

1. Introduction

1.1 General

1.1.1 The purpose of this Code is to ensure that operators of goods vehicles are aware of their obligations with regard to the safe transport of goods in accordance with the law, and also to provide guidance as to the most appropriate means of achieving this.

1.1.2 Not every eventuality, or type of load, or method of restraint is or could be included in this Code. However the general principles outlined in the Code should provide sufficient guidance for whatever type of load, or restraint used and therefore should be followed.

1.1.3 Apart from the fact it is a legal requirement that loads must be safely transported, unsafe loads, whether by reason of being improperly secured, or transported on the wrong type of vehicle, or badly loaded, constitute a potential and serious danger to all road users. Loose material falling from a vehicle can cause serious or fatal injury to pedestrians or occupants of following vehicles. Overheight loads will collide with overhead structures causing damage to the structure and injury to the driver of the vehicle and any persons on or near the structure. Loads not properly stacked or positioned will affect the stability of the vehicle, causing it to overturn with obvious consequences to the driver and any passers-by. Overweight loads are a potential danger because of the instability that this can cause to the vehicle transporting the load, and they also cause considerable damage to the road resulting in frequent repairs having to be undertaken.

1.1.4 Unsafe loads pose an unacceptable risk to road users generally and it is the responsibility of all goods vehicle owners, operators and drivers to ensure that loads carried by their vehicles are safe.

1.1.5 The transport of dangerous goods or wastes such as toxic and corrosive chemicals and flammable substances will require additional and special precautions to be taken over those described in this Code and will require for certain substances that the vehicle has been issued with a Dangerous Goods Permit. Advice of manufacturers of the material and the appropriate authority such as the Director of Fire Services or the Director of

Environmental Protection should be sought if there is any doubt as to the precautions to be taken, or permits required. It should also be noted that the transport of incompatible substances, such as waste oxidizing materials and combustible materials, including domestic refuse, on the same vehicle is not to be allowed and advice on this may need to be sought from the Authorities.

1.2 Legislation

1.2.1 The relevant legislation affecting the loading of vehicles is contained in the following: -

(i) Road Traffic Ordinance, Cap 374 (RTO)

(ii) Road Traffic (Construction and Maintenance of Vehicles) Regulations, (C&M)

(iii) Road Traffic (Traffic Control) Regulations, (TC)

(iv) Road Traffic (Registration and Licensing of Vehicles) Regulations, (R&L)

(v) Fixed Penalty (Criminal Proceedings) Regulations, (F.P.)

1.2.2 Section 109 of the Road Traffic Ordinance authorizes the Commissioner to prescribe a Code of Practice for the Loading of Vehicles, and this same section provides for the Code to be used to substantiate whether an offence has been committed in respect of any of the relevant Regulations. However failure to observe the Code is not in itself an offence.

1.2.3 The main points of the relevant legislation are summarized as follows but it is advised that the Sections or Regulations referred to in abbreviated form, should be consulted for the precise wording: -

(i) A goods vehicle must: -

(a) - have all its wheels in contact with the road surface, except in the case of a vehicle with retractable axles

C&M 13

(b) - have the permitted gross vehicle weight and the maximum permitted axle weight marked on both sides

C&M 79, 82

- (c) - if it has a permitted gross vehicle weight in excess of 5.5 tonnes, have appropriate rear markings C&M 118, 119, & 120

- (d) - not have amber flashing lights fitted to the cab roof or any other part of the vehicle unless authorized by the Commissioner for Transport C&M 111

- (e) - not be used for any purpose which may cause danger to any person or damage to property TC 58

- (ii) Goods must not be loaded: -
 - (a) - such that the weight of the vehicle transmitted to the road surface exceeds: - 4.5 tonnes for a single wheel, 9 tonnes for an axle having 2 single-tyred wheels, 10 tonnes for an axle having 2 double-tyred wheels, 11 tonnes for an axle having more than 2 wheels, C&M 14

 - (b) - such that the permissible gross vehicle weight of the vehicle is exceeded or the permitted axle weight is exceeded, or in the case of an articulated vehicle, the maximum gross combined weight is exceeded, TC 54
C&M 7
C&M Second
Schedule

- (c) - such that, unless an appropriate permit has been issued, the goods extend: -
 - more than 1.5 m beyond the front of the vehicle,
 - more than 1.4 m beyond the rear of the vehicle,TC 55

- (d) - sideways so that the total width of the load and the vehicle is more than 2.5 m,
 - to a height of more than 4.6 m above the road surface,TC 55

- (e) - such that, the weight, its distribution or packing causes a danger to any person, or damage to the road.
 TC 58

(iii) Loads must: -

- (a) if overhanging the vehicle, have a red flag of not less than 1 sqm attached to the rear, or at night or in poor visibility conditions have a white light on each side of the load at the front, and a red light on the extremity of the load at the rear,
 TC 56

- (b) be properly secured,
 TC 57

- (c) not be carried on the tail board,
 TC 57

- (d) not touch the ground.
 TC 57

1.3 Overloading

1.3.1 The legal requirements concerning overloading are summarised in paragraph 1.2.3(ii) and explained in more detail in the following paragraphs, together with information on the effects of overloading.

