**R55-07-zz**

Item 26 Specification fixing points A50X towbar or similar couplings*140530*

This is a revised proposal R55-05-12. The appendix, the list with the installation data, is now proposed to be a part of Annex 2. Annex 2 is the approval communication of a vehicle type with regard to the fitting of a mechanical coupling device. That place seems better and more in line with the list in R13H with regard to the replacement brake linings. Where possible I tried to simplify the wording.
An annex to this proposal is added to clarify the importance of clear information from the vehicle manufacturer since without the information of the vehicle manufacturer a manufacturer of towbars cannot apply for a type approval of his product without having the information from the vehicle manufacturer.In the regulation at several places is reference is made to the information which the vehicle manufacturerer has to supply to the coupling manufacturer. In the annex to this proposal those references are collected to have a better overview.

**Regulation R55**

*paragraph 3.2.8 amend to read:*

3.2.8. in the case of a mechanical coupling device or component designed for a specific vehicle type, the manufacturer of the device or component shall also submit the installation data**, according to Annex 2 Appendix 1,** given by the vehicle manufacturer. The approval authority or technical service may also request that a vehicle representative of the type be submitted.

*Paragraph 5.1. amend to read:*

5.1. Where a vehicle manufacturer applies for approval of a vehicle fitted with a mechanical coupling device or component or authorises the use of a vehicle for towing any form of trailer, then, at the request of a bona fide applicant for possible type approval for a mechanical coupling device or component, or of the type approval authority or technical service of a Contracting Party, the vehicle manufacturer shall readily make available to that inquirer or authority or technical service, such information as required in ~~paragraph 5.3. below~~ **Annex 2 Appendix 1**, to enable a manufacturer of a coupling device or component to properly design and manufacture a mechanical coupling device or component for that vehicle. At the request of a bona fide applicant for possible type approval for a mechanical coupling device or component, any information given in ~~paragraph 5.3. below~~ **Annex 2 Appendix 1** which is held by the type approval authority shall be released to that applicant.

*Paragraph 5.3. amend to read:*

5.3. It shall be accompanied by the following information to enable the type approval authority to complete the communication form given in annex 2.

5.3.1. a detailed description of the vehicle type **according to Annex 2 appendix 1** and of the mechanical coupling device or component and, at the request of the type approval authority or technical service, a copy of the approval form for the device or component;

*Delete paragraph 5.3.2. and 5.3.2.1.*

~~5.3.2.~~ ~~The information shall also include the maximum permissible masses of the towing and towed vehicles, the distribution of the maximum permissible mass of the towing vehicle between the axles, the maximum permissible axle masses, the maximum permissible vertical loading to be imposed on the rear of the towing vehicle and details and/or drawings of the installation mounting points for the device or component and of any additional reinforcing plates, support brackets and so on, necessary for safe attachment of the mechanical coupling device or component to the towing vehicle;~~

~~5.3.2.1. the loading condition at which the height of the tow ball of M1 category vehicles is to be measured - see paragraph 2 of annex 7, appendix 1.~~

*Annex 1 paragraph 10 and 11 amend to read:*

10. Instructions for the attachment of the coupling device or component

type to the vehicle and photographs or drawings of the mounting

points **(see Annex 2 appendix 1)** given by the vehicle manufacturer:

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

11. Information on the fitting of any special reinforcing brackets or

plates or spacing components necessary for the attachment of the

coupling device or component **(see Annex 2 appendix 1)**:

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

*Annex 2 paragraph 8 and 9 amend to read:*

8. Instructions for the attachment of the coupling device or component type

to the vehicle and photographs or drawings of the mounting points **(see appendix 1)**:

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

9. Information on the fitting of any special reinforcing brackets or plates

or spacing components necessary for the attachment of the coupling device

or component **(see appendix 1)**:

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

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*Insert Annex 2 - Appendix 1*

**Annex 2 – Appendix 1 \***

**LIST OF INSTALATION DATA FOR A MECHANICAL COUPLING DEVICE OR COMPONENT DESIGNED FOR A SPECIFIC VEHICLE TYPE.**

**1. Description of the vehicle type:**

**1.1. Trade name or mark of the vehicle,**

**1.2. Models or trade names of vehicles constituting the vehicle type, if available.**

**2. Masses of the towing and towed vehicles:**

**2.1. maximum permissible masses of the towing and towed vehicles,**

**2.2.**  **the distribution of the maximum permissible mass of the towing vehicle between the axles**

**2.3. the maximum permissible axle masses of the towing vehicle,**

**2.4. the maximum permissible vertical loading to be imposed on the rear of the towing vehicle,**

**2.5. the loading condition at which the height of the tow ball of M1 category vehicles is to be measured - see paragraph 2 of annex 7, appendix 1.**

