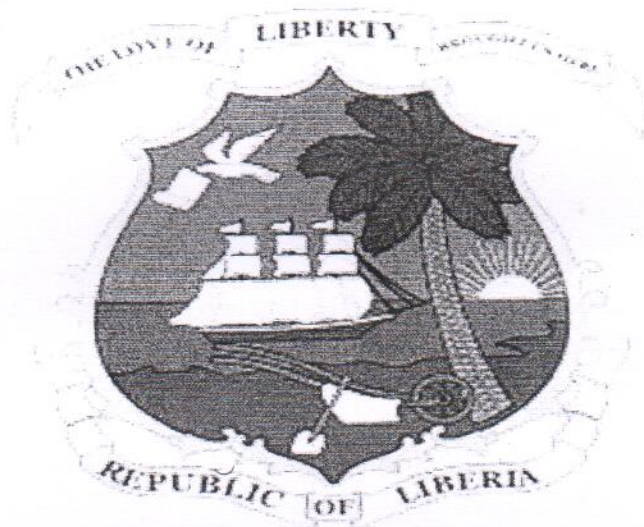


# Ministry of Transport



## **Axle Load Regulation MOT/RL/01/2016**

# REPUBLIC OF LIBERIA

## HEAVY DUTY VEHICLE AXLE LOAD REGULATIONS 2016

### ISSUED UNDER AUTHORITY OF THE MINISTRY OF TRANSPORT R.L.

The following Regulations have been issued under Authority of the Ministry of Transport of the Republic of Liberia in compliance with and in order to give effect to the Axle Load Law of 2015 and the ECOWAS Supplementary Agreement of 2012 any amendments made thereto and shall take effect upon their publication

#### Section 1 Weight and Dimension Limits and their Measurement

(1) **Height**

No vehicle, including protrusions and payload, may be higher than 4.5 metres from the road surface.

(2) **Width**

No vehicle, including protrusions and payload, may be wider than 2.55 metres with these exceptions.

(a) Vehicles equipped for carriage at controlled temperatures may have width 2.65 metres.

(b) Trailers fitted with twist locks for carriage of containers may have width 2.70 metres.

(c) Rear vision mirrors protruding horizontally no more than 300mm are excluded from these measurements.

(3) **Length**

The maximum lengths of vehicles and combinations are as follows.

|   |              |
|---|--------------|
| Truck   | 12.00 metres |
| Semitrailer from the kingpin to the back      | 12.00 metres |
| Other trailers, excluding coupling mechanisms | 12.00 metres |
| Articulated vehicle                           | 18.75 metres |
| Road train                                    | 18.75 metres |
| Double train used for transport of cars       | 18.00 metres |
| Double train used for transport of containers | 24.20 metres |
| Other double trains                           | 22.00 metres |

(1) The Authorised Maximum Axle Load, or AMAL, is as follows.

| Single Axle                            |   | tonne |
|--|---|-------|
|  | Steering axle                               | 9     |
|  | Other axle— supersingle tyres               | 11.5  |
|  | Other axle— twin tyres                      | 12    |
| <b>Tandem Axle Set with Twin Tyres</b> |   |       |
| Type 1                                 | Axle spacing $\leq 1.0\text{m}$             | 11.5  |
| Type 2                                 | Axle spacing $> 1.0$ and $\leq 1.3\text{m}$ | 16    |
| Type 3                                 | Axle spacing $> 1.3$ and $\leq 1.8\text{m}$ | 18    |
| Type 4                                 | Axle spacing $> 1.8\text{m}$                | 20    |
| <b>Triaxle Set with Twin Tyres</b>     |   |       |
| Type 1                                 | Axle spacing $\leq 1.3\text{m}$             | 21    |
| Type 2                                 | Axle spacing $> 1.3$ and $\leq 1.4\text{m}$ | 25    |
| Type 3                                 | Axle spacing $> 1.4$ and $\leq 1.5\text{m}$ | 27    |
| Type 4                                 | Axle spacing $> 1.5\text{m}$                | 31.5  |

Authorised weights are reduced by 20% for axle sets without load-sharing suspensions.

