMENT PLANS AND THEIR IMPLEMENTATION

The traffic concept for an entire region – mobility without borders, by Mr. Peter Häckelmann, Saarbrücken City municipality, Germany

Mr. Häckelmann gave a short overview on Saarland and Saarbrücken. Saarbrücken is the centre of Saarland. There are 1 million inhabitants in Saarland and it`s area is 50 km x 50 km having borders with France and Luxemburg. The river Saar is going through Saarbrücken and next to it is the highway – 90 000 cars per day. In Saarbrücken there is railway and a lot of narrow/short roads.

Mr. Häckelmann presented the special “door-system” that is used in Saarbrücken → there is a circle around the city centre that has 12 entering-places (“doors”) where are traffic signs indicating how many cars can enter city centre- others have to wait. Buses and trams can enter all the time and that helps to promote public transport. As people were not notified about the new system then at the beginning they were sceptical but a year later they were satisfied with the system.

The provider of public transport is SaarBahn & Bus that is easily connected to DeutscheBahn.

Mr. Häckelmann pointed out that in 1988 (before SaarBahn) there were 24 million inhabitants transported by public transport annually but currently the number is 42,2 million, the number of passengers using public transport-system is over 100 000 per day (40 000 by tram, 60 000 by bus).

Mr. Häckelmann described the previous history of public transport in Saarland and the reasons that lead to the construction of SaarBahn. He pointed out that there used to be 120 buses per hour in previous times in the area where now is pedestrian zone.

The costs of the new tram-system SaarBahn, which leads about 45 km (1/3 existing railway of the Deutsche Bahn, 1/3 newly built, 1/3 re-built railway) were 400 millions euros including the trams.

Mr. Häckelmann emphasised the positive aspects of SaarBahn-

- Ground level entry- no steps
- Dynamic passenger information displays
- Solar cell installations

He also briefly described the SaarBahn vehicle.

Mr. Häckelmann concluded that SaarBahn is the first city in Germany to have constructed a new local rail transport system in dual technology (connection points for changing from train ↔ tram) on existing and new railway lines - also across national borders.

Answering questions

Mr. Häckelmann explained that reaching the political decision of constructing SaarBahn was relatively easy because there was high congestion in the city and public was not against the new system.

Considering the organisation of co-operation between traffic departments Mr. Häckelmann replied that when SaarBahn was created there was a co-ordinator who gave the ideas to planning/environmental departments. Town government themselves could not have done that so quickly.

Mr. Häckelmann also pointed out that the only problem they are facing is communication with DeutscheBahn administration.

6 parallel working groups

Two cities – a small city and a large city - were briefly described to participants: geography and population, traffic and environmental situation (Detailed descriptions are in Annex 2).

Participants were divided into 6 groups- 3 small cities and 3 large cities- and given 3 discussion topics:

1. What kind of solutions can you think of for the given examples? What are the pro & cons of the solutions? Which measures can be taken?
2. Which open questions remain? Which further information is necessary to find a solution for the particular problem?
3. How would you prioritise your found measures and why would you do it that way?

The detailed results from the working groups are listed in Annex 2.

The main solutions and open questions presented by each working group are the following:

SMALL CITY	LARGE CITY
<u>Solutions</u> <ul style="list-style-type: none"> • Building of one/two by-passes • Additional route of public transport/ improvement of public transport scheme • Construction of additional parking places near city centre (closer to city- higher parking fee) • Improvement of possibilities for using bicycle 	<u>Solutions</u> <ul style="list-style-type: none"> • Building of by-pass • Construction of bridges (one group suggested to have special bridges just for public transport) • Introduction of the Park & Ride system • Building of parking lots/ restrictive measures in the inner city/ differentiated charge system • Upgrading the public transport system- combination of several modes of transport, more stops/stations
<u>Open questions</u> <ul style="list-style-type: none"> • Availability of finances • Towns development plan/ land use planning/ rights of land around the city • Different surveys/researches 	<u>Open questions</u> <ul style="list-style-type: none"> • Questions considering airport- right location? Data on activity? <p>Other questions varied among different working groups</p>

Environmental sustainable management of public transport, by Mr. Oliver Mietzsch, German Association of Cities and Towns, Germany

Mr. Mietzsch gave an overview of the possibilities in the fields of overall strategic planning, passenger traffic, traffic and local mobility management, local public transport and stationary traffic in order to achieve an environmentally sustainable public transport. He stressed that an integrated city and traffic plan is necessary. He pointed out that parallel public transport is not necessary- busses should take to railway not to run parallel with railway but that needs planning and co-operation. He also emphasised the need for improved regional co-operation.

