

MVC informal group

Table about national current practice with regard to MVC

Item	UK	D	D(BPW)	DK	S	FIN	NL
<b>Year of testing</b>	Annual 1 year from first use for all except showmans (fairground) vehicles	Field trial in Germany starts 01 Jan 2012 to 31 Dec 2016		2008-2016		<p><b>Since 1993</b></p> <ul style="list-style-type: none"> <li>- 60 ton / 7 axles or more</li> <li>- Maximum length 22 m, 25.25 m since 1997</li> <li>- Maximum height 4.2 m</li> </ul> <p><b>From October 1st 2013</b></p> <ul style="list-style-type: none"> <li>- 64 ton / 8 axles (68 ton if 65 % of the weight of the trailer/trailers is on axles with twin tires)</li> <li>- 69 ton / 9 axles (76 ton if 65 % of the weight of the trailer/trailers is on axles with twin tires)</li> <li>- Maximum height 4.4 m</li> </ul>	Start experiments and tests in 2000 with four transport companies
<b>Year of application</b>	Available now although not normally used in the UK with no Companies known to be operating such combinations						Entry into force of the "Policy rule test and granting exemption Long Heavy Trucks (LZV)" is 1 January 2013
<b>MVC definition</b>	Maximum length of the towing vehicle is 9.2m, maximum length of any single trailer is 7m			Truck + 1 or 2 trailers all within standard dimensions but length exceed 18,75 m as roadtrain.			<p>LZV (long heavy trucks); combinations with a loading length of at least 18 meter and not more than 21,82 m, or a comparable loading length in the case the vehicles are equipped for the transport of removable loading structures, consisting of not more than three vehicles and equipped for the transport of goods of which the total length is not more than 25,25 meter and the total mass not more than 60 ton, and for which an exemption is granted according article 3.</p> <p><i>(remark, article 3 is about the kind of exemption granted by RDW)</i></p>

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								(source Beleidsregel art 1 par e)
<b>Types of combinations</b>		Locomotive – 3 trailers Motor tractor – 2 trailers if neither is laden A heavy motor car - 2 trailers if one of them is a towing implement and part of the other is secured to and either rests on or is suspended from that implement	Tractor with semi-trailer (17,80m), tractor vehicle with a central axle trailer (25,25m), normal truck with dolly and semitrailer (25,25m)		ISO 1 truck – dolly – semi ISO 2 tractor – semi – CAT ISO 5 tractor – link trailer – semi Truck – long trailer		<ul style="list-style-type: none"> <li>- Truck + long trailer (21 m – 25.25 m) is the most common combination</li> <li>- ISO 1 (truck + dolly + semitrailer) is also popular</li> <li>- ISO 2 (tractor + semitrailer + centre-axle trailer) is not so popular. Not so good in slippery conditions (stability and traction).</li> <li>- ISO 5 (tractor + link trailer + semitrailer) is quite rare but getting more popular. Problems with turning regulations.</li> </ul>	Not specified, type of combination is the outcome of the requirements; - maximum 3 vehicles - maximum 2 turning points - max/min loading length - each separate vehicle in the combination has to fulfil the general requirements, same as for any other vehicle - 1/5 <sup>th</sup> of the combination mass shall be on the driven axles - turning circle, within two concentric circles, the outer circle with a radius of 14,50 m and the inner circle with a radius of 6,50 m
<b>Dimensions</b>	<b>Combination max length</b>	25.9m	25,25m		25,25 m	25,25 m	25,25 m	25,25 m
	<b>Max weight</b>	44000kgs	40 – 44to		60T/8 axel, 56T/7 axel, 50T/6 axel	60tons	<ul style="list-style-type: none"> <li>- 4 ton / 8 axles (68 ton if 65 % of the weight of the trailer/trailers is on axles with twin tires)</li> <li>- 69 ton / 9 axles (76 ton if 65 % of the weight of the trailer/trailers is on axles with twin tires)</li> </ul>	60tons
	<b>Max wheelbase (distance from front axle to rearmost axle)</b>	Not defined	No Information about that item		No maximum < 19 m only 54T	Must be according to requirement in traffic ordinance.		No specific requirements, see above
	<b>Width</b>					max 2.6m		
	<b>Linktrailer</b>				Max 8,75 m from king pin to fifth wheel			
<b>Manoeuvrability</b>	<b>Max outer circle diameter</b>	When drawing one trailer, a heavy motor vehicle - no part of it projects outside the area contained between concentric circles with radii of 12.5m and 5.3m.	12,5m (“BO-Kraftkreis”)	25 m	12,5 m	12.5m	12.5m	14,50 meter
	<b>Minimum inner circle diameter</b>	See above	7,2m	10,6 m	None	2m	2m	6,50 meter