(2)

#### Axle Groups

For the protection of bridges, limits are placed on axle groups. The maximum weight on an axle group is calculated from the bridge formula

$$W = 12 + 2.5L$$

where

W is the weight on the axle group in tonnes, measured to the nearest 0.1 tonne, and L is the spread of the axle group in metres, measured to the nearest 0.1 metre.

Every axle group of a vehicle or combination must comply with this requirement.

The Authorised Total Laden Weight, or ATLW, of a vehicle or combination is the weight given by the bridge formula for the axle group having the greatest spread, except for a semitrailer for which the ATLW is the maximum weight allowed on its axle or axle set.



**Section 3****Conditions of a Transit Permit to Prevail**

If a heavy duty vehicle or combination is travelling with a transit permit, and the conditions of the permit are being met, the provisions of the transit permit shall prevail over these regulations and the limits set herein.

**Section 4****Tare and Dimension Plates**

Every powered vehicle, trailer and semitrailer shall have affixed:

- (a) a tare plate displaying its UV and ATLW; and
- (b) a dimensions plate displaying its dimensions.

These plates must be made of permanent materials impervious to weather and may be combined into a single plate displaying the required information.

**Section 5****Vehicle Weighing**

- (1) Weigh scales installed at weigh stations and portable scales used by mobile patrols shall be WIM scales that weigh each axle, including individual axles in axle sets.
- (2) The Metrology Service shall approve the scales, approve their installation, and calibrate them before entering service and thereafter at intervals of not more than twelve months unless reason for earlier calibration arises. The Metrology Service shall issue a dated certificate of calibration showing the serial number of the scales tested. At weigh stations the certificate of calibration shall be mounted on the inside of the office window facing outward for public display. The certificate for mobile scales shall be kept with the scales and be available for inspection by the driver or owner of a vehicle that is being or has been weighed using those scales.
- (3) Checks by mobile patrols shall take place on level ground at locations where road width and visibility are sufficient for safe operations. Checks conducted at night shall be at sites with illumination to facilitate checking and sufficient to alert approaching traffic.

**Section 6****Tolerance to be Applied to Measured Weights**

Compliance certificates shall show the weight as measured by the scales. To determine compliance or to calculate fines each measured weight shall be reduced by a tolerance of:

- (a) 5 per cent for weights measured at weigh stations; and
- (b) 7.5 per cent for weights measured by mobile patrols.

Section 7

Consequences of Noncompliance

(1) Penalties for noncompliance with this Regulation shall be as follows:

|   | Infringement or offence   | Applicability   | Fine*   | Other sanctions  |
|---|---|---|---|--|
| 1 | Absence of a tare plate or dimension plate.   | Applicable per vehicle or combination ( not per missing plate) and only once in a period of 7 days.               | \$200   |  |
| 2 | Breach of dimension limits due to protrusion by the payload.  |   | \$200   | Vehicle is immobilised until compliant.                      |
| 3 | Breach of dimension limits due to protrusion by the vehicle.  | Applicable only once in a period of 7 days.   | \$1,000   | Vehicle permitted to travel to a place of rectification.     |
| 4 | Either<br>(i) exceeding ATWL<br>or<br>(ii) exceeding AMAL<br>on one or more axles or axle sets<br>or<br>(iii) exceeding the bridge formula on one or more axle spreads. | If there is more than one infringement, the highest penalty applies.  | \$40 per tonne overweight if transport is within Liberia<br>\$120 per tonne overweight if transport is to or from another country<br>Fines are doubled for hydrocarbons and hazardous materials | Vehicle is immobilised until compliant.**                    |
| 5 | Crossing a posted bridge in contravention of its Gazetted load limit.   | Applicable even if the signpost is missing  | \$1,000   | Vehicle is immobilised until compliant.**                    |
| 6 | Refusal to stop at a weigh station or when signalled to do so by an authorised officer.   |   | \$200   | Vehicle escorted back to the weigh station (if apprehended). |
| 7 | Departure from a platform without a compliance certificate or knowingly in breach of this Regulation. <sup>1</sup>  | Not applicable if the platform confirms it was at the time unable to conduct the check and issue the certificate. | \$400 per heavy duty vehicle or combination   |  |

