Informal document **GRSG-117-19** 117th GRSG, 8–11 October 2019 Agenda item 22

Recreation Vehicles and GRSG

Caravans, Campers, Mobile Homes, Mobile Command Centers, and Other RV Applications under GRSG











R.E.3 Revision 1 (1997)

UNITED NATIONS			E	- 1 3	
		Distr.		TRANS/WP.29/78/Rev.1 page 19	
	Economic and Social Council	GENERAL	1.15.	Caravans.	
		TRANS/WP.29/78/Rev.1 11 August 1997		Provisions contained in Regulation No 1/.	
		Original: ENGLISH	1.16.	Driver's field of view.	
			1.16.1.	Power-driven vehicles.	
ECONOMIC COMMISSION FOR EUROPE				Provisions contained in Regulation No $2/$.	
	ORT COMMITTEE	1/ At present	, exists only	/ in draft form (TRANS/SC1/WP29/R.90/Rev	v.l)
CONSOLIDATED RESOLUTION ON THE CONSTRUCTION OF VEHICLES (R.E.3) Revision 1			WP.29 has shown interest in recreation vehicles for		
			establishing	Twenty years ago, WP.29 envisioned a separate regulation (R90) to address and other recreation vehicles along the	

lines of UN R107 for motor coaches.

R.E.3 Revision 2 (2011)

Economic and Social Council Distr.: General 30 June 2011 Original: English 2.5.1. Economic Commission for Europe Inland Transport Committee Morld Forum for Harmonization of Vehicle Regulations Consolidated Resolution on the Construction of Vehicles (R.E.3)	United Nations	ECE/TRANS/W	P.29/78/Rev.2			
Inland Transport Committee World Forum for Harmonization of Vehicle Regulations Consolidated Resolution on the Construction of Vehicles	30 June 2011					
World Forum for Harmonization of Vehicle Regulations Consolidated Resolution on the Construction of Vehicles	Economic Commission for Europe					
Consolidated Resolution on the Construction of Vehicles	Inland Transport Committee					
	World Forum for Harmonization of Vehicle Regulations					
Revision 2	Revision 2					

"Motor caravan": A special purpose M₁ category vehicle constructed to include accommodation space which contains at least the following equipment:

- (a) Seats and table;
- (b) Sleeping accommodation which may be converted from the seats;
- (c) Cooking facilities; and
- (d) Storage facilities.

This equipment shall be rigidly fixed to the living compartment; however, the table may be designed to be easily removable.

Revision 2 in 2011 provided a definition of "motor caravan" as a Category M₁ derivative. This definition has been carried through to the current Revision 6 but does not capture the diversity of our vehicles.

R.E.3 Categorizations





It's clear that the technical characteristics of a bus-sized RV differ substantially from an M₁ passenger car, just as an RV trailer is quite different from a commercial trailer.





Expandable Travel Trailers

- 19-30 ft (5.8-9 m)
- Sleeps up to eight
- Smaller models can be towed by midsize vehicles: either the family car, minivan, SUV or pickup truck
- Lightweight versions have been designed for towing behind many sixcylinder family vehicles. It is important to match the loaded weight of the RV to the towing capacity of the tow vehicle.
- Kitchen, dining, bathroom and sleeping areas standard, with additional amenities available depending upon size.





Sport Utility RV

- 19-39 ft (5.8-12 m)
- Sleeps up to eight
- Smaller models can be towed by mid-size vehicles: either the family car, minivan, SUV or pickup truck
- Kitchen, dining, bathroom, entertainment and storage.
- Slideouts in some models, which move the RV wall outward up to three feet
- Available as a motorhome or towable unit, the rear end of the SURV drops down, forming a ramp for access into a "garage" area





