Legislative Tools and their Use for Reducing the Negative Effects of Transport

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This statement lists examples of measures and tools applied in the Czech Republic in the area of national legislation and land planning and development for the improvement of the transportation situation.

The development of transport in the Czech Republic is not optimal – with respect to environmental protection and public health. Road traffic has increased significantly within the last ten years. The share devoted to rail traffic is on the decline. The number of motor vehicles in the Czech Republic increased by 47% between 1990-1999; and the percentage of vehicles with alternative fuel is still very low – 0.2% of all vehicles. With respect to tenability, the larger problem is the increased use of passenger vehicles at the cost of public transportation. These trends are being supported by the economic and social situation in the Czech Republic.

Support for the development of environmentally friendly transportation systems, reducing air pollution and noise levels, with less requirements for land expropriation, remain the priorities of transportation politics. Precautions to improve transportation safety and decrease accident and injury rates are equally important.

Improvement of Transport Safety and Decreasing Accident and Injury Rates – Legislative Initiatives

In the Czech Republic, around 1,300 people die every year as a result of traffic accidents. From this point of view, the Czech Republic belongs among the worst countries in the European context. In 2002, 140 people out of every 1 million Czech citizens were killed in traffic accidents; this is two to two and a half times the number of people who were killed in Western Europe. One of the measures that led to an improvement in this situation was the updating of the Road Traffic Law. It contains a number of new regulations that are common in the countries of Western Europe and the target of which is the protection of traffic participants, especially the most vulnerable ones. The most important regulations with respect to the above are:

- The obligation of the driver to enable pedestrians, using a crosswalk or preparing to use a crosswalk, to cross the road safely and undisturbed.
- The obligation of the driver of a motor vehicle to use a restraint system for the transportation of children under the age of 12 or persons under the age of 18 and less than 150 cm tall.
- The driver may not hold a telephone or other voice device while driving.
- Other than in the summer, the parking lights and the low-beam headlights of the vehicle must be turned on while driving.
- Bicycle riders under 15 years of age must use a protective helmet of an approved type while riding.

Despite all these efforts, it must be mentioned that two years after these regulations went into effect, results in this area are not very satisfactory, because accident rates are not decreasing. For this reason, the Ministry of Transportation has come up with a new initiative, the goal of which is to achieve significant improvement - “Action Program for the Improvement of Road Traffic Safety”**.** It is a practical collection of regulations, the application of which should lead to a decrease in the road traffic accident rate. It focuses primarily on the gradual separation of individual transportation modes.

Land use planning

One of the most effective tools to limit the negative effects of transportation on public health is land planning. One of the advantages is that this is a preventative precaution which will have effects in the future.

Past practice

In the Czech Republic, land use planning and transportation services projects have had mandatory evaluation by the hygiene service authority with respect to their possible effects on the environment and public health - since the past regime (before 1989). Thus, the influence of the health authorities in a process of examination, professional evaluation and the consideration of health related requirements was insured long before the introduction of the EIA and HRA processes. It is true that the evaluation process has never been as methodically applied in detail as it is currently; however, its final application served its purpose. The problem was that the communist regime did not guarantee the application of all requirements if these were in conflict with the interests of the Communist Party.

Legislation and the Involvement of Health Institutions in Current Practice

Today, according to the Act on land planning and construction codes (Construction Act), all stages of the land planning document preparation process must be accompanied by an opinion from the governmental agencies involved. Special regulations entrust the protection of public interests, one of these being the protection of public health, to these governmental bodies. The basic conditions set up under the Construction Act are the achievement of an agreement between these authorities with respect to the Land Planning Documentation under preparation. This is confirmed by Act on the protection of public health, which entitles the Public Health Protection authorities to state an opinion about the protected interests of public health, including the evaluation and management of health risks. According to the act on the environmental impact assessment, the authorities concerned are the Ministry of Health and the local hygiene service authorities. These laws ensure their application during the preparation of the land plans.

Under the current methodology, the Land Planning Documentation is generally proposed starting with the use of alternative solutions that are adjusted gradually, depending on the comments, during the individual stages of the preparation; this means that there is always an acceptable solution. These stages of preparation include the ‘task proposal’, which becomes (after the suggestion process) the ‘approved concept’. After this comes the preparation of the ‘solution concept’, which is discussed publicly. Based upon unified opinions towards this concept, the final Land Planning Documentation for the proposal is created.

Case Study

The town of Litoměřice has a population of 25,000 and is located in Northern Bohemia on the banks of the river Labe (Elbe). Historically, the main road connecting the capital, Prague, with the largest city in Northern Bohemia, Ústí nad Labem, has always passed through this town. It is located in an area with an extensive lignite mining industry, a number of power plants and a developed chemical industry. All of these factors have (especially in the past) had major negative effects on the quality of the environment. The precautions and regulations applied in recent years (desulphurization of power plants, limitations on coal mining, legislation strictly limiting emissions of the chemical industry

and – in certain cases – limitations on production) have led to the improvement of the situation With transportation intensity increasing over the past few years, the negative effects on this town have been escalating.

During the land planning documentation discussions in 1999, several alternatives for solution of transport infrastructure and connecting this city to an motorway proposed to be built southwest of the city and leading to the German border were discussed. The basis for the various solutions stemmed from the concept of outer ring roads to be built around the city. In a binding evaluation of the proposed land planning solutions, the regional Public Health Protection authority had stipulated a number of conditions. It requested the addition of a calculation model that would evaluate the environmental stress caused by the traffic. It refused one of the alternative solutions which bring excessive noise stress. It requested a re-sequencing of priorities, so that the resolution of an unbearable traffic situation in central part of the town is given preference and required that the health risc assessment be major factors. All of the above conditions were met gradually during the following stages of the documentation preparation process.

The final solution (of a by-pass around the town centre on the west side and the connection of a newly designed bridge across the river Labe with a road connecting to the new motorway and by-pass around the town centre on the east side arranged by transfer the main road to the river bank) gives preference to the originating and terminating city traffic. In this manner, the resulting connection of the town to the primary highway network will be separated in the direction of the highest traffic volume and the traffic will be divided into separate directions with the corresponding origins and destinations. Decreasing number of cars passing through the city will enable the fluent city transport and improve environmental and health conditions in the city centre.

The major arguments that led to achieving a positive solution were the protection of public health from noise and air pollution created by traffic. These arguments, used by the authorities responsible for the protection of public health, were part of the standard process of the step-by-step discussions involved in Land Planning Documentation. The result shows that good legislative tools in the hands of skilled experts can often be a model for success.

The Expansion of Bicycle Traffic by the Development of the Related Infrastructure

Part of the Land Planning Documentation is the network of bicycle paths as part of the National Strategy for the Development of Bicycle Traffic in the Czech Republic.
One of the primary plans is the construction of bicycle paths within and outside of towns. This includes the development of completely new bicycle paths, the addition of paths along the existing Class II and III roads and along the local road networks. This also includes the creation of long-distance, internationally interconnected bicycle paths - ‘Euro-Velo’. The length of this network within the Czech Republic is 1,330 km. It is expected that the construction of approximately 450 km of new paths will be needed. The issue of regulations for the behaviour of bicycle riders on the road is in the preparatory stage.

Should the implementation of this new bicycle strategy prove to be successful, the first sections of larger projects will be completed, depending on budget constraints, between 2004 – 2008.An interesting statistic, confirming the interest of towns in the construction of bicycle paths, is the information that on 31 January 2002 there were 235 registered projects with a total value of CZK 1.025 billion.