



Proposal on the categorization of Automated Vehicles

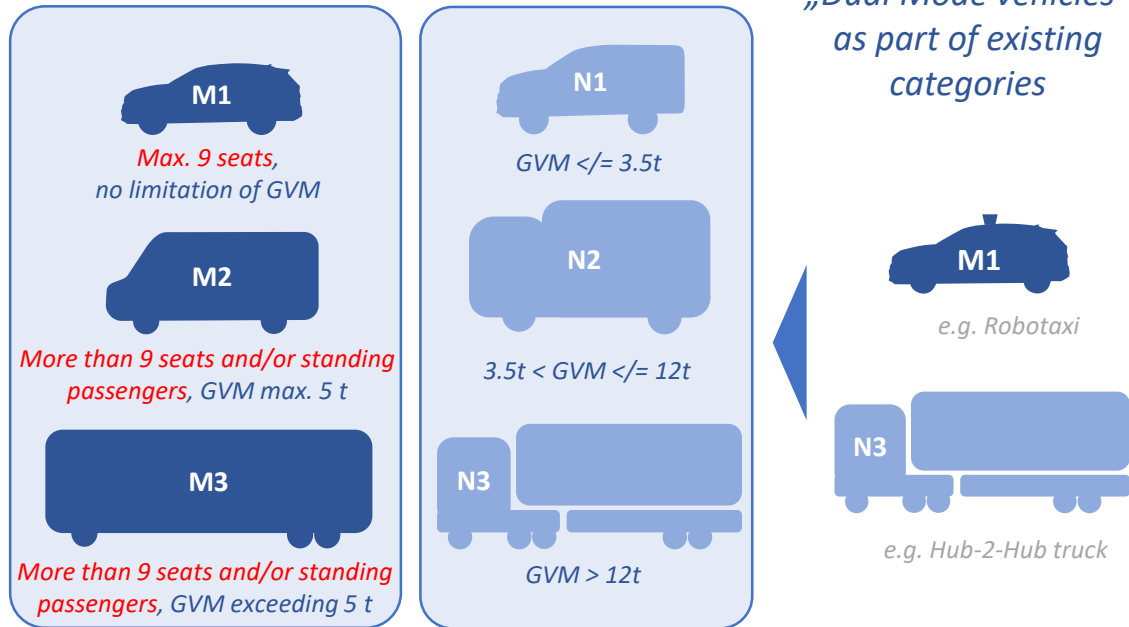
- Update -

Vehicle categorization under R.E.3

Designed primarily for the carriage of people

Designed primarily for the carriage of goods

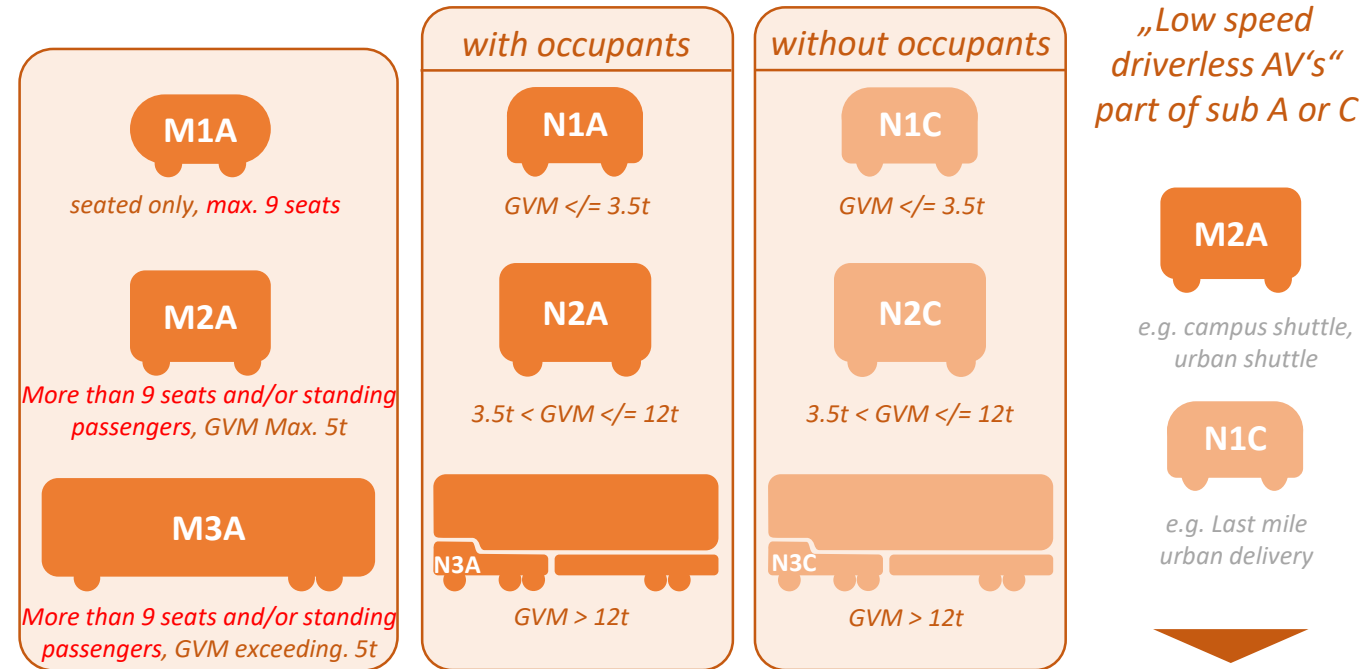
„Dual Mode vehicles“ as part of existing categories