Conventional Travel Trailers

- 12-35 ft (3.5-10.5 m)
- Smaller models can be towed by midsize vehicles, including the family car, minivan, SUV or pickup truck equipped with a hitch.
- Important to match the loaded weight of the RV to the towing capacity of the tow vehicle
- Lightweight composite models are designed specifically for towing behind many six-cylinder family vehicles.
- Kitchen, dining, bathroom, entertainment and storage.
- Slideouts in some models move the RV wall outward up to three feet





Fifth Wheel Trailers

- 21-40 ft (6-12 m)
- Sleeps up to six
- Sleeping, showering, dining, cooking, entertainment and storage
- As many as four slideouts
- Often have a large picture window at the rear
- Lightweight models have been designed to allow the use of smaller trucks with less towing capacity
- Important to match the loaded weight of the RV to the towing capacity of the tow vehicle
- May require special driver's permit





Type A Motor RV

- 21-45 ft (6-14 m)
- Sleeps up to six
- Built on specially designed motor vehicle chassis
- Includes kitchens, bathrooms, living areas with entertainment centers and central heating and A/C
- Designed with extensive storage capacity and often include basement storage areas.
- Slideouts in some models move the RV wall outward up to three feet to create larger living areas. Many motorhome models include multiple slideouts.
- Owners may tow a small vehicle
- May require special driver's license for models that utilize air brakes or exceed weight thresholds





Type B Motor RV

- 16-22 ft (4.5-6.7 m)
- Sleeps up to four
- Built using van or panel-truck shells
- Standard conveniences include bathroom, sleeping, dining and kitchen facilities as well as storage.
- Full stand-up room is achieved by raising the roof and sometimes by the use of dropped floors, for extra interior headroom.





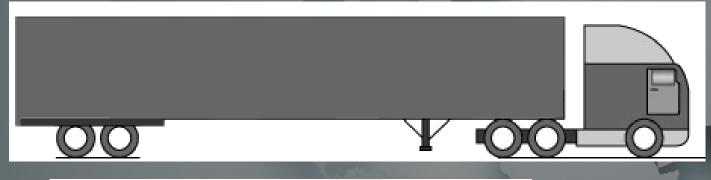
Type C Motor RV

- 21-35 ft (6-10 m)
- Sleeps up to eight
- Automotive van frame with wider body section attached to original cab section
- Over-the-cab area that often with optional sleeping area. Amenities similar conventional motorhomes.
- Ample living space includes sleeping, kitchen, dining and bathroom facilities, as well as entertainment systems and storage.
- Slideouts in some models move the RV wall outward up to three feet at the touch of a button to create larger living areas.
- Owners may tow a small vehicle
- Seats can move diving/occupant space to the living space when stopped along the way

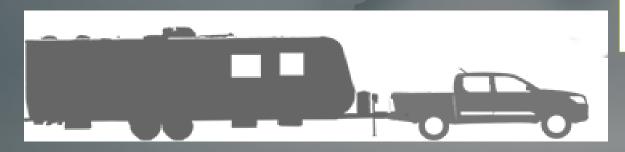




Vehicle Combinations





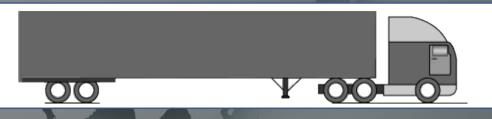


Moreover, caravans and other recreation vehicles have entirely different intended uses, including technical specifications for use in entirely different vehicle combinations than commercial trailers.

