

HGV Safety Permit Guidance for operators entering London

Introduction

One of the Mayor's top priorities is the safety of Londoners, and he has committed to adopt Vision Zero for road danger in London. The Mayor's aim is for all deaths and serious injuries to be eliminated from London's streets by 2041.

To achieve this target and reduce risk relating to heavy goods vehicles (HGVs) and vulnerable road users, we have developed a proposal for a safety permit for all lorries over 12 tonnes entering or operating in Greater London.

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For more information on the Safety Permit proposals visit:
www.tfl.gov.uk/direct-vision-HGVs

Purpose of this guide

This guide provides lorry operators with information on the vehicle requirements for getting a safety permit. More information on the permit application process will be released once available. .

Do I need a safety permit?

Under current proposals, all HGVs over 12 tonnes entering or operating in Greater London from 26 October 2020 will need to hold a safety permit. We will issue these permits from October 2019. The scheme will be enforced from 26 October 2020 across Greater London, 24 hours a day, seven days a week. This is the same date heavy vehicles will need to meet even stronger Low Emission Zone (LEZ) standards London-wide.

How do I make my vehicle compliant?

1. If your vehicle meets the minimum Direct Vision Standard (DVS) star rating you will be granted a permit (see section 1.1).

It is proposed that HGVs shall meet a minimum DVS rating of one star to enter or operate in Greater London from 26 October 2020 and that this will increase to a minimum of three stars in 2024.

2. If your vehicle does not meet the DVS star rating or is not rated, you will need to meet the 'Safe System' requirements to be granted a permit (see sections 1.2-1.4).

Under the scheme proposals, it would be unlawful to:

- Operate a HGV over 12 tonnes in Greater London without a permit
- Breach Safe System permit conditions

What is the Direct Vision Standard (DVS)?

The DVS has been developed in order to address the high number of collisions involving HGVs and vulnerable road users. The DVS objectively measures a driver's direct view through the windows of an HGV cab. This is communicated as a star rating from zero (poor) to five (excellent), which indicates the level of risk to vulnerable road users near to the vehicle.

For more information on DVS visit www.tfl.gov.uk/direct-vision-HGVs

The DVS has been developed in consultation with an expert panel comprising researchers, academics and representatives from the freight industry, Europe's foremost HGV manufacturers, and regulatory bodies.

What is the Safe System?

The Safe System is a series of vehicle safety measures (fitted after point of manufacture) which are designed to reduce the risks that HGVs present to vulnerable road users. To ensure consistency, the Safe System is aligned to other scheme requirements and existing regulations where possible.

The Safe System requirements have been identified as current industry good practice by an independent advisory group with representatives from cycling and pedestrian groups, industry trade associations, vehicle manufacturers and government organisations.

Where can I purchase Safe System equipment?

Safe system equipment can be purchased, though not exclusively, via the following industry bodies:

- Fleet Operator Recognition Scheme
www.fors-online.org.uk/cms/suppliers-and-supporters-offers
- Freight Transport Association
www.shop.fta.co.uk

Safe System review

The first review of the Safe System is scheduled for 2024, when it is proposed the minimum DVS star rating will be increased to three stars. This review will take into account any additional technology or safety equipment that was not available in 2020. This will become known as the Progressive Safe System. Any proposed updates to the safe system for 2024 will be subject to public consultation in 2022.

Zero, one and two star rated vehicles will need to feature the Progressive Safe System from 2024.

The Progressive Safe System will only include equipment that:

- Can be retrofitted to the HGV
- Is industry recognised and readily available on the market at the time

Applicability and exemptions

The permit scheme will apply to all vehicles on an HGV chassis over 12 tonnes and will operate across Greater London, 24 hours a day, seven days a week. It will be enforced from 26 October 2020. A list of vehicle exemptions can be found in Appendix A. There will be no charge for safety permits.

HGV Safety Permit requirements from 26 October 2020

The following matters (1.1 to 1.4) apply to all
HGVs over 12 tonnes

1.1 Principal requirement – Direct Vision

These matters are scheme requirements and are mandatory.

1.1.1 Vehicle star rating requirement

All vehicles must obtain a star rating under the DVS system.¹ Every vehicle must meet a minimum DVS star rating of one star.

1.1.2 Purpose

To ensure a minimum standard of a driver's direct field of view and reduce the risk of close-proximity blind spot collisions.

1.1.3 Demonstration

The rating shall be determined by the vehicle's manufacturer using the approved HGV DVS Technical Protocol.

