

	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting and Security Specifications	Document Identifier		Rev	
		Date	13 March 2018		
		Page	1 of 7		

## INTRODUCTION

Eskom Holdings SOC Ltd and Eskom RoteK; Industries Logistics Services multi axles have a 10 year contract; **“Haulage and related services for the transportation of loads above 32 tonnes,”** for the period, 20 January 2017 – 19 January 2027. The existence of an internal SLA agreement between ERI Logistics and ERI TSS and ERI TGS binds ERI Logistics services to supply transportation services for abnormal load cargo as and when required, to be transported to various sub stations and power stations.

Logistic Lowbeds currently is servicing Eskom moving abnormal loads in the form of transformers, rotors, reactors and stators to various power stations within the borders of South Africa.

There are currently no existing contracts for the above:

The National Road traffic Act of 1996 requires strict compliance in terms of abnormal loads movement, under TRH11 on Public roads. Abnormal load escorting is a permit condition which specifies the number of yellow and blue light escorting; all are calculated using the road usage factor, to align to the size of the load or the dimension of abnormality, either by width, height or length. As loads are transported across, South Africa, the escorting needs to follow the load from its receiving to delivery across SA.

The escorting needs to be coordinated via the control room, and directed by the appointed coordinator on site. Other permit conditions, which vary depending on the load that needs to be conveyed, such as complying to weather conditions for not travelling, the speed required, the specification of the escorting vehicle signs, etc.

## SCOPE OF WORK

The Scope of the contracts for the suppliers includes providing the Abnormal load escorting by yellow lights in compliance with permit conditions when delivering loads.

Service provider must provide **abnormal escorting to Multi Axle and Lowbed fleet**, where Escort means a person in a separate escort vehicle accompanying an abnormal load/vehicle for the purpose of assisting other road users and giving timely warning of the presence of an abnormal load / vehicle services as

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	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting Technical Specifications	Document Identifier		Rev	
		Date	13 March 2018		
		Page	2 of 7		

specified by Guidelines for Granting of Exemption Permits for the Conveyance of Abnormal Loads on Public Roads – TRH11 (March 2009).

On request, **guarding and security** are provided when required, especially when our combinations stand at high risk areas. Services will be requested as and when required. The security guards and the company must be PSIRA registered. The security is expected to travel with the combination until site. The company should appoint accredited security guard as well escorting personnel where both services are required. All security guards to have a minimum PSIRA level E- entry level with a radio, basic firefighting, self-defence, Carry out basic first aid treatment, Use security equipment and panic button (not limited to the stated). The supplier is not expected to charge weekend kilometres as the combination will be stationary; however a daily rate can be charged. The supplier should have an armed response team to respond to emergencies that might arise during the combination travel. The supplier should have a control room for monitoring the movement of our team when allocated to a project. Please note: a site visit will be conducted in order to verify the specification above.

## **TRH11 requires Markings and Escorting Of Abnormal Vehicles to be as:**

### **1. DESCRIPTION OF WARNING DEVICES AND BOARDS**

To alert oncoming traffic, headlamps emitting passing beams must be displayed on all escort vehicles and on the front vehicle of any abnormal vehicle combination requiring warning devices.

Over and above the passing beams, and depending on the degree of abnormality of the vehicle or load, one or more of the following warning notices or devices may be called for:

#### **a. Flags**

The extremities of the vehicle or load must be identified by a display of bright red flags to indicate the overall length and width of the vehicle or load. Each flag must be securely attached to the load or to a staff on the vehicle. The flags must be placed at the extreme corners of the vehicle or load, must measure at least 600 mm x 600 mm, must be clean and free to flutter.

#### **b. Escort Vehicle Warning Board**

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	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting Technical Specifications	Document Identifier		Rev	
		Date	13 March 2018		
		Page	3 of 7		

A warning board must be fitted to the roof of the escort vehicle and must be at least 1 200 mm long by 400 mm high, and bear in retro-reflective red modified series E letters, at least 120 mm high, on a white background the words:

'**ABNORMAL LOAD AHEAD**' on the one side of the board, and

'**ABNORMALE VRAG VOOR**' on the other side of the board.

The warning board must be removable, collapsible or coverable and must not obscure the amber flashing lights. Alternatively a warning board complying with and SABS approved specification may be displayed.

### c. ESCORT REQUIREMENTS

Length and Width

The class of escort required will be determined by both the length and the width of the loaded vehicle, can be calculated using the formula:

Road Usage Factor,  **$RUF = 1, 61757 \times 10^{-3} \times W^{4.7} + 7, 5 \times 10^{-7} \times L^{3.76}$**

Where W = overall load or vehicle width, m

L = overall load or vehicle length, m

RUF ≤ 0,54 no escorts required

RUF 0,54 to 0,94 one own-escort required

RUF 0,94 to 2.73 two own-escort required

RUF > 2,73 two accredited escorts or one accredited escort and one own escort required

**Multi Axle RUF always falls above 2,73: two accredited escorts or one accredited escort and one own escort required**

## 2. ESCORTING OF ABNORMAL VEHICLES

An abnormal vehicle is provided with escorts to **warn the normal travelling public of the abnormal vehicle** and to promote a safer flow of traffic in the face of possible disruption caused by the abnormal vehicle. Unless specifically authorised, a private escort has no legal authority to control other traffic.