Mr. Mietzsch introduced required ecologic standards in tendering. Usually only the price matters and due to that reason environmental aspects loose. He shortly described the so-called “Concordia-Bus” judgement that allows competent authority to consider also ecologic criteria not only economic. But it should be kept in mind that in tendering documents you have to make clear why you added ecological criteria.

Mr. Mietzsch stressed the principles of tender-procurement: non-discrimination, transparency and equal treatment. The prioritisation of criteria is allowed. He briefly described two different methods of tendering-constructive (illustrated by Dijon example) and functional (illustrated by Helsinki example).

Mr. Mietzsch presented the EMAS certification for public transport. In case of tendering → one criteria may be having EMAS certification. He pointed out that in Germany already 18 transport companies are certified. The average annual cost of implementing EMAS is 16 000 € but the sum depends largely on the size of the company.

In the last part of his presentation he spoke shortly about the role of local transport plans. He emphasised that public transport is not necessarily the solution to environmental problems – when public transport system is old and not environmentally friendly then there are threats to environment.

Discussion

During the discussion Mr. Mietzsch explained the difference of EMAS and ISO 14 001 certificates- while EMAS controls the whole system (process + outcomes), ISO is only a certification about procedure but not the outcome.

Ms. Mia Simm commented that in Sweden companies mainly have ISO and municipalities EMAS but not both and the tendering criteria is having either ISO or EMAS.

Mr. Mietzsch concluded that EMAS is maximum. ISO should be the starting point.

CONCLUSIONS

Integration of environmental aspects in transport policy

- Transport policy = air quality, noise, GHG, consumers behavior, etc.
- Regional cooperation on strategic planning is essential
- Implementation & cooperation has to be started already at an early stage (planning)
- Green procurement – from national level to municipalities

Possible measures for municipalities

- City planning with goal to reduce air pollution
- Increase the share of public transport
- Proper development of road/street infrastructure
- Public awareness to raise demand for sustainable transport (companies, truck drivers)

HOWEVER

Missing good ideas,
co-operation among departments & money

Noise & transport

- No limit values for noise reduction at the EU level
- Noise maps – only first stage; measures to reduce is even more important
- Public has to be involved in discussions on possible measures
- Noise abatement can increase air emissions – an optimum solution shall be found

Air quality & transport

- Air quality shall be an important criteria for elaboration / evaluation of city development plans and traffic organization
- Air quality modeling results can be used for planning of transport development
- Monitoring results have to be explained and made comparable (e.g. location of stations)

Public information

- Simple (*good/bad*), easily understandable and acceptable
- Different media can be used BUT there is low interest noticed from media and public; in case of exceeding – too high attention
- Awareness raising should be increased (e.g. campaigns) + political will and support
HOWEVER
- Until air pollution “does not kill”, it does not matter what info is spread

City transport development

- First step – background information on existing situation (transport flows, pollution loads, etc.)
- It is important for city developers to involve politicians and get their acceptance
- Variety of measures can be possible depending on money available and set priorities

*Report by Sandra Oisalu
Baltic Environmental Forum*

The workshop was organised within frame of the project “Information exchange and promotion of cooperation among municipalities in addressing the urban environment problems at the three Baltic States” being supported by the European Union, Phare 2003 “Cross Border Co-operation Programme in the Baltic Sea Region”.

Organisation of the workshop was supported also by:



*Ministry of Environment, Nature
Protection, and Nuclear Safety,
Germany*



*Federal Environmental Agency,
Germany*

This document is prepared with the financial support of the European

In which way and what kind of information you would like to receive about air pollution?