- Where this rating is one star or above, fleet operators will be able to apply for a safety permit with no further mandatory action required
- Where this rating is zero star, or where a vehicle is unable to be rated,¹ the vehicle shall be fitted with mitigating safety features as outlined in requirements 1.2 to 1.4, which will be the conditions of the permit. Operators must be able to demonstrate compliance with these requirements when applying for the safety permit

1.1.4 Recommended specification

Operators of vehicles rated at one star or above are also encouraged to voluntarily fit the supplementary safety features outlined in requirements 1.2 to 1.4.

A record of star ratings will be kept by the vehicle manufacturer and passed on to TfL. Permits will not be automatically issued; fleet operators will still be required to apply for a permit when the application process opens or a new vehicle is procured.

Note: For existing vehicles, manufacturers will consider ratings based on the vehicle chassis number as provided by the operator. Any DVS rating advised will reflect the specification of the vehicle at first stage manufacture; multi-stage manufacture and later modifications are not reflected in the DVS rating. Your manufacturer will be able to advise.

¹ HGVs that pre-date available vehicle manufacturer data (therefore being ULEZ non-compliant) and a select number of low volume ranges will be assigned an automatic zero star rating unless data or other evidence is supplied by the operator that the vehicle should be classed as having a higher star rating



For more information on DVS star ratings and vehicle manufacturer contact details, visit: <https://tfl.gov.uk/direct-vision-HGVs>

1.2 Mitigating measure – Indirect Vision

Safe System Permit Conditions

These matters are scheme requirements and are mandatory.

1.2.1 Vehicle requirement

Vehicles that do not meet the minimum one star direct vision rating (see 1.1) shall have front and side blind spots completely eliminated or minimised as far as practical and possible, through the use of each of the following:

- A fully-operational camera monitoring system
- Both Class V and VI mirrors
- A sensor system with driver alerts

1.2.2 Purpose

To improve visibility for drivers, and reduce the risk of close proximity blind-spot collisions.

1.2.3 Demonstration

Indirect Vision aids shall be fitted to the front and nearside of all vehicles.

Required equipment:

- Class V mirror shall be fitted to the nearside of the vehicle
- Class VI mirror shall be fitted to the front of the vehicle
- A fully operational Camera Monitoring System shall be fitted to the nearside of the vehicle
- A sensor system alerting the driver to the presence of a VRU shall be fitted to the nearside of the vehicle

1.2.4 Recommended specification

Class V and VI mirrors should fulfil the fitment requirements contained in UNECE Regulation 46².

Camera Monitoring Systems should aim to completely eliminate, or minimise, the remaining vehicle blindspot at the nearside as far as practical and possible.

In-cab monitors should ideally be positioned close to a window edge or existing mirror location (without obscuring the view through the window) to minimise the time the driver needs to take their eyes from other important views to scan the monitor. Monitors only intended to show blindspots related to low speed manoeuvring (ie not mirror replacement cameras) may switch off at speeds above 20mph.

For best practice guidance on quality of monitor images, refer to UNECE Regulation 46 Class V and VI mirror replacement Camera Monitoring Systems.

Sensors on rigid vehicles and articulated tractor units should ensure coverage 6m down the nearside or 1m from the rear of the vehicle (or tractor unit), whichever is smaller. Sensors should not activate in relation to roadside furniture or stationary vehicles.

Sensor systems should operate regardless of whether the direction indicators are activated and may switch off at speeds above 20mph.

We also recommend additional front sensors with coverage as defined by the UNECE Regulation 46 Class VI mirror coverage zone.

Operators shall make regular checks and take all reasonable measures to ensure all indirect vision systems and driver alerts remain fully operational. It is the operator's responsibility for any camera equipment and associated footage to comply with General Data Protection Regulation (GDPR).

It is recommended that indirect vision devices require a minimum amount of driver intervention.

For left-hand drive vehicles, mirrors, cameras and sensors should be fitted appropriately to account for the blind spot on the right hand side of the vehicle.

Note: No specific make or brand of equipment or technology will be mandated as part of the safe system

2 Camera monitoring devices may be fitted to the vehicle as an alternative to fitting a Class V and/or Class VI mirror where doing so is permitted by UNECE Regulation 46

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Regulation 33 – The Road Vehicles (Construction and Use) Regulations 1986 – Mirrors

Regulation 46 UNECE – approval of devices for indirect vision

1.3 Mitigating measure – Warning of intended manoeuvre

These matters are scheme requirements and are mandatory.

1.3.1 Vehicle requirement

All vehicles that do not meet the minimum one star direct vision rating (see 1.1) shall be equipped with enhanced audible means to warn other road users of a vehicle's left manoeuvre, and prominent signage that visually warns other road users not to get too close to the vehicle.

1.3.2 Purpose

To reduce the risk of close-proximity collisions by alerting vulnerable road users to vehicle hazards.

1.3.3 Demonstration

All vehicles shall be fitted with equipment to warn vulnerable road users of the vehicle's intended manoeuvre.