Subcategories „Driverless Vehicles with ADS“

Designed primarily for the carriage of people

Designed primarily for the carriage of goods



*Class I, II, III and Class A, B, ... can be carried over

Requirements in non-ADS Regs to be adequately adapted based on use-case

Subcategory A – designed for carrying occupants

Subcategory C - goods only

Vehicles which can be driven manually under nominal conditions

AV’s which do not require a driver/fallback-ready user

Categories according to Consolidated Resolution R.E.3

Required amendments to existing Definitions:

2.2. Category M - Power-driven vehicles having at least four wheels and used for the carriage of passengers

- 2.2.1. "Category M1": Vehicles used for the carriage of passengers and comprising not more than ~~eight~~ **nine** seats ~~in addition to the driver's seat~~.
- 2.2.2. "Category M2": Vehicles used for the carriage of passengers, comprising more than ~~eight~~ **nine** seats ~~in addition to the driver's seat~~ and/or **designed to carry standing passengers**, and having a maximum mass not exceeding 5 tonnes.
- 2.2.3. "Category M3": Vehicles used for the carriage of passengers, comprising more than ~~eight~~ **nine** seats ~~in addition to the driver's seat~~ and/or **designed to carry standing passengers**, and having a maximum mass exceeding 5 tonnes.
- 2.2.4. Vehicles of categories M2 and M3 belong to:
 - 2.2.4.1. For vehicles having a capacity exceeding **[23] occupants** ~~22 passengers in addition to the driver~~, there are three classes of vehicles:
 - 2.2.4.1.1. "Class I": Vehicles constructed with areas for standing passengers, to allow frequent passenger movement.
 - 2.2.4.1.2. "Class II": Vehicles constructed principally for the carriage of seated passengers, and designed to allow the carriage of standing passengers in the gangway and/or in an area which does not exceed the space provided for two double seats.
 - 2.2.4.1.3. "Class III": Vehicles constructed exclusively for the carriage of seated passengers.
 - 2.2.4.1.4. A vehicle may be regarded as belonging in more than one class. In such a case it may be approved for each class to which it corresponds.
 - 2.2.4.2. For vehicles having a capacity not exceeding **[23] occupants** ~~22 passengers in addition to the driver~~, there are two classes of vehicles:
 - 2.2.4.2.1. "Class A": Vehicles designed to carry standing passengers; a vehicle of this class has ~~seats and shall have~~ provisions for standing passengers **and may have seats**.
 - 2.2.4.2.2. "Class B": Vehicles not designed to carry standing passengers; a vehicle of this class has no provision for standing passengers.

Categories according to Consolidated Resolution R.E.3

New categories:

New “Driverless Vehicles” subcategory:

2.y. Category A – Driverless vehicles with Automated Driving Systems designed to carry occupants

2.y.1. Definition.

Driverless vehicles of this subcategory are vehicles of category M or N which are equipped with an Automated Driving System which by design prevents the vehicle to be driven manually except for specific purposes outside nominal operation (e.g. maintenance, remote intervention, ...) and which are designed to carry occupants.

2.y.2. Combined designation

Symbols M and N may be combined with symbol A. For example, a vehicle of category M1 which is considered a driverless vehicle shall be designated as M1A.

2.z. Category C – Driverless vehicles with Automated Driving Systems designed to carry goods only [(no occupants)]

2.z.1. Definition.

Driverless vehicles of this subcategory are vehicles of category N which are equipped with an Automated Driving System which by design prevents the vehicle to be driven manually except for specific purposes outside nominal operation (e.g. maintenance, remote intervention, ...) and which are designed to carry goods only [(no occupants)].