Vehicle Use

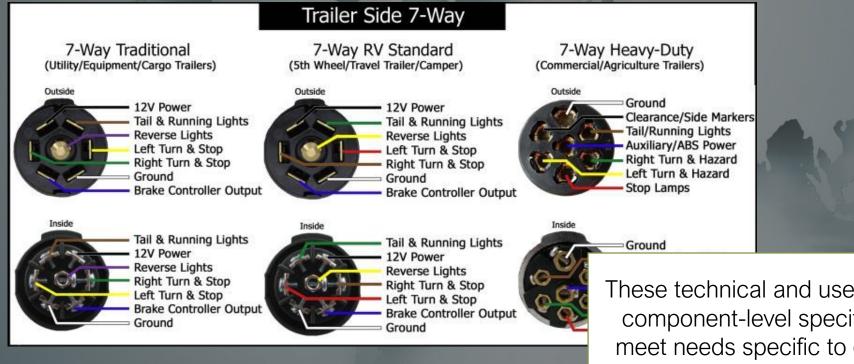


- General license drivers
- Residential accommodation
- Maximum length 11.5/12.5 m
- Towed by N₂
- < 9000 km per year
- Long idle periods
- Used 4-5 times per year
- Selective use in fair weather



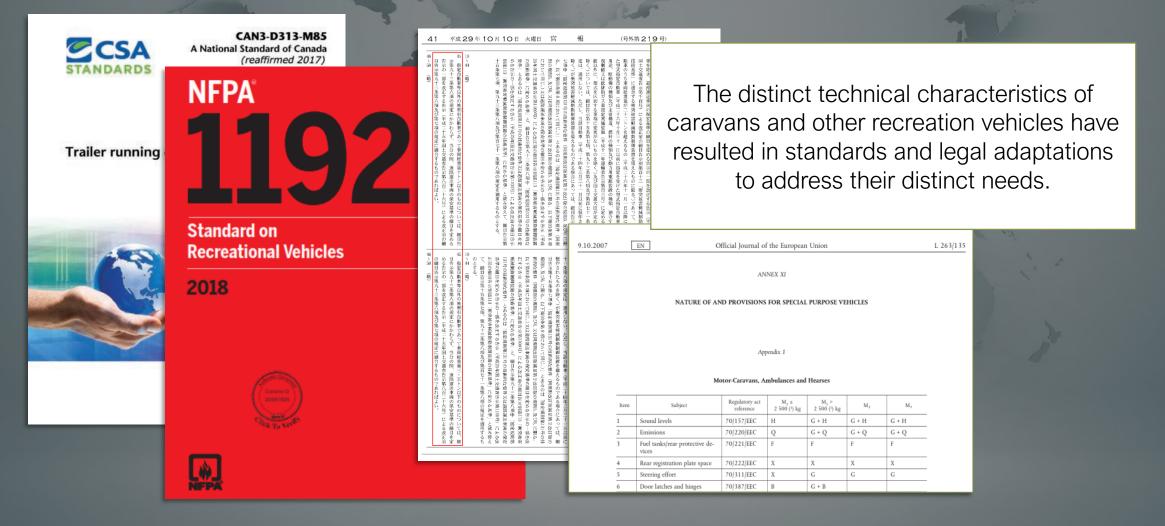
- Professional license drivers
- Cargo transport
- Average length 14.5 m
- Towed by N₃
- ≈120,000 km per year
- Intensive use
- Economic rationale for high use
- Obligatory use in all weather

SAE J2863 and ISO 7638



These technical and use differences extend to component-level specifications intended to meet needs specific to general public use of recreation vehicles, including in combination with light and medium cars and vans.

RV Technical Provisions and Exceptions



Harmonized RV Definitions

- Recreation vehicles present distinct technical characteristics.
- These characteristics differ from other vehicle types.
- Stakeholders worldwide have been obliged to make local provisions to address recreation vehicles.
- The global RV industry believes that harmonized descriptions for recreation vehicles would benefit all stakeholders.
- As the GR with deep expertise in vehicle construction, we would like to pursue this under GRSG auspices.
- The global RV industry is prepared to commit resources to support such an effort.

Request to GRSG

Would GRSG be willing to work with the RV industry to develop a global reference guide to support the work of WP.29?

Thank you for your consideration.

For further information, please contact Bruce A. Hopkins, Vice President, Standards RV Industry Association Office: +1 703 620 6003, 323 Mobile: +1 703-624-437 Email: bhopkins@rvia.org