Self-driving vehicles: new safety ambition

You

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Q2. Are you responding:

on behalf of an organisation?

Organisation details

Q3. What is the name of your organisation?

Cycling UK

Q4. Your organisation's work is?

Safety and road user groups

Q5. Your organisation is in?

Another country: UK (i.e. all of the above)

Proposals

Q7. What are your views on the approach that self-driving vehicles should be expected to achieve an equivalent level of safety to that of a competent and careful human driver?

We fear that using the term "a competent and careful driver" risks perpetuating the same inconsistencies and misunderstandings that already arise from its use in the Road Traffic Act 1988 (as amended), i.e. in the definitions of 'dangerous' and 'careless' driving offences.

In this context, the term is is widely misunderstood and misapplied by prosecutors and the courts. Evidence of this is documented in Cycling UK's report 'Failure to see what's there to be seen' (https://www.cyclinguk.org/blog/failure-see-whats-there-be-seen-new-report-cycling-uk). This inconsistency in the term's application is perhaps the central reason why Cycling UK and several allies have been calling for a review of road traffic offences and penalties for around 15 years.

We were very pleased when, in December 2021, the Government revived a promise to review parts of the Road Traffic Acts (see https://www.theyworkforyou.com/lords/?id=2021-12-13b.93.2#g102.1, https://www.cyclinguk.org/blog/government-finally-thinking-about-tackling-road-injustice and https://questions-statements.parliament.uk/written-questions/detail/2022-04-06/HL7759/).

We would be happier if we could be confident that the term would be used as it logically ought to be used in law. The offence of 'careless driving' (or 'driving without due care and attention', to be legally accurate) is defined as driving which "falls below what would be expected of a competent and careful driver". Therefore logically, judges and jurors should not interpret the phrase "a competent and careful driver" as mean a typical driver (i.e. normally safe and fairly responsible, but occasionally fallible). Hence it should be regarded as being a notional driver, who never commits the offence of 'driving without due care and attention'.

However, rather than using the term " a competent and careful driver" that then needs lengthy clarification (as above) to avoid misunderstanding, we suggest that it would be better to define the required safety ambition in terms that avoid ambiguity as far as possible.

We therefore suggest that the ambition should be as follows:

"Self-driving vehicles should be expected to avoid causing danger or intimidation to other road users, or unnecessarily interfering with their free passage along the public highway (especially where they have priority), other than in emergency situations which no vehicle's operating system could have been expected to anticipate or avoid."

We would add that a less onerous test might justifiably be used for the safety standard required for permitting self-vehicles to be used on motorways (and possibly trunk roads with high-quality segregated cycle lanes), as distinct from that required before they are allowed onto urban streets and rural single-carriageways.

The first of these tests could be met if a self-driving vehicle is demonstrably better than "a competent and careful driver" (however that term is understood) at avoiding collisions with other motor vehicles. However the second test must require them to reach the standard suggested above not just in their ability to avoid causing danger, intimidation or unnecessary interference not just to other motor vehicles, but also specifically to pedestrians, cyclists and other non-motorised users.

This in turn would require them not only to be able to reliably detect the presence of pedestrians and cyclists, but also to predict their potential movements. That requires them to be able to understand pedestrians' and cyclists' hand signals and eye movements, as that is how they currently negotiate for space with drivers.

Insisting on this more onerous standard for shared street or lanes (i.e. for roads other than motorways or high-standard dual carriageways) is crucial for ensuring that self-driving technology does not result in discriminate against young people, many older or disabled people and anyone else who uses the roads without being in a motor vehicle - and thus to comply with the requirements of the Equality Act. It is also necessary to comply with principle 3 of the Government's 'future of mobility' urban and draft rural strategies, namely that "Walking, cycling and active travel must remain the best options for short urban journeys" (see

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/84659 3/future-of-mobility-strategy.pdf and https://www.gov.uk/government/consultations/future-of-transportrural-strategy-call-for-evidence/future-of-transport-rural-strategy-call-for-evidence).

Final comments

Q8. Any other comments?

We additionally call for the legal framework to be amended to recognise that, when a self-driving vehicle is in a collision with a non-motorised road user, the victim(s) should not be expected to prove that the self-driving vehicle caused the collision. There should instead be a 'presumed liability' rule, whereby the company making the vehicle and/or its operating system (i.e. the 'Authorised Self-Driving Entity', or ASDE) is assumed to be liable to pay any resulting damages, unless the ASDE can show – using all of the video and evidence available to it – that the victim was clearly at fault.

Otherwise, injured pedestrians and cyclists (whose injuries may mean they cannot remember the collision, and who may well be uninsured) will be expected to bring claims against large corporations which (a) have spent huge sums of money developing their technology and (b) hold all the evidence. This creates a massive 'inequality of arms' in the legal process. It would also give rise to an obvious risk of those corporations doing their utmost to conceal any faults in their operating systems, in the way that some motor manufacturers have gone to great lengths to undermine air quality regulations.

We therefore call for section 2 of the Automated and Electric Vehicles Act 2018 (https://www.legislation.gov.uk/ukpga/2018/18/section/2/enacted) to be amended to make it clear that, when self-driving vehicles are in collisions with non-motorised road users, the injured party is assumed to be liable to pay compensation for injuries or damages suffered by those non-motorised users unless the ADSE can prove that the injured party had behaved in a way that fell well below the standard that could be expected of them, taking account of their age, abilities and the circumstances of the collision.