E-Scooters appear on bike infrastructure: users and usage, conflicts and coexistence with cycling

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Almost 90 percent of the participants already experienced conflicts between e-scooters and active modes and specified information regarding the type of the conflict, location, parties involved, and reason for the conflict. Thus, most conflicts are experienced as pedestrian while 57.2 percent of cyclists specified at least one conflict. Figure 3 gives an overview about the type of conflicts experienced by pedestrians and cyclists.

The analyses of trip data reveal the spatial distribution of e-scooters in the city of Berlin. Also, we evaluate temporal differences. These analyses allow to identify areas of special importance for the conflicts of interest for further research. Expert interviews allow to widen the perspective and include the assessment of stakeholders involved. Similar to users in the online poll, the experts see parked e-scooters as bigger problem than moving e-scooters. In addition, improper using behavior is stated to cause problems. While the regulatory frameworks do affect the case study cities, most experts agree on desired regulation measures. These refer to general organization of the service in terms of special use permissions or concessions as well as measures like automated speed reductions, zoning and integration into public transport.

Conclusion
The main findings of the research are: The utilization is divers and shared e-scooters are used differently than privately owned. The potential for conflicts is large. Thus, reasons for problems caused by parked e-scooters are much bigger than those caused by driving e-scooters. Further reaching regulation is desired by most stakeholders.

References