

HGV safety permit scheme advisory group – 14 August 2018

Transport for London, Palestra, 197 Blackfriars Road, London, SE1 8NJ

1. Update since previous meeting and scheme recap

Update

- Three meetings of the advisory group held in January/February to define the requirements of the HGV safety permit scheme
- HGV Safety Permit guidance for operators entering London published:
- <http://content.tfl.gov.uk/hgv-safety-permit-guidance-for-operator.pdf>
- Feedback from operators and authorities suggest further clarification and detail required *where not already covered by existing regulation*

Scheme recap

- All HGVs over 12 tonnes entering or operating in Greater London from 26 October 2020 will need to hold a safety permit.
- Permits will be issued from October 2019 and the scheme will be enforced from 26 October 2020
- The scheme will be enforced 24 hours a day, seven days a week across Greater London
- Vehicles that meet the minimum Direct Vision Standard (DVS) star rating will be granted a permit
- Vehicles that do not meet the minimum DVS star rating, or are not rated, will need to meet the 'Safe System' requirements to be granted a permit

2. Meeting objectives and points for consideration

Objectives

- To finalise the level of detail and specific instructions to operators for each safety permit scheme requirement in order to provide clear, robust and consistent guidance
- To strike a balance to make sure there is a level playing field whilst ensuring requirements are not overly prescriptive/restrictive – to allow operators to select the most appropriate system for their operation and drivers

Points for consideration

- **Alignment to existing schemes** – level of detail specified in the HGV safety permit scheme guidance must align with detail in schemes recognised as equivalent eg FORS
- **Evidence** – requirements for the permit scheme must be easily evidenced. Operators must be able to provide evidence that their equipment / technology meets the specified requirements
- **Clarity** – Enough detail should be provided to allow operators clear assessment of whether they are meeting the requirement
- **Level playing field** – the level of detail specified should help ensure the quality of equipment / technology is consistent

3.HGV safety permit scheme requirements – detailed discussion

General requirements / comments

- An approval process for retrofit equipment would be welcomed. Whilst TfL aren't able to endorse specific products, there is potential to endorse technical specifications and minimum acceptable requirements
- Operators want certainty that the equipment they have purchased will be approved at permit application and not later deemed unacceptable at enforcement stage
- How will deterioration of equipment over time be handled? Guidance around maintenance and inspection should be included in the guidance e.g. first-use or walk around checks. How long is acceptable for a vehicle to be operating on the road with a damaged system?
- Operational experience that fed into the development of FORS and CLOCS shouldn't be forgotten/discounted. Whilst both are voluntary schemes they have been developed in consultation with industry – the safe system requirements are aligned
- Performance criteria should be included in safe system guidance document with reference to maintenance. Installation criteria is covered by regulation
- Caution around unintended negative safety consequences e.g. ignoring systems/alarms due to false positives or overuse. Additional noise concerns over left-turn alarms being fitted to all vehicles over 12 tonnes
- Guidance should define the *minimum acceptable* specification for each type of equipment/technology
- 2024 progressive scheme provides opportunity to be more prescriptive where it is not deemed appropriate for 2020. 2020 can act as a 'stepping stone' with recommended details becoming mandatory in 2024
- Require further clarity and definition in guidance document around terminology such as "fully operational" or "regular checks"
- Caution over mandating absolute requirements that aren't achievable or practical
- There is a need to consider the cumulative impact of clustered requirements with regard to cognitive overload
- Risk of over-exposure e.g. audible left-turn alarms. If every vehicle is required to fit then there is the risk that VRUs become 'immune' to the effects
- Criticality should be considered when defining thresholds e.g. visual warnings appropriate at 'x' distance but audible warning necessary at 'y' distance as risk becomes greater

Sensor system with driver alerts

- Key factors for consideration
 - **Range** – to maximise detection of VRUs whilst minimising false positives should be considered in relation to Human Machine Interface (HMI) as well. Front of vehicle range must also be considered due to prevalence of pedestrian collisions in this zone. Range should ideally be aligned with the defined DVS zone but must be considered in terms of urban environment and reality of false positives
 - **HMI** – non intrusive versus intrusive