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	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting Technical Specifications	Document Identifier		Rev	
		Date	13 March 2018		
		Page	4 of 7		

**Three classes of escort are called for in the following sections:**

(i) One own-escort vehicle, to be provided by the carrier, which should be a passenger motor car or a light motor vehicle as defined in the RTA with a load capacity not exceeding 3,5 ton. The escort vehicle must be equipped with amber flashing light and an abnormal vehicle warning board on the roof of the vehicle, positioned such that it is visible from all directions. The escort vehicle must travel between 10 m and 50 m behind the abnormal vehicle, as far back as possible within sight of it, to give other road users timely warning of the presence of the abnormal vehicle, The Marking and Escorting of Abnormal Vehicles TRH 11 – '99 but allowing normal overtaking when conditions allow. When the abnormality is caused by excessive front overhang, the escorting vehicle must travel in front of the abnormal vehicle.

(ii) Two own-escorts, as described above, one travelling in front and the other behind the abnormal vehicle, travelling between 10 m and 50 m from the escorted vehicle. (iii) Accredited escorting, normally comprising two vehicles with accredited officials. One accredited escort may at the discretion of the issuing authority be replaced by an own-escort.

An additional municipal escort may be required by local authorities in urban areas. Other factors such as topography, road width and traffic volume, may also influence escort requirements and Figure 3 of the said regulation should be used as a guide.

Under exceptional circumstances two or more accredited escorts may be required in addition to two own-escorts, at the discretion of the issuing authority. On dual roads, one or more of the accredited escorts may be dispensed with at the discretion of the issuing authority.

### 3. Height

An own-escort is required to drive between 10 m and 50 m ahead of any vehicle exceeding 4,7 m in height. (See ii). An accredited escort may be required where the lifting of overhead wires or other arrangements may require the vehicle(s) to stop in the roadway.

These suppliers assist in compliance with all the requirements and legislative instructions as well as safe guarding our employees and or Eskom equipment.

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	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting Technical Specifications	Document Identifier		Rev	
		Date	13 March 2018		
		Page	5 of 7		

The service will be required on an ad hoc basis, in line with the projects of Multi-axle business. Once employed, it will follow the load from receiving to delivery or if need be, await to be used to return the combination to return to the depot, as sometimes we park at the delivery points (power stations).

## Functional Specification

The service to be provided will be used to escort, i.e. follow the load, direct traffic, notify the public, and control the risk of potential height and width restrictions by driving forward using the 16.D stick to alert the combination of possible uncleared obstructions.

## Performance Specification

The escorting will be usually done by employing an experienced driver and escort vehicle capable of visually checking for obstructions and notifying the public using the clearly marked vehicle, to alert them of the presence of an abnormal load. He will further liaise with the combination via two way radio to alert them of any obstruction, so it can be cleared before we pass through. The vehicle must comply with our roadworthiness and comply to TRH11 escorting vehicle specification.

## PURPOSE

The objective of this annexure is to guide the subcontractor when performing work for Eskom Rotek Industries SOC limited, Logistics Services, Multi Axles and Lowbed department in terms of technical specifications.

This is to assist Logistics services in escorting our combinations to deliver the required transportation services to Power Generation, Transmission and Distribution and in complying with the Road Transportation Act when delivering abnormal loads under TRH11.

## AREA OF OPERATION

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	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting Technical Specifications		Document Identifier		Rev	
			Date	13 March 2018		
			Page	6 of 7		

Areas of operation will include various substation and power stations throughout Gauteng, Mpumalanga, Limpopo, North West, Free State as well as in lessor cases Western, Northern, Eastern Cape and KZN provinces including cross border in the SADC region.

**NOTE:**

Abnormal load escort requests for a load from 5.5m laden height (including lowbed height) will require 30 working days (this is for geometric clearance to be obtained that will certify height of bridges and any power or telephone lines that may need to be moved).

All of the above requires abnormal load permits.

Full compliance with TRH11.

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	<b>Business Management System</b> Logistics Services Multi Axles, Abnormal Load Escorting Technical Specifications	Document Identifier		Rev	
		Date	13 March 2018		
		Page	7 of 7		

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Mpho Mokwena

25 September 2020

The Technical specifications for subcontracting for abnormal load escorting work to Eskom RoteK Industries SOC Limited, Logistics Services is supported by the following stakeholders:

Supported by:



Vanessa Manake

Controller: Multi Axle

Date: 06 November 2020

Supported by:



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SHE Officer, Multi Axles

Date: 06 November 2020

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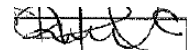


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