**3. Specification of fixing points:**

**3.1. Details and/or drawings of the installation mounting points for the device or component and of any additional reinforcing plates, support brackets and so on, necessary for reliable attachment of the mechanical coupling device or component to the towing vehicle,**

**3.2. The vehicle manufacturer shall specify:
- the number and location of the fixing points of the coupling device on the motor vehicle
- the maximum permissible overhang of the coupling point
- the height of the coupling point above the road surface as specified in Annex 7 par. 1.1.1. and the height of the coupling point in relation to the fixing points of the coupling,**

**3.3. For every fixing point the following shall be specified (if applicable):
- The location of each hole to be drilled in the chassis or the body of the vehicle (specification of the maximum diameter to be drilled),
- The location and size of pre-drilled holes (specification of the diameter of the hole),
- The location and size of captive nuts or bolts (specification of the thread size).
- The material to be used for attachment (e.g. securing bolts, washers etc.)
- Any additional mounting point to be used for the attachment of coupling devices (e.g. the towing eye).
The specification of the dimensions shall be specified with an accuracy of at least ±1mm
The vehicle manufacturer may specify other specifications with regard to the fitting of the coupling device (e.g. size & thickness of back plates).**

**4. Manufacturer’s name and address of the vehicle manufacturer.**

**\* At the request of (an) applicant(s) for a mechanical coupling device or component designed for a specific vehicle type, the information shall be provided by the vehicle manufacturer or by the type approval authority as contained in Appendix 1 to this annex.**

**However, this information shall not be provided for purposes other than Regulation No. 55**

**approvals.**

*Annex 5 paragraph 1.2. amend to read:*

1.2. The shape and dimensions of towing brackets shall meet the requirements of the vehicle manufacturer concerning the attachment points and additional mounting devices or components ~~if necessary~~ **, see Annex 2 appendix 1.**

*Annex 6 paragraph 3.1.3 amend to read:*

3.1.3. The positions of the fixing points for attaching the coupling ball and towing bracket are specified by the vehicle manufacturer (see **Annex 2 Appendix 1** ~~paragraph 5.3.2.~~ of this Regulation).

*Annex 7 paragraph 1.1.2. amend to read:*

1.1.2. For coupling balls and towing brackets the vehicle manufacturer shall supply mounting instructions and state whether any reinforcement of the fixing area is necessary (see **Annex 2 Appendix1** ~~paragraph 5.3.2.~~ of this Regulation).

*Justification;*

Towbar manufacturers sometimes have problems obtaining the clear, unmistakable drawings with correct fixing points from the vehicle manufacturer. For technical services it is difficult to assess unclear drawings of the fixing points. Subsequently there are several examples of type-approved towbars on the market (designed for the same vehicle type) which use different fixing points. Some examples are shown in document R55-02-07. To minimize the problems resulting from unclear fixing points the regulation should specify more in detail the requested information.

The place where the requirements with regard to the fixing points should be put is not too easy. In a first proposal requirements were put in a new paragraph 5.3.3. In a second proposal the requirements were put in an appendix to Annex 7 (installation) analogous to the information for the purpose of a R90-approval (replacement brake pads, etc.) asked for in regulation R13 (braking systems).
However the situation in R55 differs from the situation in R13 and R90. Every vehicle manufacturer needs an approval according R13 and the vehicle-information necessary for the R90-approval can be asked for relatively simple in an appendix to the R13 approval communication. Unfortunately not every vehicle manufacturer applies for a R55-approval. In the EU the information of the fixing point for towbars is obtained via the directive masses and dimensions. The UNECE does not have such a regulation. Nevertheless it is believed that with good specified requirements, with regard to the fixing points for towbars and the like, in R55 the goal (better information for the coupling manufacturer and the technical services) will be achieved.

The set up of the proposed Annex 2 appendix 1 is similar to R13 H Annex 1 – Appendix 1 – (list of vehicle data for the purpose of regulation no. 90 approvals). This proposal is basically the same as the proposal in document R55-05-12 however the place for the appendix with the information about the fixing points is changed from Annex 7 (installation) to Annex 2 (communication) to be more in line with R13 H and R 90. The data asked for is copied from the current paragraph 5.3.2..

The introduction of an appendix is preferred above putting the requirements in the existing text. In the form of an appendix the information can be easily referred to and the information can be easily supplied to the coupling-manufacturer by the vehicle manufacturer or by the approval authority.