# **Guidelines for Granting of Exemption** Permits for the Conveyance of **Abnormal Loads**



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## **Definitions**

Keyword	Definition			
Abnormal Load	An indivisible (for practical purposes) object that, due to its dimensions and/or mass, cannot be transported on a vehicle or vehicles without exceeding the limitations or mass as described in the National Road Traffic Regulations, 2000.			
Abnormal Vehicle	A vehicle or a combination of vehicles that, by virtue of its dimensions or mass, or a combination of both, does not comply with the requirements of the National Road Traffic Regulations 2000, Permit offices may declare a vehicle to be legitimately abnormal interms of Regulation 21 (1) (h).			
Articulated motor vehicle (from NRTA)	A combination of motor vehicles consisting of a truck-tractor and a semi-trailer.			
Route Survey	Turn by turn description of the intended route to be used for the conveyance of the abnormal load, with reference to street names and route numbers.			
Escort	A person in a separate escort vehicle accompanying an abnormal load/vehicl for the purpose of assisting other road users and giving timely warning of th presence of an abnormal load/vehicle.			
Guidelines	The Guidelines for the Conveyance of Abnormal Loads, supported by the Abnormal Load Technical Committee consisting of official representatives from all nine provinces an industry representatives such as the Road Freight Association, the SA Association of Road Transport Consultants, the Association of Abnormal Load Carriers, approved by the Committee of Transport Officials (COTO) and published by COTO in document form as TRH11.			
Indivisible Load	A load which cannot, without disproportionate effort, expense or risk of damage, be divided into two or more loads for the purpose of transport on public roads.			
National Road Traffic Act (NRTA)	The National Road Traffic Act, 1996 (Act 93 of 1996) as amended.			
National Road Traffic Regulations (NRTR)	The National Road Traffic Regulations, 2000, as amended, made under Section 75 the NRTA.			
Payload	The mass of those goods being carried by the vehicle or combination of vehicles, and includes any special equipment required for securing a particular load.			
Permit	An exemption permit issued by a Provincial Roads Authority in terms of Article 81 of the National Road Traffic Act, authorising the transportation of an abnormal load or the movement of an abnormal vehicle or a combination of vehicles subject to such terms and conditions and the payment of such fees as may be imposed.			
Principle Approval	The voluntary approval that is obtained by a manufacturer or importer of a vehicle (or load) prior to commitment to import or manufacture in order to obtain assurance that the vehicle (or load) would be granted exemptions to travel on a public road in future.			
Route Clearance	A statement by a registered professional engineer with structural as well as road safety and traffic engineering competencies, to the effect that the detail route provided was inspected by him/her and is safe for the transportation of the intended abnormal load. The engineer responsible for the route clearance carries the full risk with regard to claims and structural failures and as such must have adequate professional indemnity insurance to cover that risk.			



### Introduction

### **Background**

Where such a vehicle or load cannot be dismantled, without disproportionate effort, expense of risk of damage, into units that can travel or be transported legally, it is classified as an abnormal load. Provision for such abnormal vehicles and loads is made in the NRTA, and specifically in Section 81 of the NRTA, which reads as follows:

"Vehicle and load may be exempted from provisions of Act

An MEC may, subject to such conditions an upon payment of such fees or charges as he or she may determine, authorise in writing, either generally or specifically, the operation on a public road of a vehicle which does not comply with the provisions of this Act or the conveyance on a public road of passengers or any load otherwise that in accordance with the provisions of this Act."

When the movement of an abnormal load is considered to be in the economic and/or social interest of the country, an exemption permit may be issued to allow a vehicle(s) transporting such an abnormal load to operate on a public road for a limited period. The fundamental principles guiding this process are:

An exemption permit for an abnormal load will only be considered for an indivisible load, abnormal in dimension and/or mass, where there is no possibility of transporting the load in a legal manner.

The risks to other users must be reduced to a level equivalent to what it would be without the presence of the abnormal vehicle on the road; and

The conditions imposed must take the economic and/or social interest of the country and public at large into account.

### **Types of Abnormalities**

A vehicle or a vehicle with its load that is considered to be indivisible, can be abnormal either dimensionally or abnormal in mass or abnormal both dimensionally and in mass.