|   |   |  |                                 |  |
|---|---|--|---------------------------------|--|
| 8 | Departure from a platform without a compliance certificate or knowingly | Not applicable if the platform confirms it | \$400 per heavy duty vehicle or |  |
|---|---|--|---------------------------------|--|

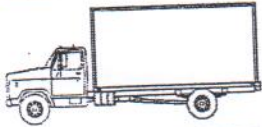
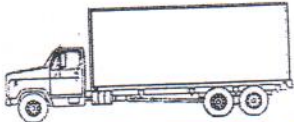

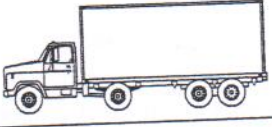


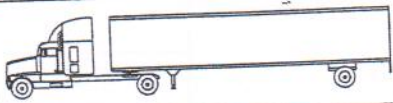
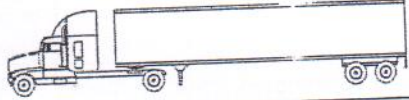
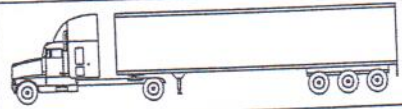
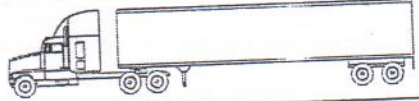
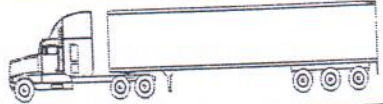

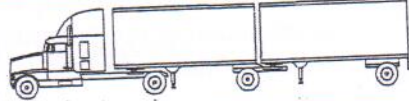

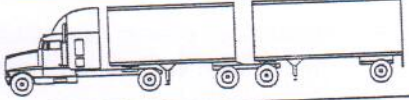

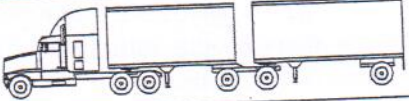
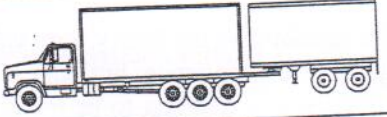
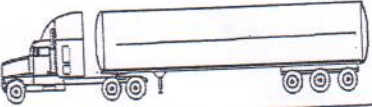



<sup>1</sup> The ECOWAS \$100 fine for "absence of a certificate of compliance with weight and dimension limits" is omitted since some journeys start from places where there is no opportunity to obtain a certificate.



|    |  |  |             |  |
|----|--|--|-------------|--|
|    | in breach of this Regulation. <sup>2</sup>   | was at the time unable to conduct the check and issue the certificate.   | combination |  |
| 9  | Removing an immobilised vehicle without a compliance certificate.  |  | \$1,000     |  |
| 10 | Failing to report to a weigh station if instructed to do so by an authorised officer.                            |  | \$1,000     |  |
| 11 | Lack of inspection equipment at a platform.  | Applicable two years after notice was given to comply with the Regulation.<br>Applied not more than once in a calendar year. | \$100,000   |  |
| 12 | Proven or attempted fraud, bribery or wilful deception.  | Additional to any other penalties.   | \$600       |  |
| 13 | Wilful provision by a cargo consignor of misleading information designed to conceal the true weight of the load. | Enforceable in a court of law.   | \$5,000     |  |