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	<b>Max number of rotating points</b>	Not defined	3	2	2			2
<b>Braking</b>	<b>EBS mandatory</b>	Age related	Yes	yes	yes	ABS		Yes ("EBS according R13 par. 5.1.3.1.2", i.e. one pneumatic supply line, one pneumatic control line and one electric control line)
	<b>Electric control line</b>	Age related	yes	yes	yes			yes
	<b>LDWS/AEBS and automatic-distance control system</b>		yes					
<b>Steering system</b>	<b>Dolly</b>	Automated	Yes	yes	Allowed, free tracking axel must lock > 40 km/t	Dolly must have turntable for speed above 40 km/h. Max art. +/- 20°		no specific requirements, each separate vehicle in the LZV-combination shall fulfil the requirements which apply to any other vehicle
	<b>Semi-trailer</b>	N/A	Yes		Not allowed if coupled to dolly. Free tracking axel must lock > 40 km/t			no specific requirements, each separate vehicle in the LZV-combination shall fulfil the requirements which apply to any other vehicle
	<b>Full trailer</b>	Automated	yes		No regulation			no specific requirements, each separate vehicle in the LZV-combination shall fulfil the requirements which apply to any other vehicle
	<b>Link trailer</b>				Only one free tracking axel is allowed			
<b>Towing vehicle</b>	<b>Traction requirements</b>				None			no specific requirement, 1/5 <sup>th</sup> of the combination mass shall be on the driven axles
	<b>Minimum driving axle weight</b>	N/A	< 7to (of 92% of the vehicles)		None			no specific requirement, 1/5 <sup>th</sup> of the combination mass shall be on the driven axles
	<b>Additional</b>						<ul style="list-style-type: none"> <li>- The towing truck/tractor must be approved for the combination mass used</li> <li>- No exceptions to the level of safety requirements</li> <li>- National alternative requirements for brakes – same level as Reg 13</li> </ul>	-
<b>In-use</b>	<b>Max speed</b>	Believed to be 60km/h	80 km/h	80 km/h	80	Truck-dolly-semi, tractor-link-semi		80 km/h as for any other combination, however an LZV-combination is not allowed to

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					and tractor-semi-cat others 40 km/h		overtake other vehicles which are allowed to be driven at speeds higher than 45 km/h
<b>Permitted roads</b>	All	specifically defined road network with about 95% highway proportion		Dedicated road net			The suitability of each road which may be used by an LZV is assessed. All roads which are judged positively as suitable are placed on a digital roadmap. This map can also be found on the internet, <a href="http://www.rdw-ontheffingen-lzv.nl/">http://www.rdw-ontheffingen-lzv.nl/</a>
<b>ADR vehicles</b>	Not allowed under ADR	no		Yes on ISO 1 and truck – long trailer combinations			LZV is not permitted for ADR
<b>Winter particular requirements</b>	none	No special requirements known		None			The LZV is not allowed to be used on the road in the case the roads are slippery
<b>Max speed of steered trailer</b>	As defined by the manufacturer of the trailer	80 km/h	80 km/h				No specific requirements.
<b>No passing other vehicles with more than 25km/h</b>		yes					
<b>Additional</b>				Dolly must have 2 axels and a turntable on the fifth wheel allowing $\pm 20^\circ$ Linktrailer brake performance > 50% Dolly brake performance > 55%		<ul style="list-style-type: none"> <li>- If the total mass on the driving axle(s) is less than 18 per cent of the vehicle combination mass, the towing vehicle shall, during winter time, be equipped with a device which will improve the vehicle's starting capability on a slick surface. (If the combination mass exceeds 64 tons and there is only one drive axle there must be chains, Robson drive system or something like that in winter.)</li> <li>- If the mass of the vehicle combination exceeds 68 tonnes, a minimum of 20 per cent of the combined vehicle mass shall be placed on the driving axles. (= two drive axles)</li> </ul>	

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						<ul style="list-style-type: none"><li>- Distance between first and last axle of the combination (bridge rule) e.g. 14.3 m / 60 ton or 19.3 m / 76 ton.</li><li>- Engine power 5 kW / ton for a mass of combination e.g. 60 ton / 300 kW or 76 ton / 380 kW.</li><li>- The fifth wheel of a dolly shall not turn more than <math>\pm 30^\circ</math></li><li>- ISO 18868 may be used for coupling devices of multiple trailer combinations</li></ul>	