Required equipment:

- Audible vehicle manoeuvring warning shall be fitted to audibly warn vulnerable road users when a vehicle is turning left
- External pictorial stickers and markings shall be displayed on vehicles to warn vulnerable road users of the hazards around the vehicle

1.3.4 Recommended specification

The volume of the audible warning, measured at 1m from the sounder, should be between 65 and 88 decibels/dB(A).

The device should have a manual on/off switch for use between the hours of 11.30pm-7am.

Operators should consider an audible warning system that combines spoken warnings and white noise.

For left-hand drive vehicles, the audible vehicle manoeuvring warning shall be fitted to audibly warn vulnerable road users when a vehicle is turning right.

Warning signage should not be offensive and should not give instructional advice to the vulnerable road user. The text point size should be legible by a cyclist or pedestrian at a reasonable distance from the vehicle.

It is recommended that audible warning devices require a minimum amount of driver intervention.

1.4 Mitigating measure – Minimising physical impact of a hazard

These matters are scheme requirements and are mandatory.

1.4.1 Vehicle requirement

All vehicles that do not meet the minimum one star direct vision rating (see 1.1) shall be fitted with side under-run protection

1.4.2 Purpose

To minimise the probability and severity of under-run collisions with vulnerable road users.

1.4.3 Demonstration

All vehicles shall be fitted with appropriate side under-run protection except where exempt (see appendix A for list of exemptions).

Required equipment:

- Sideguards fitted to both sides of the vehicle unless this is proved impractical or impossible

1.4.4 Recommended specification

Operators should consider improved sideguard design such as flat panel sideguard protection.

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Regulation 73 UNECE - lateral protection devices

1.5 Advisory measure - Driver training

It is recommended (but not a mandatory requirement of the HGV safety permit scheme) that all drivers, including those exempt or not in scope of Driver Certificate of Professional Competence, should undergo specific training on the safety of vulnerable road users and the use and limitations of supplementary vehicle safety equipment.

Operators are encouraged to ensure all drivers have the knowledge, skills and attitude required to recognise, assess, manage and reduce the risks that their vehicle poses to vulnerable road users.

It is recommended that training covers the safety of vulnerable road users through a combination of:

- Theoretical training which includes the safety of vulnerable road users
- Progressive on-cycle hazard awareness training
- Appropriate e-learning
- Appropriate on-the-job training
- The use and limitations of supplementary vehicle safety equipment.

Note: Evidence of driver training will not be required when applying for a HGV safety permit.

HGV Safe System





Audible alert for vehicle turning left



Prominent pictorial warning signage

Appendix A

HGV Safety Permit Scheme exemptions policy

1. Scope

The HGV Safety Permit Scheme is only applicable to Heavy Goods Vehicles (HGVs) exceeding 12 tonne gross vehicle weight (gvw). These are classed as N3 category vehicles. Vehicles of 12 tonne gvw or less are not required to apply for a permit.

2. HGVs fully exempt from the HGV Safety Permit Scheme

The following vehicle types are fully exempt from the HGV safety permit scheme and are not required to hold a permit:

| Vehicle type | DVS exemption |
|--|--|
| Emergency service vehicles, such as ambulances and fire engines, which have a taxation class of 'ambulance' or 'fire engine' on the date of travel | Exempt where applicable It is not considered appropriate to require emergency service vehicles e.g. fire engines to meet the DVS star rating threshold or to comply with the safe system conditions as these vehicles need to be suitable for the operations for which they are designed |
| Specialist Gritting and Snow Plough Vehicles (London Boroughs) | Fully exempt These are specialist, very low mileage vehicles that are only utilised in certain weather conditions |
| Armed Forces vehicles | Fully exempt It is not considered appropriate to require armed forces trucks to meet the DVS star rating threshold or to comply with the safe system conditions as these vehicles need to be suitable for the operations for which they are designed |
| Ministry of Defence vehicles / Military vehicles | Fully exempt where applicable It is not considered appropriate to require military trucks to meet the DVS star rating threshold or to comply with the safe system conditions as these vehicles need to be suitable for the operations for which they are designed |
| Breakdown organisations / recovery vehicles | Fully exempt where applicable Exempt for vehicles called out by the emergency services and which or whose load is required for the purposes of dealing with any actual or apprehended emergency affecting the safety of persons or property |

