

## What is the required capability of the ALKS with regard to Emergency and Enforcement vehicles?

### Some general thoughts

- Emergency and Enforcement vehicles come in very different shapes and sizes with a wide range of possible means of interaction with drivers.
- Feedback from law enforcement (e.g. police in Germany) indicates that they are used to manage situation-specific challenges in interaction with human drivers by a wide range of escalation means. The most relevant means of interaction for the highway scenario are special warning lamps as well as active sirens and that this is what they would commonly use to trigger and escalate a vehicle/driver response.
- In some situations a specific vehicle behavior in response to an emergency vehicle might not be necessary, because the ALKS might very well already show the required reaction e.g. by providing sufficient space when forming an access corridor for emergency vehicles. In these situations a transition demand would be unnecessary.
- Comparable to a human driver also the capabilities of an ALKS to identify such a situation can be affected by outside conditions, e.g. large trucks stopped behind the ALKS.
- As was defined by ECE/TRANS/WP.29/1140 the driver is still expected to be sufficiently vigilant (capable of hearing) to respond to emergency vehicles (same as to transition demands), so we believe the driver can be expected to respond to such unique situations where the system's capabilities are limited.

What is the required capability of the ALKS with regard to Emergency and Enforcement vehicles?

Reworked proposal after informal exchange:

5.1.2. The activated system shall comply with traffic rules relating to the DDT in the country of operation.

The activated system shall [especially] be able to respond to emergency vehicles and enforcement vehicles [both] with active external signaling in the form of special warning lamps and siren or special warning lamps only, according to the traffic rules in the country of operation, either

- by continuing the operation in accordance with traffic rules or
- by initiating a transition demand

both in accordance with the provisions of this regulation, in order to support the driver in his duties. The manufacturer shall declare the strategies to fulfil these requirements to the Technical Service.