- (2) Where an infringement is detected or an offence is committed, the heavy duty vehicle or combination is not permitted to resume travel until all fines are paid, any infringement requiring immobilisation is corrected, and a compliance certificate issued.
- (3) Where an infringement requiring immobilisation is detected at the roadside by an authorised officer conducting random checks using portable weigh scales, the infringing heavy duty vehicle or combination shall either:
- (a) be directed to report to a specified weigh station, with or without being escorted there by the authorised officer, and upon arrival at the weigh station shall become the responsibility of its authorised officers who shall perform fresh compliance checks and take such actions as are appropriate; or
  - (b) be escorted to a location where it is safe to immobilise the heavy duty vehicle or combination and take corrective action to remedy the noncompliance, but only if referral to a weigh station is deemed undesirable due to the distance needing to be travelled in a noncompliant state.
- (4) If a vehicle remains immobilised at a weigh station for more than thirty days it may be subject to possession and sale to recover any unpaid fines and any remaining moneys will be retained pending payment to the vehicle's former owner.

ANNEX 1 AUTHORISED TOTAL LADEN WEIGHT FOR SOME COMMON VEHICLES

| Tonne |  | tonne |   |    |
|-------|--|-------|---|----|
| 1     |                             | 18    | 2                             | 26 |
| 3     |                             | 31    | 3b                            | 31 |
| 4     |                             | 18    | 5                             | 26 |
| 6     |                             | 30    | 7                             | 38 |
| 8     |                             | 43    | 9                             | 46 |
| 10    |                            | 51    |   |    |
| 11a   |                           | 38    | 11 b                        | 38 |
| 12a   |                           | 44    | 12 b                       | 44 |
| 12c   |                           | 44    | 12 d                       | 44 |
| 13    |                           | 51    |   |    |
| 14    | HYDROCARBON TRANSPORT<br> | 59    | 15 CONTAINER TRANSPORT<br> | 46 |
| 16    | CONTAINER TRANSPORT<br>   | 56    | 17 CONTAINER TRANSPORT<br> | 64 |
| 18    | CONTAINER TRANSPORT  | 75    | 19 CONTAINER TRANSPORT  | 80 |





## ANNEX 2

### 1. Interpretation and Definitions

(1) Unless the context otherwise requires:

**AMAL** means the authorised maximum axle load;

**articulated vehicle** means a combination comprising a tractor and one semitrailer;



Illustration of an articulated vehicle

**ATLW** means the authorised total laden weight;

**Authorised Maximum Axle Load** means the maximum weight permitted under this Regulation to be supported by the subject axle or axle set;

**Authorised Total Laden Weight** means the maximum gross weight permitted under this Regulation for the subject vehicle or combination;

**axle** means a shaft positioned transversely across a vehicle fitted at each end with wheels that are in contact with the ground and help to support the vehicle;

**axle group** means a sequence of two or more contiguous single axles or axle sets on the same heavy duty vehicle, tractor or combination;

**axle set** means a tandem axle set, triaxle set or a twinsteer axle set;

**axle spacing** means the distance between the centre lines of adjoining axles in an axle set;

**axle spread** for an axle set or axle group means the distance between the centre lines of the first and last axles in the set or group;

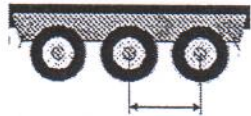


Illustration of axle spacing

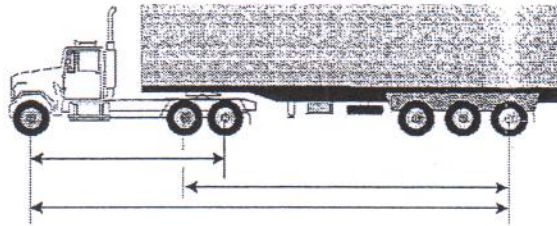


Illustration of axle spread for a triaxle set

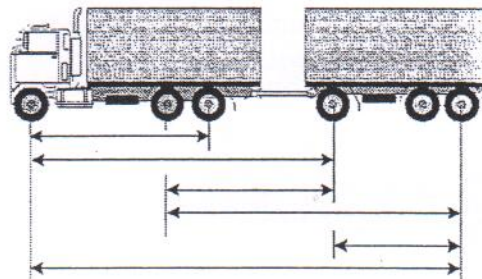


Illustration of axle groups and their spreads

**bridge formula** means an algebraic formula or tabulation specifying the authorised maximum weight on an axle group for a range of axle spreads;