(answers from the seminar participants)

- Emission changes around the clock
- The character of pollution (emissions) in the city (which hours are the most critical ones)
- Form: on the street (displays), TV and Internet. On the display is the network of city streets shown, where green color – clean air streets, red – crossroads and streets with pollution. Information: What air quality (index GKI) is in this or this or another place? Where are congestions?
- In the workdays evening radio programs are informing about the congestions, but would like to receive information about the air quality. So would the target group be reached – people on the roads +www+ screen.
- Internet – in the news portals (for example, TV-net in Latvia). A simple comparison about normatives in air quality, wishfully in the whole states' territory.
- Information in the radio and TV about congestions and about exceeding the air quality norms in a simplified form. And in the meantime the same information should be available on the Internet homepage.
- 1) Monitors – screens on the streets – easy to notice and understandable; 2) radio I on certain hours; 3) TV – in the morning programs together with the weather forecast.
- Air quality meter – good or bad, judging according to the influence on health
- In an easily understandable and manageable kind – weather air quality is good, for example, 😊 and that it doesn't influence my health.
- I would like to receive information about air pollution with the help of an well known internet page, because it will be seen by those, who will have an interest on these issues.
- I would like to receive regularly and in a compact way information about air and water quality and about transport congestions in the most popular radio stations, for example, on Radio2, SWH, StarFM, Radio Skonto, as well as information in TV1 and on LNT news.
- Short information in showcases – about PM10 dust, air quality.
- Has somebody researched and are there any EU directives that provide EU normatives about air pollutions with solid particles in the rural territories at houses that are next to gravel roads?
- On the internet I would like to find all the facts about air pollution easily and prescribed in a easily understood way
- Information about air quality: on the street (the streets where exceeded standards); live weather info (if pollution is high). People to be informed not frightened.
- I would like to get information about air quality in my city on radio or on lightscreens, it should be information about most concentrated zones, that are in living and recreative zones
- Info on how should I as individual behave if limits are exceeded (e.g. avoid going outside, not doing sports outside etc.)
- Which municipal (financed) activities contribute to air quality improvements, which municipal (financed) activities contribute to worsened air-quality
- Internet, prospects, TV, newspapers, radio
- I would like to get: simple information about air quality: for example – perfect, good, bad, poor, very bad. On teletext; if exceeds information threshold- to get that information on TV, radio, newspaper.
- A short overview of the air pollution in form of signs, no figures about SO_x, NO₂ etc!

- Not too scientific/complicated → just simple, easy to understand information
- On local radio and local TV the forecast about the air pollution so there is a opportunity to change the behavior
- Pay-free town newspaper- for all + every day
- How many old cars, trucks or busses are taken away from roads in last year? (and last five years?) By whom? What are the company names? Are they awarded by authorities?
- SMS to the phone- once in a day; open air banner
- Knowing the air pollution situation (by radio...); I wish to have an alternative by bus, train and information about it (schedule, price...)
- Info from Internet- as a some kind of banner in most used pages- in Estonia- www.delfi.ee
- Info about exceeding → also some reasons why it appeared
- Why have the buses and trucks so bad emissions, lot of black smoke?
- In case you do not say that bad air situation kills me, it does not matter what info is spread.
- Stop burning grass and leaves; an individual car traffic out of town/cities area (parking far from city and using much more buses, trams, etc.); repairing the roads; “Green Line”
- I would like to get information about: 1) air conditions in my city; 2) air conditions in my district where I live; 3) the solutions, what will be done to improve the situation. This information I would like to get in written form as a report of some kind of a project or something.

