

1. There is no need for classification of “level 3” alike vehicles like vehicles equipped with ALKS, since they are already approved right now and we are not facing any issues.

n.b. in the EU, ALKS is indicated in section 54 of the COC.

2. We should not only consider technical requirements, but take an integrated approach. When defining vehicle categories we should put the experience of the user and other traffic as a central consideration instead of the technical requirements. So we should view this from a broader perspective, by including criteria like traffic rules, driver licensing, taxation, statistics, law enforcement, PTI and Registration.
3. It would make most sense to define sub-categories like /A, /D like Germany proposes. They would apply to all vehicle categories (even T, L) and can be combined with other subcategories like M1G => M1G/D.
These are only definitions; in order to be able to actually issue a type-approval for such categories, also technical requirements for these (sub) categories have to be defined.
4. We have to distinguish vehicles with an ADS (e.g. ALKS vehicles) and ADS vehicles (fully automated, dual mode vehicles). We prefer using a distinction that reads ‘switch-on’ automated driving systems and fully automated traffic services.
5. AVs to have same general provisions as existing vehicle categories with regard to: number of seats, masses and dimensions, crash protection, in case same infrastructure is used.
6. Consider dedicated categorisation for AVs for cargo-only.
7. A dual mode vehicle, by definition, does not have a transition of control. In a dual mode vehicle, either you cannot sit in the seat where you have manual controls (formally known as “the driver’s seat”) like in a Robot taxi where plexiglass is dividing the passenger compartment and the steering control, or the manual controls cannot be operated, or will not function or disappear when in automated mode. In such case, it doesn’t matter who is sitting in the seat, formally known as the driver’s seat; it could be someone without driver’s license, a child, a drunk person etc. You have to be able to distinguish an ALKS-like vehicle where a driver with a driver license has to be able to take over control at any time and a dual mode vehicle driving around in automated mode where this is not relevant. Otherwise it becomes really complicated for e.g. law enforcement. With regard to the technical specifications, it could be that they are very similar for a vehicle with an ADS in a certain ODD and an ADS vehicle. But as explained in bullet point 2, not only technical requirements have to be considered for the vehicle classification.
8. If we are considering reduced safety requirements, e.g. allowing standing passengers in M1/A, or side mounted seats, or less crash protection, this shall not be related to the level of automation, but to the suitability of the infrastructure (geo-fenced). If you allow an automated vehicle to have relaxed safety requirements while it still interacts with e.g. N3 trucks and M3 buses, its safety is compromised. If you allow the vehicle to be driven only in certain areas where there is no such traffic, it could be acceptable to reduce the level of protection. In this regard, we have sympathy for the TRL proposal, proposing 2 levels of safety: Crash Approval Level (CAL): “CAL Standard” versus “CAL Reduced”.
9. Remote control: the “/R” might work as Germany proposes. It is only a definition, to make it possible to approve them, technical requirements have to be defined.