### **Dimension Abnormality**

When any of the following dimensions exceeds the legal limitations:

Length - Width - Height - Overhangs - Load projections - Wheelbase

## **Mass Abnormality**

When the allowable mass of the vehicle/combination or one or more axle groups exceeds the legal limitations.

### **Legally Permissible Maximum Dimensions / Mass**

Length Truck & Semi-trailer (Tri-Axle) Overall length of combination (Including load projections) -18.50m. Superlink (6m + 12m trailers) Overall length of combination (No load projections) - 22.00m.

Width 2.60 m.

4.30 m measured from the ground. Height of conventional trailer is 1.60m from ground to trailer deck, therefore permissible Height height of load is 2.70m.

13.50m Tri-Axle 28 Ton / 15.00m Tri-Axle 30 Ton. Weight

Superlink 34 Ton gross (6.00m - 10 / 12 Ton & 12m - 24 / 22 Ton)

Any dimension / mass outside the above will be classified as an Abnormal Load and will necessitate the application to the Department of Transport And Public Works for a permit authorising the conveyance of said load.

A **permit** is required for each Province that the load has to transit.

Subject to the dimensions and / or mass of the load special trailer equipment may also be required i.e. Stepdeck, Lowbed, Multi-Axle or Extendable as well as Escort vehicles.



#### Escort Vehicles (Own / Provincial Traffic Officer)

Loads of  $3.40m + wide - 1 \times 0wn$  Escort. Loads of  $3.80m + wide - 2 \times 0wn$  Escorts.

Loads of 4.80m + wide — 2 x Provincial Traffic Escorts.

Loads of 36.00m + long - 1 x Own Escort (subject to width of load).

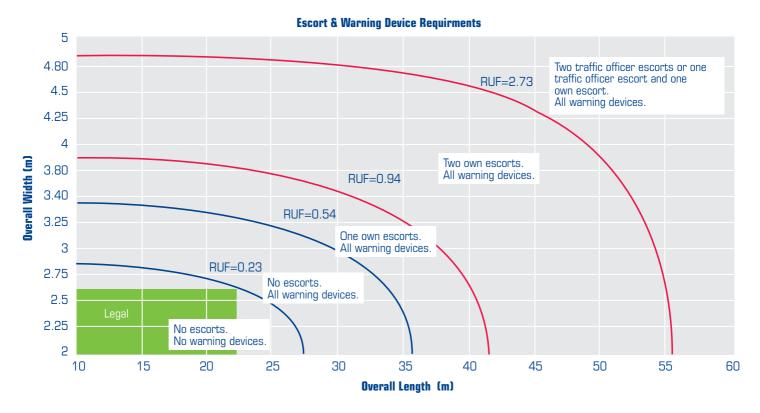
Loads of 42.00m + long - 2 x Own Escorts (subject to width of load).

Loads of 55.00m + long - 2 x Provincial Traffic Escorts (subject to width of load)

## Length is calculated on the total combination of the load i.e. including vehicle.

Loads of 4.70m + high (measured from the ground)  $-1 \times 0$ wn Escort.

Loads of 5.50m + high - **Telkom & Eskom Clearance** is required for the lifting of overhead lines.



## **Abnormal Load Classification**

## **Background**

The conditions under which a permit is granted for an abnormal load become more stringent as the degree of abnormality increases. By dividing abnormal loads into classes according to overall dimensions and mass, the setting of permit conditions is facilitated.



#### **Dimensional Classification**

The dimensional classification is according to overall width and overall length. Both the width and the length must fall within the limits to belong to a certain class.

Table 1-1: Classification according to Dimensions

Class	Width Limit (m)	Length Limit (m)		
D1	2.75	27		
D2	3.00	30		
D3	3.25	34		
D4	3.75	40		
D5	4.75	54		
D6	>4.75	>54		

#### **Mass Classification**

The mass classification is according to total laden mass.

Table 1-2: Classification according to Mass

Class	Width Limit (t)			
M1	60			
M2	65			
МЗ	80			
M4	100			
M5	125			
M6	>125			

## Administration of Abnormal Vehicles and Loads

## **Consulting Engineers**

Consulting engineers are usually involved in the conveyance of the 'bigger' abnormal loads and superloads. Their involvement could include one or more of the following:

Capacity calculations of vehicles and combinations of vehicles;

Route clearances for loads where the total combination mass exceeds 120 000 kg with special reference to bridge limitation; or

Stability calculations for high and wide loads.

