Indicators accompanying the introduction of Transport Telematics Systems on national level

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1. Impact of Transport Telematics on Urban Areas - Indicators

Transport Telematic Systems combine information, telecommunication and automation technologies to collect, transmit, proceed and utilize traffic data.

Transport Telematic Systems will generate an impact on the environment in their own right because they constitute a private or public response to transport–related problems. The implementation of a Transport Telematics Systems is usually an integrated part of integrated transport policy (as it is the case for the Austrian Common Transport Plan which has been issued by the Austrian Ministry for Transport, Innovation and Telecommunication in January 2002).

A major aspect of integrated planning is spatial planning because it influences the following indicators that are driving forces in an integrated control circuit of indicators (see figure 1.1).

- structure of residential areas and access to basic services (commuting, shopping, leisure)
- access to transport services (vehicle ownership, access to public transport, car-free units cp. Car-free Model Housing Vienna)

Spatial planning is often neglected for the implementation of transport telematics systems for several reasons (e.g. missing cooperation of transport, environment and spatial planning ministries, long time horizon until measures take effect, ...)

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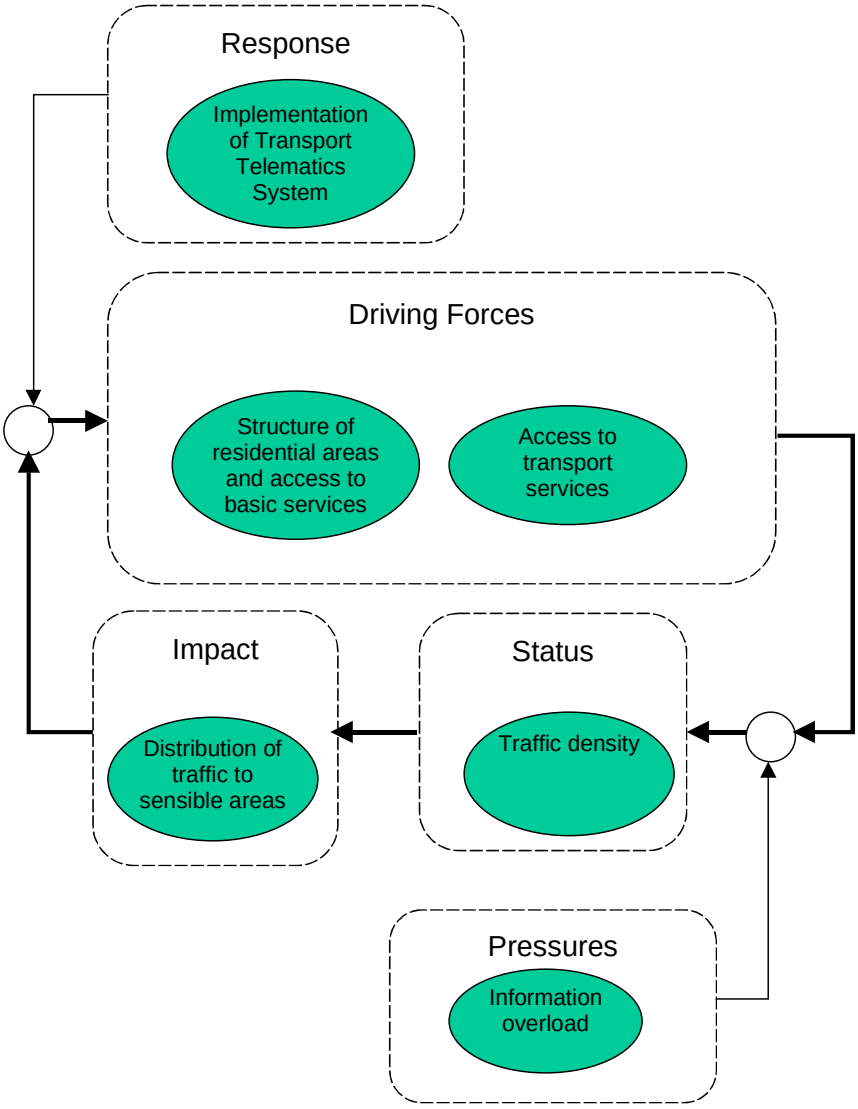
Figure 1-1: indicator-based control circuit model on national level



The immediate effect on urban areas and regions will be first visible in the areas of:

- distribution of traffic (to sensible areas)
  Automatic traffic guiding systems will mislead drivers to choose remote roads and therefore influence the immediate environment of residential areas (examples Germany – France – Austria)
- usability – information overload
  Information overload of traffic participants (e.g. too many traffic messages, too many traffic signs) may lead to a situation where the necessary information is available but refused

This paper will show the problems already surfacing and evaluate the indicators for a conclusive implementation of Transport Telematic Systems in Austria.