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# **Nutzen der Verkehrsinformation für die Verkehrssicherheit**

**Profit de l'information pour la sécurité routière**

**Benefit of traffic information for traffic safety**

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## Summary

The aim of this research work was to ascertain and to assess the specific benefit of traffic information for road safety in motorized individual transport on motorways. In order to be able to make statements that are as far-reaching and are as well-founded as possible, the foundations and the input values, necessary for this and sourced from different activity-areas, were obtained or determined by calculation. The study takes as its basis a comprehensive analysis of the literature and the analysis of specific data on accidents. In addition, a survey was conducted both among individuals in their capacity as traffic participants and also among experts. For categorising the findings, a structured model was produced with regard to effects, one that at the same time indicated existing gaps in data. The literature, the survey and the accident-analyses enabled numerous key-values to be substantiated. However, this process clearly revealed what, in some instances, were substantially wide ranges within the results.

The literature and the data-analyses substantiated the benefit of traffic information for road safety; the surveys also confirmed this in principle. Overall it is clear that traffic participants have a high regard for traffic information. As part of a range from "getting a reassuring feeling" to an actual change in driving behaviour, the feedback is positive to a large degree. Traffic information serves as an important building-block of mobility. Especially for situations dramatically deviating from the normal state of affairs, participants in traffic demand information. The time-sequence is particularly significant in diagnosing what is happening and in disseminating the information. In particular, it is shortly after a new (problematic) state of the traffic emerges that critical situations arise and, where applicable, there are additional casualties in accidents. Not only in the survey but also in the literature, traffic radio (and thereby in-vehicle radio) is confirmed to be a particularly important information system. At present, with the high degree of use made of such information by traffic participants, and the free accessibility of regular information - in particular, the very latest rapidly-supplied information on current dangers - traffic radio serves as the most important traffic-information system for a large proportion of all traffic participants. Traffic-radio's large potential is evident because such a high proportion of traffic participants have the equipment and also due to the willingness to consciously take receipt of the information. Danger-reports are assured of the listener's rapid reachability; conversely, in some instances other reports are in part not broadcast, so as to limit the time-window for the traffic reports. Here, areas of potential available in certain scenarios are not being utilised. This is where new information services, set up to interact with smartphones (for instance), come into play. The acceptance-level and also the take-up level for recommendations give rise to open questions, both because scores are low and because of wide ranges of responses, yet they also point to large unused areas of potential. Further questions need clarification here and, where applicable, accompanying measures need to be developed and implemented. On the one hand, the driver using the wrong side of the road represents a rare situation compared to instances where overload causes accidents or cases of congestion. However, cases of individuals driving on the wrong side of the road frequently cause serious accidents. As this situation is not usually detected by an automatic process, the challenge of how to improve detection and rapid transmitting of the information takes on an especially high significance. Likewise, the "danger" situation has a variety of causes, some of which either are not or respectively cannot be determined automatically. In Switzerland, Austria and Germany apply in some instances substantially different cost-rates. Traffic-information's benefit to the economy as a whole is thus crucially influenced by the cost-rates. Independently of the different cost-rates, changing text-message updates offer a benefit that clearly outweighs the system costs involved. The results can be used to deduce recommendations for action, open research questions or indications pointing to suitable accompanying measures. Important factors are improvement of the situation in terms of data and the matter of ascertaining the acceptance-level among users. Set against the background of current technical developments, the functions and the reliability of smartphone applications must be established. Because traffic radio currently enjoys high regard, a central role should be taken by advertising for a greater readiness to consciously take note of information provided.