Icelandic Transport Authority

9.2. Regulation R55. Provisions regarding installation of coupling devices to vehicles. **(Germany 3)**

1. Reference

2.11.1.

" T is the **technically permissible maximum mass** of the towing vehicle, in tonnes. Where relevant, this includes the vertical load imposed by a centre axle trailer.

R is the **technically permissible maximum mass**, in tonnes, of a trailer with drawbar free to move in a vertical plane, or of a semitrailer.

C is the mass, in tonnes, transmitted to the ground by the axle or axles of the centre axle trailer, as defined in paragraph 2.13., when coupled to the towing vehicle and loaded to the **technically permissible maximum mass**. ….."

2. Issue
The definitions to T, R and C for the calculation of the reference values D, resp. Dc name the technically permissible masses of the vehicles in question. This is logic and obvious in the case of a trailer and also for a towing vehicle where the sum of its technically permissible mass (M) and its technically permissible maximum towable load (TM) equals its technically permissible maximum mass of the combination (MC).
E.g.: M=26t, TM=24t, MC=50t, the values fort the D-formula are T=26t, C or R=24t (D=122,4kN)

However, it is not uncommon that in the case of a towing vehicle its technically permissible maximum mass of the combination (MC) is less than the sum of its technically permissible mass (M) and its technically permissible maximum towable load (TM).
E.g.: M=26t, TM=24t, MC=42t,

In this case the situation where both vehicles will have their technically permissible maximum mass will not occur, their masses range from

T=18t and C or R=24t (D=100,9kN)

to
T=26t and C or R= 16t (D=97,2kN)

Using the values for the technically permissible maximum mass of both vehicles in the calculation will result in oversizing the coupling for the towing vehicle. In this case maximum D-values for a given technically permissible maximum mass of the combination (MC) will not emerge when assuming the technically permissible maximum mass of one vehicle and the complementary mass of the other but rather when both vehicles have the same mass.

I.e. the values fort the D-formula are T=21t, C or R=21t (103kN)

KBA has been accepting this kind of approach when dealing with the situation MC<M+TM , however, this approach has lately been questioned mainly for formal reasons as to the wording of 2.11.1.
It shall be conceded that UN R55 does neither provide for an information document requiring to declare a value for the technically permissible maximum mass of the combination (MC) nor does annex 2. On the other hand the regulation considers this mass also as an important value when determining reference values:

"5.3.5.1 The characteristic values shall be at least equal to those applicable to the maximum permissible towing vehicle, trailer and combination masses."

In this light KBA sees the mentioned approach also in line with the regulation.

Question:
Do the other approval authorities share this approach?

		Possibilities of solution	Comments
	A	When MC<M+TM then T+R (resp. C)=MC while T= R (resp. C) for maximum D-value	Oversizing of coupling should be avoided Permitted by 5.3.5.1.
	B	When MC<M+TM even so both M and TM must be used for T,R and C	Might be mandated by the wording of 2.11.1

Type approving authority "e"	1

Selection of solution		accepted	refused
	A	X	
	B		X

Different views on this question. Majority is in favour of solution B but it was decided to forward this question to working group in Geneva. The German delegation will present the question. Move to next TAAM.