# A SIMPLIFIED GUIDE TO LORRY TYPES AND WEIGHTS

Recommended Description			ldentifier	UK Maximum Gross Weight (tonnes)	Shape
LIGHT GOODS VEHICLES			2 axles	3.5	no rear side windows
		SMALLER 2-AXLE LORRIES	2 axles	Over 3.5 7.5	
L		BIGGER 2-AXLE LORRIES	2 axles	Over 7.5 18	
		MULTI- AXLE LORRIES	3 axles rigid	25 26*	
0	HEAVY GOODS VEHICLES (Vehicles over 7.5 tonnes gross require a Heavy Goods Vehicle Driver's Licence)		3 axles artic.	26	
R			4 axles rigid	30 32*	
			4 axles artic.	36 38*	
R			Vehicle and draw-bar trailer 4 axles	30 36**	
			5 axles or more artic. See note (a)	40	
			Vehicle and draw-bar trailer 5 axles See note (a)	40**	
E			6 axles artic. See note (b)	41*	<b>10</b> 00 000
			6 axles draw-bar See note (b)	41* and **	
S			5 or 6 axles artic. See notes (b) and (c)	44* and ***	<b>000 000</b>
			6 axles draw-bar	44*,** and ***	
			6 axles artic. See note (b) and (d)	44*	000 000
			6 axles draw-bar See note (b) and (d)	44* and **	

- \* If the driving axle, if it is not a steering axle, has twin tyres and road friendly suspension, or each driving axle is fitted with twin tyres and the maximum weight for each axle does not exceed 8.55 tonnes.
- \*\* Distance between the rear axle of the motor vehicle and the front axle of the trailer is not less than 3 metres.
- \*\*\* If the vehicle is being used for combined transport.
- (a) 5 axles or more artic and the 5 axles or more drawbar could alternatively have a 3 axle motor vehicle and a 2 axle trailer.

(b) Conditions:

- each vehicle must have at least 3 axles.
  drive axle has twin tyre and road friendly suspension and maximum of 10.5 tonnes, or each driving axle is fitted with twin tyres and has a maximum of 8.5 tonnes
- trailer has road friendly suspension

- (c) Conditions for operation on 5 axles:
  - must have 3 axles on tractor unit
  - single container 40ft in length conforming to standards laid down by the International Standards Organisation being carried only
  - vehicle being used for international journey.
- (d) Powered by a low pollution engine.

# **OVERLOADING OF GOODS VEHICLES**

#### Why does overloading matter so much?

- 1. **ROAD SAFETY.** Lorries which are loaded beyond their design weight are less able to stop quickly in an emergency and the steering of the vehicle can be affected.
- 2. **ROAD WEAR AND TEAR.** It is estimated that the overloading of good vehicles costs the community over £50M a year through additional wear and tear to roads and bridges. Heavy axles cause proportionately far more wear and tear, and overloading drive axles (legal limit 11.5 tonnes) are the biggest single cause of excessive wear and tear on roads.
- 3. **COMPETITION.** Gross overloading is unfair to the majority of law-abiding operators who accept the constraints of the plated weight limits set by the law. An operator who persistently overloads a lorry can earn additional profits amounting to thousands of pounds per annum.

## SOME TECHNICAL TERMS EXPLAINED

AXLE WEIGHT	: The total weight transmitted to the road by all the wheels on one axle.
GROSS VEHICLE WEIGHT	: The weight of a vehicle and its load.
TRAIN WEIGHT	: The weight of a vehicle, a trailer and its load.
PLATED WEIGHT	: Either the design weight limit given on a manufacturer's plate or the legal weight limit given on the Department's plate.
TRAILER	: Any vehicle drawn by a motor vehicle.
DRAW-BAR TRAILER	: A trailer pulled by a rigid vehicle.
SEMI-TRAILER	: A trailer forming part of an articulated vehicle.
ARTICULATED VEHICLE	: A tractor unit with a semi-trailer attached where part of the load is borne by the drawing vehicle.

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## **OVERLOADING**

Goods vehicles are subject to U.K. weight limits. The weight limits are given on the manufacturer's plate or the Department's plate on each vehicle. They are determined by the technical specification of the vehicle and the need to protect U.K. roads and bridges from excessive wear and tear. Vehicles over 41 tonnes operate under special arrangements. 44 tonnes is allowed for combined (road to rail) transport.

A vehicle is overloaded if it exceeds the plated weight limits. A vehicle could be overloaded on all its axles, on its gross weight and on its train weight. Each of these would be separate offences, e.g. a 3 axle articulated which exceeded the plated weights on the 1st axle, 2nd axle and gross weight would make both the vehicle operator and driver liable to three separate offences.

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A vehicle or vehicle combination from 1 January 1999 can operate under either The Authorised Weight Regulations 1998 or The Road Vehicles (Construction and Use) Regulations (as amended).

This leaflet has been produced by the Department for Transport, at the request of the Magistrate's Association to give guidance to Magistrates in dealing with cases on overloading. It is not intended to be a full authoritative statement of the law.

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