

ESTRAL (Ecological and Safe TRAffic systems by digitizing Law)

ESTRAL aims to advance the digitization of traffic-related regulations. The planned results are intended to contribute to the advancement of digital regulations in the transportation sector. Concrete use cases are used to identify challenges, to establish a connection between regulations and practical implementation.

The Road Traffic Act in Austria (StVO) has been in force since 1960, and since then, societal conditions have undergone significant changes. The pressure on public space usage has increased, demands for traffic safety have risen, and ensuring legal certainty has become increasingly challenging due to the growing digitization. New technologies, new forms of mobility, and negative environmental impacts further add to the complexity. The tools from the 1960s are not always sufficient for these challenges. Digitization offers significant potential to better address the described challenges.

New forms and channels are necessary to comprehensively, in detail, dynamically, situationally, or audience-oriented formulate traffic regulations and thus efficiently and effectively manage traffic. Digitization enables the delivery of complex traffic regulations to the intended target audience of road users, depending on the situation, and in full detail using the appropriate digital data transmission method, ensuring their full effectiveness.

The ESTRAL project aims to advance the digitization of traffic-related regulations. The planned project outcomes are intended to make a significant contribution to further shaping the field of digital regulations in the transportation sector. The current state and conditions are assessed. To establish a connection between regulations and practical implementation, challenges and obstacles are identified through specific use cases. The selected use cases include entrance and exit barriers, truck driving bans, construction sites, special regulations for electric vehicles, and maximum speed limits. Our primary role in the project, particularly in the work package concerning the current state and conditions, is to evaluate the perspectives of road users, work on opportunities and benefits brought about by the digitization of regulations for socie-

Kontakt des Projektleiters: Andrea Reindl
+43 50804-33294, andrea.reindl@fh-steyr.at

ty, address information distribution in mixed traffic, and information reception by different road users. The project also encompasses the development of an implementation plan and the generalization of the results.

FFG/ Zero Emission Mobility 2022/01

Duration: 01-09-2023 to 28-02-2023