Working group session

Smaller city: Bearsprings-upon-Whye

Geography and population

- Small river, plain terrain
- Nature park along the river
- Typical Baltic climate
- Local centre (local administration, some supermarkets for the surrounding villages and small towns) close to the capital (17 km westwards)
- Very touristy place with a park with an old castle and a spa bath with mineral springs
- now 27,850 inhabitants
- some population growth since 2001: 23.993
- mostly old, medieval houses, city was founded already in 1208
- inner city narrow streets with lots of curves and small one-way streets
- small socialistic block housing estate from the 1980s in the north of the town
- no heavy industry, tourism is the main employment and income sector
- most inhabitants travel to work to the capital by car everyday
- some shopping facilities in the centre, a bigger shopping centre is located at the railway station
- camping site at the river, causes some extra traffic in the summer

Traffic situation - general

- one long main national road through the whole city from east to west and the centre with lots of traffic and cargo transport
- high number of cars – 575 cars/1000 inhabitants
- modal split: IT: 60% PT: 4% Cycle: 11% Foot: 25%
- one electrified single track railway line with some cargo and passenger traffic
- second non-electrified local line is branching off east of the railway station

Individual traffic (IT)

- no circuit, heavy transit traffic
- congestion in the city centre, especially during the weekends and in summer and during the peak hours in the morning between 7.00 and 8.00 and in the afternoon between 16.30 and 18.00
- narrow roads due to the city structure
- not sufficient parking areas in the whole city, the majority of tourists that come by car

Public transport (PT)

- one rail route with one stops (opposite side of town of spa and park)
- railway station is pretty far of the city centre
- one local bus line the connects the railway station and the park area/castle
- bus station is located at the railway station

Cargo traffic

- Lots of cargo traffic crossing the town by road to and from the capital
- Delivery of stores in the centre is a regular traffic obstacle due to the narrow roads

Environmental situation

- problem with bad air quality, especially along the main roads
- loud roads due to high traffic flow and bad road conditions, growing complaints because of traffic and railways noise (especially load cargo trains during night hours)
- cobbled streets in the old town roads > problematic because of noise and for cyclists (and women wearing high heel shoes ☺)

Working group 1 – SMALL CITY

Solutions:

1. 2 additional railway stations
 - non-electrified part → electrified
2. By-passes (northern + south-western)
 - ↓
 - bicycle roads
3. Additional bus-lines
 - [to camping – working 4 seasons]
 - ↓
 - bridge
 - north-south
 - east-west
4. Car-free zone in city
5. Road construction: equal attention to bicycle & car
 - ↓
 - 11% → 20%
6. Additional parking places near car-free zone
7. Railway noise management
 - Speed reduction
 - Noise barriers (offices)
 - New rails
8. Increase population density in centre

Necessary information:

1. Land use planning
 - All levels
2. Co-operation
3. Surveys
4. Fund-raising
 - Old town → UNESCO
 - Road & railway → EU funds

Prioritization:

The highest priority was given to by-passes as these are the basis for further developments.

Working group 2 – SMALL CITY

Solutions:

1. Additional route of public transport;
2. Enlargement of the camp site and a new road to the park;
3. A new parking lot at the park with bike rental;
4. Building of a bypass road

Open questions:

1. Which direction is the capital city?
2. A research is needed – main directions of the traffic;
3. Towns' development plan. (here – the SW direction is assumed as the direction of extension)
4. The intensity of rail traffic (The solutions of rail crossovers)
5. The availability of finances???

Pro:

1. No congestions;
2. Better air quality;
3. Less noise in the city;
4. The center is released from heavy traffic;
5. the number of car tourists is lessened through the city centre;
6. The number of private traffic is lessened in the city.

Contra:

1. The bypass road increases the driving distance;
2. Big investments are needed to build a bypass road;
3. Cutting down the forest for the building of bypass road.

Working group 3 – SMALL CITY

Solutions (Priorities if only limited budget is available):

1. Noise protection barriers, green fences around big roads, railway road (investments of companies having offices nearby roads, state support, municipal funding)
2. Building of a bypass around old town
3. Improvement of technical conditions of roads/streets (investments of companies having offices nearby roads, state support, municipal funding)
4. Organization of transportation (scheme) of employees
5. Introduction of entrance permits in old town
6. Establishment of bicycle scheme (investments from campsite owner)

If more financial sources are available:

1. Construction of by pass (railway, highway) around the city
2. Establishment of high speed tram line through the city
3. Construction of additional parking sites (closer to city – higher parking fee)
4. Improvement of public transport scheme
5. Construction of connecting between new and old roads

