

Wagons composed of permanently-coupled units (multiple wagons) and articulated wagons

*Wagons composés d'éléments accouplés par attelage permanent (wagons multiples) et wagons articulés
Aus mehreren ständig gekuppelten Elementen zusammengesetzte Wageneinheiten und Gelenkwagen*



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Important : the articles (points) in this leaflet have been renumbered in the new edition. The first digit of each point has been increased by one (i.e. 0 becomes 1, 1 becomes 2, etc.). Please take account of this when using cross-references from other leaflets.

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Summary

This leaflet indicates the technical specifications to be complied with by permanently-coupled multiple wagons and articulated wagons.

1 - Definitions

1.1 - Multiple wagons

A wagon composed of permanently-coupled units, or multiple wagon, is a combination formed by several frame-bodies, each of which is equipped with running gear permitting it to be moved individually, for example, on a workshop track.

This combination is provided at the two ends with draw and buffer gear of the conventional type (according to *UIC Leaflets 520 and 526-1* - see Bibliography - [page 11](#)). Coupling between units is obtained by means of special components which cannot be separated in normal operations.

A multiple wagon can be formed either from 2-axle vehicles or from bogie vehicles.

When the wagon is composed of two units, it is called a couple.

1.2 - Articulated wagon

An articulated wagon is a wagon formed from units connected to one another by an articulation arranged at right angles with the intermediate running gear. It contains at least 3 axis or 3 bogies.

o 2 - General arrangements for all wagons composed of permanently coupled units (multiple wagons) and articulated wagons

2.1 - Commercial conditions

In operating terms each combination (multiple or articulated wagon) is considered to be a single vehicle. It only has a single identification number and bears only the markings corresponding to a single vehicle (in particular a single load table for the combination).

This rolling stock will only be accepted in international service to the extent where it will bring certain economic advantages for the railways and/or the customers.

The aim is not to deploy this rolling stock in traffic currently being operated with other wagons in suitable conditions, the variation in the cost due to the greater length or greater capacity of multiple or articulated wagons being taken into account in the tariffs to be applied to them.

These tariffs must also avoid any competition between multiple or articulated wagons and bogie wagons, on the one hand, and between multiple wagons offering load capacities of different sizes on the other hand.

In the absence of such tariff variations revenue losses could be expected for existing wagons and an increase in empty running would be likely.

UIC Leaflet 211 (see Bibliography - page 11) sets out the regulations applicable to the tariff policy for multiple and articulated wagons.

Acceptance of these wagons must also take into account certain inherent disadvantages of units with such great length, in particular:

- immobilisation of the combination of units in the case of a break-down,
- difficulties in train formation and shunting in yards and maintenance workshops,
- treatment of multiple or articulated wagons with more than 8 axles as exceptional loads (see *GCU Article 2* - see Bibliography - page 11),
- restrictions on train-ferry connections (see *RIV, Appendix IV*).

2.2 - Technical conditions

2.2.1 - Unless otherwise specified, the interchangeable parts listed in *UIC Leaflet 570* (see Bibliography - page 11) shall be used in the construction of these vehicles.

2.2.2 - Each unit of the wagon shall satisfy all strength conditions specified for its category in *UIC Leaflet 577* (see Bibliography - page 11).