1.3.2 An overloaded vehicle is a source of danger both to its occupants and to other road users. Overloading has a detrimental effect on the brakes, suspension and steering, making the vehicle difficult to control. The vehicle's behaviour is particularly affected in emergency situations, where its slow and irregular response to the driver's controlling actions, are a real source of potential accidents.

1.3.3 In addition to posing a direct threat to road users as described above, an overloaded vehicle will damage the road. Such damage detrimentally affects the surface characteristics of the road which may in turn, lead to accidents. The structure of the road pavement may also be damaged, leading to the need for rebuilding. Such rebuilding would cause unnecessary expense to the Community, both in terms of construction costs and traffic congestion during reconstruction.







1.3.4 In order to avoid the above problems it is the legal responsibility of the vehicle owner/operator/driver to ensure that the loaded vehicle does not exceed its maximum gross vehicle weight, its maximum axle weight and its maximum gross combined weight.

1.3.5 The maximum permitted gross vehicle weight is very straight forward, being the maximum permitted weight of the whole vehicle when loaded. Similarly the maximum permitted axle weight is simply the maximum permitted weight of any axle of the vehicle when loaded.

1.3.6 The maximum permitted gross combined weight (PGCW) of a vehicle is sometimes misunderstood and is therefore explained here in more detail. The PGCW refers to the combined weight of a tractor and trailer. In addition to not exceeding the maximum permitted gross vehicle weights and maximum permitted axle weights of the tractor and trailer when measured individually, the combined weight of tractor and trailer together must not exceed the PGCW.

1.3.7 The PGCW varies depending on the configuration of the combination of tractor and trailer and the axle spacing. The PGCW of a 2-axled tractor and 1-axled trailer is not the same as the PGCW of the same 2-axled tractor in combination with a 2-axled trailer. Diagram 1.3.1 shows the PGCW for different combinations of tractor and trailer and for different inner axle spacings.

1.3.8 As an illustration of how the PGCW for a particular combination is derived, consider Diagram 1.3.1. It can be seen that for a two-axled tractor with a 3-axled trailer and an inner axle spacing of 4.2 m, the PGCW is 38 tonnes. It is likely that the PGCW on the licence and registration document of such a 2-axled tractor would be 38 tonnes, as this is the maximum that would ever be permitted. However if this same vehicle were to be coupled with a 1-axled trailer, with an inner axle spacing of less than 2.1 m, the PGCW would be only 20 tonnes, irrespective of the 38 tonnes recorded in the licence and registration document. It is obviously vital that owners and drivers understand this concept and thereby ensure that their loaded vehicle complies with the law.

	Type of Combination of Articulated Vehicle	* Inner Axle Spacing (Metres)	Maximum Permitted Gross Combined Weight (PGCW)
	2 axled tractor with 1 axled trailer	Less Than 2.1 At least 2.1 At least 3.1	20 tonnes 22 tonnes 24 tonnes
	2 axled tractor with 2 axled trailer	Less than 2.9 At least 2.9 At least 3.1 At least 3.6 At least 4.0	24 tonnes 26 tonnes 29 tonnes 32 tonnes 34 tonnes
	2 axled tractor with 3 or more axled trailer	At least 4.2	38 tonnes
	3 or more axled tractor with 1 axled trailer	Less than 2.0 At least 2.0 At least 2.7 At least 3.0 At least 4.0 At least 4.4	22 tonnes 24 tonnes 26 tonnes 28 tonnes 30 tonnes 32 tonnes
	3 or more axled tractor with 2 or more axled trailer	Less than 2.0 At least 2.0 At least 2.3 At least 3.2 At least 4.0	24 tonnes 26 tonnes 30 tonnes 34 tonnes 38 tonnes
	3 or more axled tractor with 3 or more axled trailer	At least 4.7 At least 5.2 At least 5.7	40 tonnes 42 tonnes 44 tonnes

* inner axle spacing means the spacing between the rearmost axle of a tractor and the foremost axle of the trailer .

MAXIMUM COMBINED WEIGHTS FOR ARTICULATED VEHICLES

DIAGRAM 1.3.1

1.4 Definitions

1.4.1 A number of different terms are used in the code, most of which are self-explanatory, but for clarity definitions of the less common ones are as follows: -

(i) banding - means metal strips or similar used to secure items, usually of the same type, together into a more convenient load for handling, e.g. as in the case of bricks.

(ii) baulking - means stout timber lengths or similar butted against the wheels of vehicles being transported or the load being carried, at platform level, to prevent longitudinal movement.

(iii) tensioners - means a device forming part of a lashing which enables that lashing to be tightened and held tight.