



## Editorial

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This volume of TOTS deals with three areas. Two of them, traffic and transport safety, and mobility preconditions for people with special needs, are of continuous interest. The third one, the effects of COVID on transport and mobility, came up as a short-term issue only a couple of years ago. It will lose interest, unless another pandemic will haunt us in the near future; then what we have learned this time will hopefully be useful.

Concerning traffic safety, Bicaksiz et al. analyse the relationship between positive personality traits - the Light Triad framework represented by humanism, faith in humanity, and Kantianism - and a safe driving style. Ordinary violations, aggressive violations, and positive driver behaviour subscales of the Driver Behaviour Questionnaire DBQ were used to describe the driving style. The Driving Anger Expression Inventory (DAX) was applied to assess aggressive and constructive forms of driving anger expression. After controlling for age, gender, and total mileage, the findings supported the expected associations; some traits of the Light Triad yielded negative associations with aggressive expressions of driving anger, whereas the opposite pattern was found with positive driver behaviour and constructive expression of driving anger. While this paper focussed on safe driving, Chebariachko et al. were interested in improving the safety of passenger road transportation. To this end, they aimed at developing a model of the transport process with minimal risks of incidents by using the Functional Resonance Analysis Method (FRAM) in order to determine the factors that may influence the reliability of transportation. The specialists' professional experience (the transportation organization manager, the mechanic checking a passenger bus before starting work, doctor, driver), significantly affects the safety of the transportation process. However, the main reason for violation of traffic rules by drivers of passenger buses is the psycho-physiological state of the driver, which is strongly affected by the preconditions generated by the other specialists. Thus, the state of the driver needs to be continuous subject of control, but so do the abilities and activities of the other specialists. The originality of the research lies in the established relationship between functions and criteria that have an impact on the safety of the transport process. Its practical significance lies in the recommendations for monitoring all activities along and around the transportation process, including the psycho-physiological state of the driver.

Changing the topic, we move on to persons with special needs. Forsblad et al. analysed how children with mild Intellectual disability experience self-driving buses. The degree of inclusiveness of the design strategy and the role of support persons are analysed. Based on this, recommendations of how to mitigate existing problems in these areas are formulated. The outcomes of the study were, among others, practical hints like that the buses need to decelerate less abruptly and have easier and consistently designed seatbelts. Moreover, the children need to understand more clearly what the bus does, what the system "sees" and reacts to. Support persons

can be helpful in this respect. Though within a very different context, support of persons with special needs is in the focus of the next paper as well. It deals with the usability of road infrastructure for persons with mobility impairment in Nigeria. Christy et al. stress the importance of efforts to improve the inclusion of these persons by providing a safe, accessible, reliable, and affordable transport system for all. They underline that at the moment travel experiences of persons with mobility impairments - which in a certain way includes children and old people, as well - are marked by exclusion and frustrations due to different barriers. For instance, the study found only insignificant numbers, or complete non-existence, of pedestrian infrastructure and universal design facilities on roads in the cities they investigated. In fact, more than 90% of respondents rated safety, accessibility, reliability, and affordability of the infrastructure as very low, thus reflecting poor usability of road infrastructure across the cities generally, but especially as far as persons with impairments are concerned. This group also encompasses older persons, who are in the focus of the work of Khan et al. who address mildly demented older individuals' ability to drive. The driving performance of younger and mildly demented older drivers was compared on a driving simulator by using specially designed driving performance parameters. Only a small part of the analysed persons turned out to be "poor drivers", and their cognitive performance was in average lower than that of the other individuals. The authors opine, thus, that neuropsychological (cognitive) assessment would be sufficient to identify poor drivers, thus making measurement of driving skills through driving instructors unnecessary. At the same time, cognitive training could be applied to help people to stay mobile.

The last two articles in this volume deal with the effects of COVID on the realm of transportation and mobility. Malabanan et al. ask if more people started to use public transport again after the COVID period, and how satisfied they were with public transport supply. They noticed a revival of traffic congestion by the increased use of private vehicles after the restriction phase and underlined the need to return to public transport use, thus. Their work focused on Bangkok's mass rapid transit system as a case, and it showed that satisfaction with ticket sales, station facilities, station staff, public relations, and rolling stock significantly affect passengers' use of the system. They recommend that these factors be prioritised and further improved to produce higher levels of passenger satisfaction and, consequently, increased use of the public transport system. Atombo et al. dealt with a special feature connected to COVID, namely preventive measures, reflected by special safety protocols. Their question is if commuters' attitude towards public transport changes after the relaxation of the enforcement of safety protocols. Facemask wearing covering both nose and mouth, reduction in the number of occupants per vehicle, the use of alcohol-based hand sanitizer, and the cleaning of vehicles after every trip were the most important safety measures perceived to prevent infection. The preliminary findings of a survey they carried out

in Ghana show that after the relaxation of the safety protocol the use of private transport increased more than public transport. These findings suggest that the COVID infection anxiety could decrease public transport ridership. However, these results may only be valid for some time after the end of the COVID pandemic.

In this volume of TOTS one encounters different aspects of safety: traffic safety, reflected by the behaviour of drivers, system safety as represented by different actors in a chain of activities that represent a transport system, and – a special feature connected to COVID – safety of an infection. Another facet of safety is the feeling of being able to safely use a system. This is an issue especially important to persons with special needs or impairments. Usability is the term applied in this connection and one may arguably find a relationship between this concept, and safety in a sense that is broader than just traffic safety. One may consider that preconditions for safe mobility include aspects like comfort, usability, accessibility, security, and even social contacts.