**double train** means a tractor connected to a semitrailer which in turn is connected to a second semitrailer;

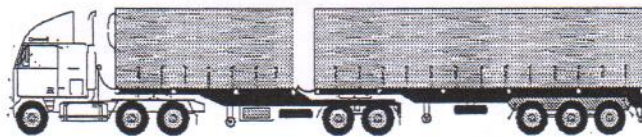


Illustration of a double train

**drawbar** means a part of a trailer, other than a semitrailer, that connects the trailer body to a coupling for towing purposes;

**driver** means the person driving or in control of a powered vehicle;

**fifth wheel coupling** means a device to which a semitrailer attaches by its kingpin for the purpose of towing and which provides articulation.;

**gross weight** means the weight of a partly or fully laden vehicle or combination including its payload;

**load-sharing suspension** means an axle set suspension that is built to divide the load between the tyres on the set so that no tyre carries a weight more than 10% greater than the weight it would carry if the load were shared equally;

**Metrology Service** means an agency that approves, checks and certifies weights-and-measures equipment installed in Liberia;



**retractable axle** means an axle that can be raised so that the tyres on the axle do not touch the ground;

**road train** means a heavy duty vehicle connected to a trailer by a drawbar;

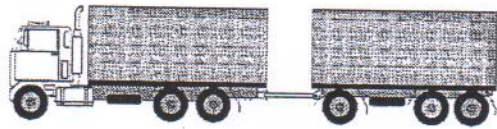


Illustration of a road train

**semitrailer** means a trailer that has a single axle or an axle set towards the rear and at the front a kingpin for attachment to another vehicle, such as by a fifth wheel coupling, that results in some of the trailer's load being imposed on the other vehicle;



Illustration of a semitrailer

**single axle** means an axle not forming part of an axle set;

**single tyred axle** means an axle which at each end has one tyre mounted on a wheel rim;

**super single** means a single tyre with a width of at least 385 mm;

**tandem axle set** means two axles attached to a load-sharing suspension;

**tare plate** and **dimensions plate** refer to plates permanently attached to a vehicle with the tare plate showing UW, ATW and axle types and with the dimensions plate showing vehicle dimensions, and each plate displaying evidence of certification by the issuing authority;

**triaxle set** or **tridem axle set** means three axles attached to a load-sharing suspension;

**trailer** means a trailer, other than a semitrailer, with a single axle or axle set at the rear and a single axle or axle set at the front that is steered by a drawbar connection to the towing vehicle;



Illustration of a trailer

**twinsteer axle set** means two axles with single tyres and connected to the same steering mechanism;



Illustration of a twinsteer axle set

**twin tyred axle** means an axle which at each end has two tyres mounted on two wheel rims;

**tare weight** means the weight of an unladen vehicle together with equipment needed for its intended purpose and fuel tanks, if any, filled with fuel;

**unladen weight** means tare weight;

**UW** means unladen weight (tare weight) with a fuel tank in the case of a powered vehicle;

**WIM** stands for weigh-in-motion which describes a type of scale that measures the weights of axles as they slowly roll over the scale.

Done this 28<sup>th</sup> day of July A D 2016 in the City of Monrovia, County of Montserrado,  
Republic of Liberia. *AB*

*Angela Cassell Bush*

Angela Cassell Bush  
MINISTER OF TRANSPORT