2.z.2. Combined designation

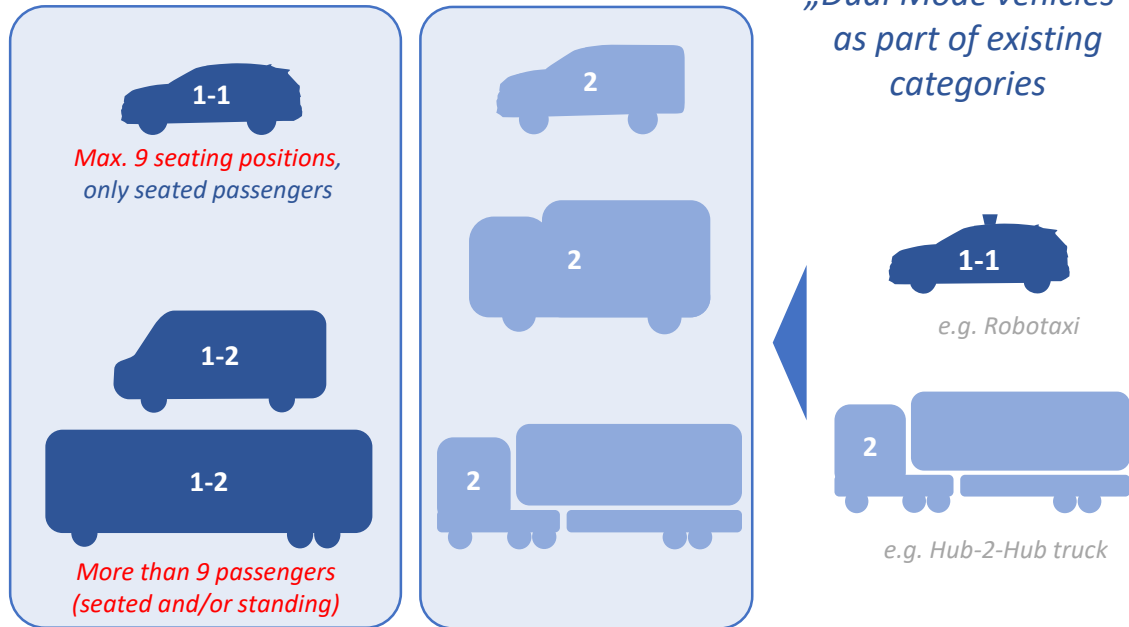
Symbol N may be combined with symbol C. For example, a vehicle of category N1 which is considered a driverless vehicle designed to carry cargo only shall be designated as N1C.

