D- and V-Values by comparison

	german draft:	**italian draft:**	**R55 01:**	**relation:**
1	$D = g\cdot(T\cdot R)/(T+R)$		$D = g\cdot(T\cdot R)/(T+R)$	
2	$D_c = g\cdot(T\cdot C)/(T+C)$		$D_c = g\cdot(T\cdot C)/(T+C)$	
3	$V_a = (a_a\cdot m_1 + b_a)\cdot g\cdot h/l$	$V_{ai} = 0{,}7\cdot R\cdot h/l * g$	$V = a\cdot C\cdot X^2 / L^2$	
4	$F_{hsch} = 1{,}0\cdot D_c$		$F_{hw} = \pm 0{,}6\cdot D_c$	$F_{hw} = 0{,}6\cdot F_{hsch}$
5	$F_{ssch} = S\cdot g + 0{,}6\cdot V_a\cdot d_a$	$F_s = R_v + 0{,}7\cdot R\cdot h/l$	$F_{sw} = g\cdot S \pm 0{,}6\cdot V$	$F_{sw} = 0{,}6\cdot F_{ssch}$

1	D =	80,79	D =		D =	80,79	
2	D_c =	77,25	D_c =		D_c =	77,25	
3	V_a =	55,72	V_{ai} =	54,94	V =	43,20	
4	F_{hsch} =	77,25	F_h =		F_{hw} =	-46,35	46,35
5	F_{ssch} =	34,66	F_s =	25,60	F_{sw} =	-6,30	45,54

references:

german draft: german national TA 31 (off road vehicles)
(technical requirements No. 31)
up to 40 km/h with a speed coefficient "d" for the test force

italian draft: CUNA NC 038-03 (off road vehicles)

R55 01: status 28.08.2010 (on road vehicles)

notes:		**Values:**	
T	the technically permissible maximum mass of the towing vehicle, in tonnes	14,00	t
R	is the technically permissible maximum mass, in tonnes	20,00	t
C	is the mass, in tonnes, transmitted to the ground by the axle or axles of the centre axle trailer	18,00	t
S	the static vertical load at the coupling point	2,00	kg
$R_v = g\cdot S$		20,00	t
D	D-value for multi axle trailers (horizontal force)		kN
D_c	D-value for centre axle trailers (horizontal force)		kN
V	V-value for the centre axle trailer (vertical force)		kN
V_a	V-value (agriculture) for the centre axle trailer (vertical force) german version		kN
V_{ai}	V-value (agriculture) for the centre axle trailer (vertical force) italien version		kN
da	a speed coefficient which depends on the speed and brakes of the rigid drawbar trailer	0,45	
$m_1 = R$		20,00	t
a_a	correction factor which depends on the rigid drawbar trailer's permissible maximum mass m1	0,85	
b_a	correction factor which depends on the rigid drawbar trailer's permissible maximum mass m1	-2,80	t
g		9,81	m/s^2
h	height in metres of the trailer's centre of gravity when loaded to the permissible maximum mass		m
l	distance in metres between the centre of the coupling ring and the centre of the axle assembly		m
h/l		0,40	
X	the length of the loading area of the trailer, in metres		m
L	the distance from the centre of the drawbar eye to the centre of the axle assembly, in metres		m
X^2/L^2		1,00	
a	for air suspension: a = 1,8 m/s^2; for other types of suspension: a = 2,4 m/s^2	2,40	m/s^2
v	speed limit	40,00	km/h

a_a	a = 0.83 for m1 < 3.5 t,	0,83
	a = 0.52 for m1 ≥ 3.5 t and ≤ 12.0 t,	0,52
	a = 0.85 for m1 > 12.0 t.	0,85
b_a	b = 0.0 t for m1 < 3.5 t,	0,00
	b = 1.1 t for m1 ≥ 3.5 t and ≤ 12.0 t,	1,10
	b = -2.8 t for m1 > 12.0 t.	-2,80
da	d = 1.00 for braked trailers with a speed of up to 80 km/h	1,00
	d = 0.90 for braked trailers with a speed of up to 60 km/h	0,90
	d = 0.80 for braked trailers with a speed of up to 40 km/h	0,80
	d = 0.45 for trailers without brakes with a speed of up to 40 km/h	0,45

