Automated vehicles: safety principles statement

Summary

This response supports the Statement of Safety Principles (SoSP) for Automated Vehicles (AV), with emphasis on the logistics sector's needs. Heavy Goods Vehicles (HGVs) have fundamentally different characteristics to cars, and any regulatory approach to automated HGV vehicles must reflect these differences.

About Logistics UK

Logistics UK is one of the country's largest business groups, representing the entire logistics industry and supporting, shaping and standing up for safe and efficient logistics. Our membership of more than 20,000 includes global, national and regional businesses and SMEs spanning road, rail, inland waterways, sea and air as well as the buyers of freight services, such as retailers and manufacturers. As an organisation, we deliver services, representation and thought leadership, helping members and policy makers to seize new opportunities for the sector and the economy as a whole, right across the country.

Consultation response

Question 14: In your view, what other uses might there be for the safety principles and why?

Post-collision repair and re-registration of written-off vehicles should be part of AV safety principles because AVs rely on sensors and structural integrity to operate safely. Damage from collisions, even if repaired, could compromise these systems, leading to potential safety risks. Including these processes in safety principles ensures that repaired AVs meet the safety standards required.

Question 15: Do you agree or disagree with our characterisation of how the SoSP might be used at pre-deployment?

Agree, however, the process may have to change and develop to validate changing interfaces and technological advancements, including infrastructure.

Question 17: Do you agree or disagree with our characterisation of how the SoSP might be used at post-deployment?

Agree

Question 18: What information do you think would need to be provided to the authorities post-deployment to demonstrate ongoing consistency with the SoSP?

We would suggest a set of KPIs are agreed with industry to satisfy the agreed requirements. The process could be similar to that of the DVSA in determining Earned Recognition Operators.

Question 19: In your view what considerations should be taken into account when assessing at post-deployment whether automated vehicles meet the expectations set by the statement of safety principles?

Compliance with road traffic rules, (subject to parameters – HGVs sometimes have to contravene these in order to manoeuvre their long/wide vehicles around varying road types/aging infrastructure,) compliance to mechanical roadworthiness and carriage of unsuitable and/or unstable loads. The absence or deterioration

of road-signs and markings may lead to a reduction in compliance. It is vital that infrastructure, including mobile signal strengths are improved, enforced and are consistent to ensure that safety of automated vehicles in maintained.

Question 20: Provide any evidence you are aware of on the current performance of human drivers.

Human drivers, while making all necessary precautions, are still human. Fatigue, mental health, physical health and other factors undoubtedly have an impact on performance. While our members go to great lengths to mitigate these risks, they can still be present.

Question 21: In your view, does human driving performance improve with competence?

Yes

Question 22: Why do you think this? Provide evidence if possible.

Different types of vehicles require different driving styles, and this should be taken into account when establishing what a safety standard equivalent to careful and competent human drivers means in practice. For HGVs, the definition of safe driving must also align to existing regulations on Operator Licensing.

Question 23: In your view, what characterises careful and competent human driving, and why? Your answer may like to consider capabilities, behaviours and outcomes.

Attentive to the driving task and perceived or actual risks.

Adhere to traffic rules.

Adapt driving style as required for vehicle types and or weather/road conditions.

Question 26: In your view, how might the assessment of careful and competent driving differ between human drivers and automated vehicles.

Most humans will take a risk-based approach and adopt differing styles/approaches to do so. Conversely, an AV would be forced to comply with road rules that may create a less comfortable ride for the occupants. Additionally, when overtaking, drivers adapt to perform the manoeuvre more safely than a protracted procedure. If AVs hold with road rules, this situation may not be available to AVs, the results of which could lead to more congestion.

Question 29: In your view, what are the implications of setting a higher safety standard than careful and competent human drivers?

There can be a safety risk of following the rules to the letter e.g. driving through a deep pothole rather than crossing a solid white line or struggling to complete an overtaking manoeuvre and confusing other drivers.

Automated vehicles face critical safety challenges, such as avoiding potholes due to limitations in sensor accuracy, environmental perception and real-time decision-making. Poorly prioritised evasive actions may compromise safety. Ethical and real day to day scenario uncertainties further complicate responses in ambiguous situations.

Question 46: any other comments?

A key message throughout our response is that HGVs have fundamentally different characteristics to cars, and any regulatory approach to Automated vehicles must reflect these differences. Specifically:

- HGV operations are already subject to a robust regulatory regime, including the Operator Licensing system. This governs safety, maintenance, driver conduct, and compliance, and should be taken into account when designing new rules for Automated vehicle deployment in the freight sector. The proposed responsibilities of automated vehicles operators, mirror, in many ways, the existing licensing regime, and it will be important that they are fully aligned to avoid a dual regulatory regime.
- HGVs often pull trailers, which may or may not be equipped with Automated technologies. This has implications for vehicle classification, sensor coverage, and control systems.

- Their physical size and manoeuvrability mean HGVs behave differently on the road. For example, they may need to cross solid white lines to safely navigate junctions or avoid obstructions, manoeuvres that would typically be restricted for cars.
- HGV performance and behaviour can change significantly depending on its load, including differences in weight, balance, braking distance, and vehicle dynamics. Any automated system must be capable of adapting to these variations in real time to ensure safe operation.
- They have distinct loading and unloading requirements, often involving complex site access, reversing, and manual oversight, all of which pose unique challenges for Automated operation that differ from those of passenger vehicles.

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