Pro:

1. Better air quality;
2. Less noise in the city;
3. The center is released from heavy traffic;

Contra:

Big investments are needed to build a bypass road and connections with the city

Open questions:

1. What is the situation with proper rights of lands around the city (state/private/municipal)?
2. What are possibilities to attract financial sources (investments potentially available)
 - Bypass roads – state money
 - Connections, parking places – municipal money
 - Bicycle system (renting points, roads, etc) – private investors, EU funds
3. What is the intensity of transport load (investigations are necessary?)
4. What would be a political will and support for particular measurements?

Large city: Fairhill

Geography and population

- Two rivers, slightly hilly terrain
- Typical Baltic climate
- regional centre (administration, culture, education, hospital)
- small university
- some sights, some tourism (mostly historic buildings in the old town, museums and churches, medieval city wall)
- now 296,430 inhabitants
- slightly decreasing population since 1993 (1990: 313.532, 2000: 302.124)
- 8 city districts:
 - centre (66.412)
 - north (31.913)
 - north-east (19.012)
 - east (11.168)
 - south-east(9.066)
 - south (45.302)
 - south-west (56.331)
 - west (57.226)
- three large socialistic housing estates: one in the north (the biggest), one in the west and one in the south-west district
- some industrial areas on the south and the east of the city with higher cargo traffic to those areas
- most of the offices are located around the old town
- shopping districts are the old town the new greenfield hyper-markets at the edge of the town

Traffic situation - general

- national traffic node (2 highways end here, several national roads cross the city, international routes lead through the city)
- national meeting point for several railways routes
- growing number of cars per 1000 inhabitants (404 cars/1000 inhabitants)
- 35-40% of all traffic is running through the town, the rest has its origin/destination here
- modal split: IT: 55% PT: 14% Cycle: 4% Foot: 27%
- small airport, railway connections

Individual traffic (IT)

- just 4 bridges
- no circuit around the city
- lots of congestion on the main roads, especially along the inner city ring around the old town and across the river bridges
- lots of traffic in the old town looking for free parking spaces
- lack of sufficient parking space in the inner city

Public transport (PT)

- 16 bus lines, 7 trolleybus lines
- trolleybuses in bad condition, still old buses from socialistic times
- some new purchased buses are already in service
- international and local trains
- 1 bus terminals – at the central station

Cargo traffic

- some water bound cargo traffic from the harbour in the south of the city
- big freight yard in the south district with heavy traffic and lots of noise

Air traffic

- rising number of flights > increasing noise in the west and south-west district
- bad connections with PT from the airport to the city centre
- flights during the night hours

Environmental situation

- problem with the high load of particulate matter in the urban air, especially along the main roads
- nitrogen oxides -> leads to serious air problems and smog-like-situations in the warm summers in the city parts along the river which are situated lower than the rest of the town
- loud roads due to high traffic flow and bad road conditions, growing complaints because of traffic noise