#### Eskom & Telkom

Telkom and Eskom must ensure that their infrastructure will not cause a safety risk during the transportation of loads exceeding 5.8m and 5.5m in height respectively.

Telkom and Eskom will escort a vehicle in cases where the load is extremely high and the route cannot be cleared by either of them. These escorts will travel with the load and lift overhead lines when necessary.

### **Abnormal Loads**

It is advisable to obtain prior approval in principle before an "indivisible" item is manufactured that will need to be transported as an abnormal load. The transportation of the item/s should therefore be considered at the design stage. This is especially true when a number of the same items are manufactured over a period of time.

### **Insurance**

Before a permit is granted, the applicant may be required to produce evidence that adequate insurance cover has been provided against accidental or wilful damage which may be caused to public services or structures or to private property, either above or below ground.

Please visit www.fiduciary.co.za for all your Marine Transit Insurance requirements.

### Abnormal Load Permits

## **Background**

It is understood that a permit is issued at the sole discretion of the Permit Office. The permit application may be refused because of the condition of the road, the culverts and bridges, the nature of other traffic on the road, abnormally heavy traffic during certain periods or for any other reason.



### **Types of Permits**

## **Trip Permits**

Trip permits are issued for a single trip or a number of similar trips. Fees are calculated according to the distance travelled. For all trip permits, the periods of validity given in Table 3-1 will apply. When traffic officer escorting is required, the period is increased to 10 days to allow for the extra administration and availability of traffic officers.

Table 3-1: Validity Period for Trip Permits

Distance (km)	Validity Period (days)		
Up to 100	2		
101 – 250	3		
251 – 500	4		
501 – 750	5		
More than 750	6		
Traffic Officer Escorting	10		

### **Area-period Permits**

Area-period permits are used for a period of one week up to twelve months and are valid within a prescribed area. The fee depends on the period, the area within which the permit is valid and the type of vehicle and will be calculated on a distance basis as set out in Table 3-2, unless acceptable evidence is submitted that a lesser distance will be travelled in the specific period.

The permit area need not be in the geometric centre of the area, but depending on the discretion of the local office, it could be a circular area of 100 km diameter or an equivalent area, indicating specific centres rather than specific geometric shapes or specific distances.

Table 3-2: Distances for Area-period Permits (km)

Vehicle Category	Operational Area	Validity Period Of Permit					
		1 Week	1 Month	3 Months	6 Months	12 Months	
Articulated vehicles	Fixed routes	600	2 000	5 000	9 000	18 000	
	Province	800	2 400	6 400	12 000	24 000	
	RSA	1 200	4 000	10 000	20 000	30 000	
Emergency repair cranes	Province	-	-	-	2 000	3 500	
Cranes and drilling rigs	15 km radius	50	150	400	600	1 000	
	30 km radius	100	300	700	1 200	2 000	
	50 km radius	150	450	1 050	1 800	3 000	
	100 km radius	250	750	1 750	3 000	5 000	
	Province	500	1 800	4 000	6 000	10 000	
	RSA	1 000	2 400	6 000	10 000	15 000	

The following principle applies:

Area-period permits will not be issued for loads that require more than 1 self escort (width less than 3.5 m)

### **Embargo Days**

During certain periods, such as school holidays or long weekends, an embargo may be placed on the issuing of permits. Embargo lists are compiled annually and are obtainable from the Permit Offices and from the Abnormal Loads website. Special motivation will be required for exemption from embargo day requirements.



#### **Routes and Clearances**

It is the responsibility of the applicant to show that the proposed route and operational procedures of abnormal vehicles or loads are suitable for the intended use. The applicant may also at his own cost, be required to prove that bridges and other structures are capable of accommodating the vehicles or loads for which the exemption permits are applied.

## Specific Policies

Extra wide loads present special challenges, as traffic on two-lane roads may be totally disrupted.

- Adequate motivation from the designer/manufacturer for the necessity of the extra wide load is required.
- Principle approval for the transport of the loads must be obtained from road authorities at this stage.
- The route must be specified in detail and a route clearance and traffic accommodation plan by an independent engineer is required stating full responsibility for the safe transportation of the load.
- The general travelling public must be given prior warning in the press and other media as appropriate.
- Weekend travel restrictions may be waived.