Vehicle categorization under S.R.1

Designed primarily for the carriage of people

Designed primarily for the carriage of goods

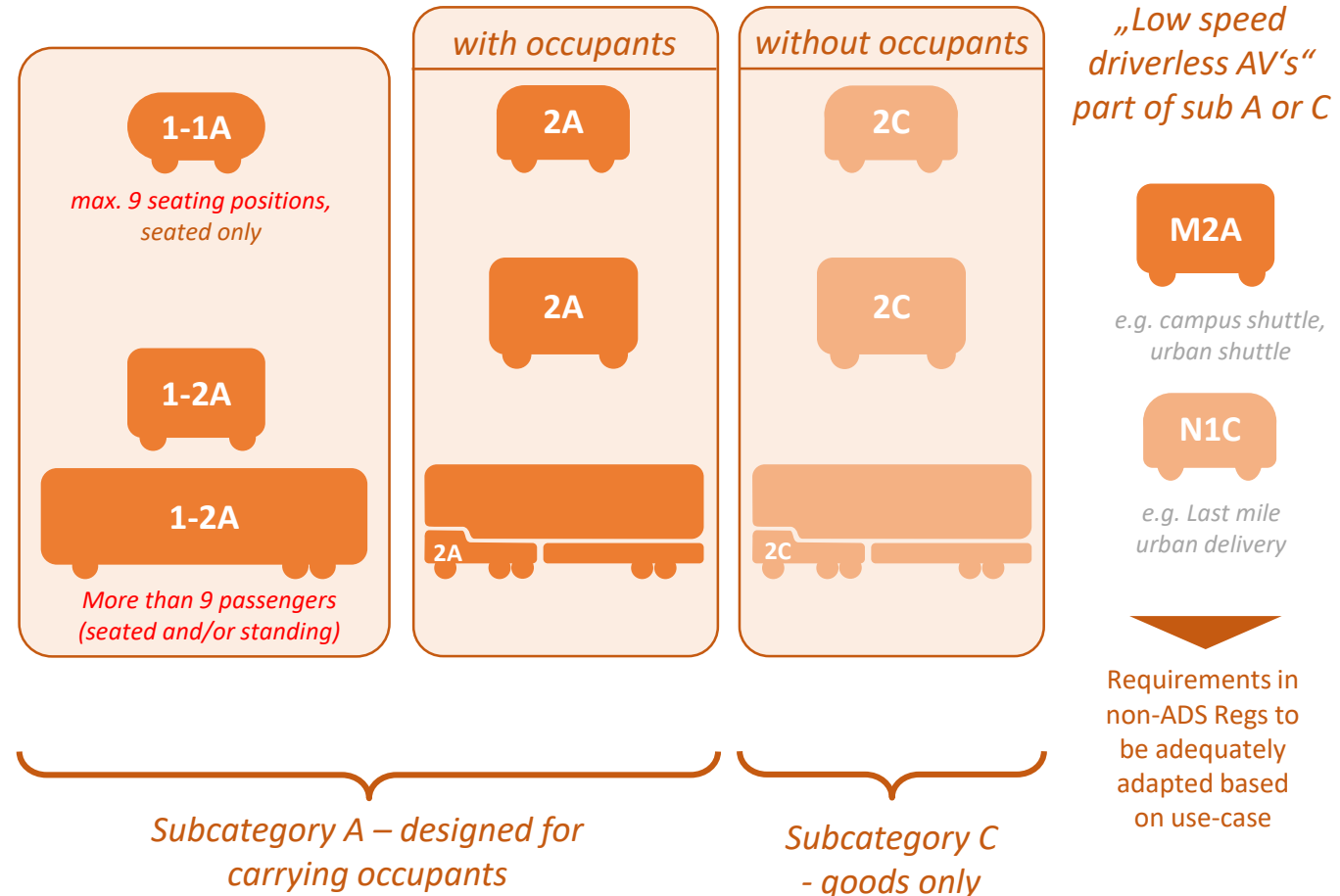
„Dual Mode vehicles“ as part of existing categories



Subcategories „Driverless Vehicles with ADS“

Designed primarily for the carriage of people

Designed primarily for the carriage of goods



Vehicles which can be driven manually under nominal conditions

AV’s which do not require a driver/fallback-ready user

Categories according to Special Resolution S.R.1

Required amendments to existing Definitions:

1. POWER DRIVEN VEHICLES WITH FOUR OR MORE WHEELS
 - 1.1. "Category 1 vehicle" means a power driven vehicle with four or more wheels designed and constructed primarily for the carriage of (a) person(s).
 - 1.1.1. "Category 1-1 vehicle" means a category 1 vehicle comprising not more than ~~eight~~ nine seating positions ~~in addition to the driver's seating position~~. A category 1-1 vehicle cannot have standing passengers.
 - 1.1.2. "Category 1-2 vehicle" means a category 1 vehicle designed for the carriage of more than ~~eight~~ nine passengers, whether seated or standing, ~~in addition to the driver~~.
 - 1.2. "Category 2 vehicle" means a power driven vehicle with four or more wheels designed and constructed primarily for the carriage of goods. This category shall also include:
 - i) tractive units
 - ii) chassis designed specifically to be equipped with special equipment.

Categories according to Special Resolution S.R.1

New categories:

New “Driverless Vehicles” subcategory:

2.y. Category A – Driverless vehicles with Automated Driving Systems designed to carry occupants

2.y.1. Definition.

Driverless vehicles of this subcategory are vehicles of category 1-1, 1-2 or 2 which are equipped with an Automated Driving System which by design prevents the vehicle to be driven manually except for specific purposes outside nominal operation (e.g. maintenance, remote intervention, ...) and which are designed to carry occupants.

2.y.2. Combined designation

Symbols 1-1, 1-2 and 2 may be combined with symbol A. For example, a vehicle of category 1-1 which is considered a driverless vehicle shall be designated as 1-1A.

2.z. Category C – Driverless vehicles with Automated Driving Systems designed to carry goods only [(no occupants)]

2.z.1. Definition.

Driverless vehicles of this subcategory are vehicles of category 2 which are equipped with an Automated Driving System which by design prevents the vehicle to be driven manually except for specific purposes outside nominal operation (e.g. maintenance, remote intervention, ...) and which are designed to carry goods only [(no occupants)].

2.z.2. Combined designation

Symbol 2 may be combined with symbol C. For example, a vehicle of category 2 which is considered a driverless vehicle designed to carry cargo only shall be designated as 2C.

Thank you!