D- and V-Values by comparison

	german draft:		italian draft:		R55 01:		relation:
1	$D = g\cdot(T\cdot R)/(T+R)$				$D = g\cdot(T\cdot R)/(T+R)$		
2	$D_c = g\cdot(T\cdot C)/(T+C)$				$D_c = g\cdot(T\cdot C)/(T+C)$		
3	$V_a = (a_a\cdot m_1 + b_a)\cdot g\cdot h/l$		$V_{ai} = 0{,}7\cdot R\cdot h/l$		$V = a\cdot C\cdot X^2 / L^2$		
4	$F_{hsch} = 1{,}0\cdot D_c$				$F_{hw} = \pm 0{,}6\cdot D_c$		$F_{hw} = 0{,}6\cdot F_{hsch}$
5	$F_{ssch} = S\cdot g + 0{,}6\cdot V_a\cdot d_a$		$F_s = R_v + 0{,}7\cdot R\cdot h/l$		$F_{sw} = g\cdot S \pm 0{,}6\cdot V$		$F_{sw} = 0{,}6\cdot F_{ssch}$
1	D =	#DIV/0!	D =		D =	#DIV/0!	
2	D_c =	#DIV/0!	D_c =		D_c =	#DIV/0!	
3	V_a =	0	V_{ai} =	0	V =	0	
4	F_{hsch} =	#DIV/0!	F_h =		F_{hw} =	#DIV/0!	#DIV/0!
5	F_{ssch} =	0	F_s =	0	F_{sw} =	0	0

references:

german draft:	german national TA 31 (off road vehicles) (technical requirements No. 31) up to 40 km/h with a speed coefficient "d" for the test force
italian draft:	CUNA NC 038-03 (off road vehicles)
R55 01:	status 28.08.2010 (on road vehicles)

notes:		Values:	
T	the technically permissible maximum mass of the towing vehicle, in tonnes		t
R	is the technically permissible maximum mass, in tonnes		t
C	is the mass, in tonnes, transmitted to the ground by the axle or axles of the centre axle trailer		t
S	the static vertical load at the coupling point		kg
$R_v = g\cdot S$			t
D	D-value for multi axle trailers (horizontal force)		kN
D_c	D-value for centre axle trailers (horizontal force)		kN
V	V-value for the centre axle trailer (vertical force)		kN
V_a	V-value (agriculture) for the centre axle trailer (vertical force) german version		kN
V_{ai}	V-value (agriculture) for the centre axle trailer (vertical force) italien version		kN
da	a speed coefficient which depends on the speed and brakes of the rigid drawbar trailer		
$m_1 = R$			t
a_a	correction factor which depends on the rigid drawbar trailer's permissible maximum mass m1		
b_a	correction factor which depends on the rigid drawbar trailer's permissible maximum mass m1		t
g		9,81	m/s^2
h	height in metres of the trailer's centre of gravity when loaded to the permissible maximum mass		m
l	distance in metres between the centre of the coupling ring and the centre of the axle assembly		m
h/l			
X	the length of the loading area of the trailer, in metres		m
L	the distance from the centre of the drawbar eye to the centre of the axle assembly, in metres		m
X^2/L^2			
a	for air suspension: a = 1,8 m/s^2; for other types of suspension: a = 2,4 m/s^2		m/s^2
v	speed limit		km/h

a_a	a = 0.83 for m1 < 3.5 t,	0,83
	a = 0.52 for m1 ≥ 3.5 t and ≤ 12.0 t,	0,52
	a = 0.85 for m1 > 12.0 t.	0,85
b_a	b = 0.0 t for m1 < 3.5 t,	0
	b = 1.1 t for m1 ≥ 3.5 t and ≤ 12.0 t,	1,1
	b = -2.8 t for m1 > 12.0 t.	-2,8
da	d = 1.00 for braked trailers with a speed of up to 80 km/h	1
	d = 0.90 for braked trailers with a speed of up to 60 km/h	0,9
	d = 0.80 for braked trailers with a speed of up to 40 km/h	0,8
	d = 0.45 for trailers without brakes with a speed of up to 40 km/h	0,45