- **Object for detection (ie VRU)** – avoiding false positives e.g. street furniture or other vehicles
- **Speed** – define a speed under which the camera system must work
- **Functionality eg with handbrake**
- **Type of system** – Radar (fewer false positives but not as commonly available) or Ultrasonic

Camera systems

- Key factors for consideration
 - **Speed** – define a speed under which the camera system must work (or range of speed). Refer to Regulation 46 for current mirror replacement camera specifications
 - **Screen resolution** – as defined in Regulation 46 (if suitable for the purposes of the safety permit scheme)
 - **Day/night operability** – visibility at night
 - **Lens size**
 - **Monitor size**
 - **Positioning of monitor** – particularly in relation to obstruction of direct vision area
 - **Field of view** – to be clearly defined. Recommended to cover same zone as defined in Direct Vision Standard

Audible vehicle manoeuvring warning (left-turn alarm)

- Key factors for consideration:
 - **Legality** – current Construction and Use Regs relate only to horn, bell, gong or siren and not specifically to spoken/white noise warnings. Reverse alarms are permitted on goods vehicles but not mandatory
 - **Hours of activation** – FORS recommends a push to silent override for circumstances such as working between 23:30 and 07:00 where it may be appropriate or necessary to deactivate the device
 - **On/off switch** – As above, this may be manual or automatic but should be defined in the guidance document
 - **Sound emitted** – white noise or spoken instruction
 - **Volume (decibels)** – should be heard over the engine but with consideration of noise pollution and impacts on residents etc. at certain junctions
 - **Language (of spoken word)** – English language vs language of the country the vehicle is registered in
 - **Activation trigger** – indicator activation or steering wheel trigger?
 - **Duration of warning**
 - **Speed** – FORS recommends activation <20mph
 - **Visual warnings** – consider as an alternative to audible warnings

ACTIONS

- Consideration to be given to maintenance and inspection and reference made in TfL guidance
- Operational experience research to be commissioned by TfL to assess which equipment (and in which configurations/specifications) is already fitted and available on the market

- Analysis of speed of impact in fatal statistics to be included in safe system research
- Utilise FORS equipment guidance for specific examples

4. Summary and next steps

- Research to be commissioned:
 - Operational evidence and preferences
 - Evidence behind the Safe System requirements
- Refine wording and content of Safe System guidance document to remove ambiguity and provide clarity where possible
- Final consultation (Phase 2b) due January 2019
- Implementation timescales – suggestion that a phased implementation would be more feasible for operators i.e. apply to new vehicles from one date and older vehicles from a later date allowing more time to retrofit against the standard. Opposed by VRU groups as considered to be a further compromise and ‘watering down’ of the proposals
- Suggestion that the focus should be on cameras and mirrors i.e. keep the proposals purely about vision and removing blind-spots through a combination of direct and indirect measures
- These requirements have been in active circulation since 2009 and adopted by a large proportion of operators, particularly in the construction sector. They were produced, and are regularly reviewed, in collaboration with industry based on operational experience (via FORS and CLOCS)

Summary of actions

No.	Action	Owner	Deadline
1	Consideration to be given to maintenance and inspection and reference made in TfL guidance	TfL	28/09/18
2	Operational experience research to be commissioned by TfL to assess which equipment (and in which configurations/specifications) is already fitted and available on the market	TfL	03/09/18
3	Research to be commissioned to look at the effectiveness of the safe system requirements	TfL	03/09/18
4	Analysis of speed of impact in fatal statistics to be included in safe system research	TfL	03/09/18
5	Utilise FORS equipment guidance for specific examples	TfL	28/09/18
6	Consideration to be given to maintenance and	TfL	28/09/18

	inspection and reference made in TfL guidance		
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Attendees

		Apollo Vehicle Safety
		CILT
		CILT
		Cycling UK
		Dennis Eagle
Donald Mcdonald		DfT
		DHL
		DHL
		FORS
		FTA
		Iveco
		Living Streets
		London Councils
		MAN
		Mercedes-Benz
		MPA
		Renault / Volvo
		RHA
		RHA
Cynthia Barlow		RoadPeace
Alex Goodship		Transport for London
Alina Tuerk		Transport for London
Lucy Roberts		Transport for London
Vicky Sims		Transport for London
Peter Binham		Transport for London
		Volvo