Amendment Proposal:

Extended application of certified characteristic performance values.

Coupling equipment with the certified characteristic values Dcert, Dc-cert, Vcert and Scert may subject to the restrictions below be used in vehicle combinations requiring other performance characteristics Dreq, Dc-req, Vreq and Sreq.

To account for the influence a support load different from Scert the definition.

Vallowable ≤ Vcert – 0,5\*(Sreq – Scert)\*g/1000

is made.

When Sreq ≥ Scert the combined required Dc-req and Vreq shall fulfil the inequalities:

$$\frac{V\_{req}}{V\_{allowable}}\leq 1-\frac{D\_{c-req}-D\_{c\_{cert}}}{D\_{cert}-D\_{c\_{cert}}}$$

 *Vreq ≤ Vallowable*

 $\frac{V\_{alt}}{V}+\frac{sin⁡(π\frac{V\_{alt}}{V})}{10}$

When Sreq ≤ Scert and **if** it can be positively shown that the certified support load Scert on its own, causes tensile stresses at the critical locations of the two way certification test, then the same inequalities can be applied. NB! If the tensile stresses from the support load cannot be positively shown the inequalities do not apply for Sreq ≤ Scert .Then retesting is required.

Justification:

Currently if a vehicle combination has required performance values Dreq, Dc-req, Vreq and Sreq  where Dc-cert ≤ Dc-req ≤ Dcert and Vreq ≤ Vcert this is a no-go situation according to UNECE R55. However everyone that are a bit acquainted with this area know that e.g. the requirement combination Vreq = 0.1\* Vcert  and Dc-req ≤ Dcert +0.1\*( Dcert - Dc-cert) would work perfectly well. Situations like this are very common in combinations comprising a rigid truck + a converter dolly + a semi-trailer. These are running without problem. Apart from this some coupling equipment have multiple certified values that support the proposal. Furthermore fatigue analyses have been performed to verify the proposal

I.e. the proposal is an adaptation to the existing reality in the field.