Working group 4 - LARGE CITY

Priority	Measure	Pro	Contra
I	Concept development	Political decision	Change of priorities at national level
II	To upgrade a system of public transport: <ul style="list-style-type: none"> • Purchase of new vehicles • Setting of new lines • Combination of several modes of transport 		<ul style="list-style-type: none"> • Harmonization of interests among various ministries • Lack of appropriate infrastructure
III	Construction of by-pass road to the City + Park-Ride system (see a map – 11 PR points, 3 bridges)	<ul style="list-style-type: none"> • Decrease of the transport flow in the city • Turn away of the transport from the city center • Reduction of noise and air pollution 	<ul style="list-style-type: none"> • Large financial means needed • Long-term project • Must be approved at the national level
IV	To develop a monitoring system for control of air pollution and noise	<ul style="list-style-type: none"> • Sufficient data and control possibilities • Planning instrument 	<ul style="list-style-type: none"> • Costs • Lack of specialists (at municipality)
V	Improvement of the transport infrastructure	<ul style="list-style-type: none"> • Good quality roads • Reduced noise and particulates 	<ul style="list-style-type: none"> • Planning • Finances • Decisions
Additional	To develop regulations for the deliveries/supply transport	<ul style="list-style-type: none"> • Equalizes transport flows, reduces traffic jams 	<ul style="list-style-type: none"> • Business interests
Additional	To set a differentiated charge system for parking places (as further from the old town – as cheaper)	<ul style="list-style-type: none"> • Reduces the transport flow at the city center • Reduces the need for parking places 	<ul style="list-style-type: none"> • Habits of inhabitants • Unpopular political decisions
Additional	To promote the use of environmentally friendly transport: <ul style="list-style-type: none"> • Cars using a bio-fuel • Cycling • Change in the Population habits pattern • Development of the information system • Pedestrian zones 	<ul style="list-style-type: none"> • Improvement of environmental quality • Healthy life-style • Improvement in cooperation of municipality and inhabitants • Improvement in social contacts of inhabitants 	<ul style="list-style-type: none"> • High costs of transport vehicles • National priorities
Additional	Development of a program for greeneries to reduce noise and air pollution	<ul style="list-style-type: none"> • Reduction in pollution 	<ul style="list-style-type: none"> • Political decision • Financing
Additional	Actions/measures for protection of inhabitants from the airport noise	<ul style="list-style-type: none"> • Improved living environment 	<ul style="list-style-type: none"> • Cooperation of institutions

Working group 5 – LARGE CITY

Things that have to be clarified in advance, that means before developing and implementing measures

- Distance to services
- Air quality
- Noise burden
- Complaints by the inhabitants
- Status of noise mapping and air monitoring
- Data from the airport on activity
- Travel patterns (within the city and transit travel patterns)
- Responsibility of financing
- Survey among the public to close knowledge gaps

Possible measures sorted by topic

Public transport (PT)

- Bridges (Priority lanes, special bridges just for PT)
- Better connection to the airport
- Increased use of the existing railway network which can serve as a backbone for PT
- New stations along the railway line
- Park & Ride (Kiss & Ride)
- Involvement in city planning

Bike

- Installation of new bike paths

Cars, individual transport (IT)

- Installation of new bypasses
- Restrictive measures in the inner city

Freight

- Installation of new bypasses for rail-bound freight traffic
- New freight yard outside the city

Planning

- Introduction of integrated planning on all levels and stages
- Public opinion

Selected priorities

Mayor priority was give to extended use of the existing railway lines in combination with restrictives measures for IT, followed by Park and Ride, Bypasses, Introduction of integrated planning and bridges for public transport.

Finances

Furthermore, the financing was discussed and the group agreed, that the different measures range from expensive to easy to finance. However, it was mentioned that the cost-benefit ratio, external costs and different financial sources have to be taken into account. Various financial instruments, such as EU funds or public private partnership were named as examples.

Working group 6 – LARGE CITY

Participants of the working groups discussed the following aspects related to municipal transport and mobility planning.

What kind of solutions can you think of for given examples? What are the pro and cons of the solutions? Which measures can be taken?

The participants of the working groups started discussion on the concept of the transport concept in the particular city.

Vision on the city:

1. No private cars in old town.
2. Good public transport infrastructure in old town, in high crowded residential areas and good communication with industry areas in particular just before and after working ours.
3. Friendlier city infrastructure for pedestrians and bicyclers.

Afterwards the participants discussed measures should be taken.

1. To build Southwest bypass including bridge.
2. To build parking lots (just before enter of the city and around city centre)
3. On railway infrastructure introduce trams lines with more (then train) stops, build new line in North and one to airport.
4. To concentrate industry area in one territory, in Southwest part of the industry territory (where was planed extension) change location to opposite bank of the river.
5. Introduce system Park and Ride

General remark. In planning of the new infrastructure environmental aspect should be considered.

Open questions.

1. Is the airport located in right place, isn't too close to the city?
2. Should be limited the speed of the private cars?
3. How could river used to improve public transport and mobility in the city, should new harbour build new city center?

Picture of the city plan with proposal for improvement the transport infrastructure and mobility.