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|---|---|
| Historic vehicles | <p>Fully exempt</p> <p>All vehicles that have a 'historic' vehicle tax class will be exempt from the DVS. This tax class excludes any vehicle used commercially. It would be inappropriate to require historic vehicles to comply with the safe system permit conditions</p> |
| Showman's vehicles | <p>Fully exempt</p> <p>Some showman's vehicles are eligible for an exemption from DVS if they are registered to a person following the business of a travelling showman and have been modified or specially constructed. Trailers and semi-trailers which have been modified or specially constructed are not eligible for the exemption. It would be inappropriate to require showman's vehicles to comply with the safe system permit conditions</p> |
| A vehicle to which no bodywork has been fitted and which is being driven or towed | <p>Fully exempt where applicable</p> <p>(a) for the purpose of a quality or safety check by its manufacturer or a dealer in, or distributor of, such vehicles;</p> <p>(b) to a place where, by previous arrangement, bodywork is to be fitted or work preparatory to the fitting of bodywork is to be carried out; or</p> <p>(c) by previous arrangement to premises of a dealer in, or distributor of, such vehicles</p> |
| Mobile Cranes | <p>Exempt</p> <p>These are specialist, low mileage vehicles requiring special permission to operate in London</p> |
| A vehicle which is being driven or towed to a place where by previous arrangement safe system equipment is to be fitted so that it complies with the requirements of this Order | <p>Fully exempt</p> |

2. HGVs partially exempt from the HGV Safety Permit Scheme

The following vehicle types are only partially exempt from specific elements of the HGV safety permit scheme. These vehicles must still hold a valid permit. Where the following vehicle type is rated zero star and therefore required to fit a safe system of mitigating measures, they are exempt from the listed equipment only:

a. Exemptions from SIDEGUARDS

| Vehicle type | DVS exemption |
|--|---|
| Road sweepers | Exempt |
| Gully emptiers/suckers | Exempt |
| Breakdown organisations / recovery vehicles (where not fully exempt) – see condition | Exempt where applicable Only exempt where the sides of the vehicle are so designed and/or equipped that by their shape and characteristics their component parts together meet the requirements as to the fitting of sideguards or provision of lateral under-run protection |
| Tractors for articulated vehicles | Exempt All trailers used with the exempt tractor unit will be required to fit side guards (unless covered by an additional exemption) |
| All trailers used with the tractor unit will be required to fit side guards (unless covered by an additional exemption) | Exempt where applicable (1) from the forward point of the vehicle stabiliser legs; or (2) otherwise where it is not fully practicable to comply with requirements as to the fitting of sideguards |
| Vehicles fitted with items in the area where a side guard would otherwise be required to be fitted, such as fuel tanks and equipment boxes | Exempt where applicable Only where the shape and characteristics of such items or components would provide lateral under-run protection equal to that of a sideguard provided that the spaces between component items providing lateral under-run protection shall not exceed 300mm |
| Tank-vehicles (that is, a vehicle designed solely for the carriage of fluid substances in a closed tank permanently fitted to the vehicle and provided with hose or pipe connections for loading or unloading) | Exempt where applicable If it is not possible for practical reasons to comply with requirements as to the fitting of sideguards because to do so would prevent (not merely hinder) the operation of the vehicle's hose or pipe connections |

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|---|--|
| Vehicle transporters (that, is a vehicle specially designed and constructed, and not merely adapted, to carry other vehicles loaded onto it from the front or the rear) | Exempt where applicable If the chassis rails are located on the extremities of the vehicle |
| Vehicles equipped with anchorage points for ro-ro transport | Exempt where applicable To the extent that there are gaps within the sideguard to accept the passage and tensioning of fixings or lashings |

b. Exemptions from CLASS V AND/OR VI MIRRORS

| Vehicle type | DVS exemption |
|--|--|
| Bonneted vehicles eg Unimog | Exempt From Class VI mirror only |
| Vehicles fitted with any combination of direct view and/or indirect vision devices as an alternative to fitting a Class V or Class VI mirror | Exempt As permitted by UNECE Regulation 46 |

c. Exemptions from CAMERA MONITORING SYSTEMS

| Vehicle type | DVS exemption |
|---|------------------------------------|
| No vehicles will be exempt from fitment of a Camera Monitoring System | N/A - no vehicle exemptions |

d. Exemptions from SENSOR SYSTEM ALERTING THE DRIVER TO THE PRESENCE OF A VRU

| Vehicle type | DVS exemption |
|---|-----------------------------|
| No vehicles will be exempt from fitment of a sensor system alerting the driver to the presence of a VRU | N/A - no vehicle exemptions |

e. Exemptions from LEFT TURN AUDIBLE ALARM (Right turn for left-hand drive vehicles)

| Vehicle type | DVS exemption |
|--|-----------------------------|
| No vehicles will be exempt from fitment of a left turn audible alarm (right turn for left hand vehicles) | N/A - no vehicle exemptions |

f. Exemptions from WARNING SIGNAGE

| Vehicle type | DVS exemption |
|-----------------------------------|--|
| Tractors for articulated vehicles | Exempt All trailers used with the tractor unit will be required to fit warning signage |