The Zero Vision - A Road Transport System Free from Serious Health Losses

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The Road Transport System

The road transport system is the least forgiving of all the manmachine systems in daily use in Sweden (with fatalities or longterm injuries sustained by approximately 5% of the population; in some countries, this figure is over 20% of the population). Unlike more modern man-machine systems, the road transport system is based on people complying with current standards, laws, regulations and guidelines; having a degree of common sense, being cautious and always making the right decisions. These decisions are taken on the assumption that all the information in the road transport system is clear and easy-to-understand and that the right decisions will inevitably be made on the basis of the information given. It is not entirely surprising that this kind of system does not always work. The most serious problem relating to the road transport system is that a single wrong decision or mistake may have life-or-death effects on a number of people. More mature and quality-assured man-machine systems are, on the other hand, characterized by an inbuilt tolerance of human error.

The Road Safety Problem in Summary

The problem of safety in the road transport system is a product of the following factors.

- 1. The number of errors made.
- 2. The scope and nature of the violence people are exposed to as a result of errors, and the specific tolerance of the individual to this violence (given the protection he has).
- 3. The quality and availability of emergency services, care and rehabilitation.

So there is an almost pre-determined number of road users who are killed or injured, and this is the primary problem in road safety, both for the community and for preventive work on road safety.

The Road Safety Problem Creates a Public Health Problem



In Sweden, the result of the low tolerance of error in the road transport system generates 600 fatalities and 80 000 people injured, 4 000 of whom become disabled. In other words, every day, year in year out, an average of two people are killed and more than 200 injured, of which just over 10 sustain permanent injury.

Road traffic injuries cut average life expectancy by at least six months, and cause a deterioration of health for an average of 2.5 years per person. Many people's lives are affected by pain, reduced mobility or reduced mental capacity. Over the years thou-