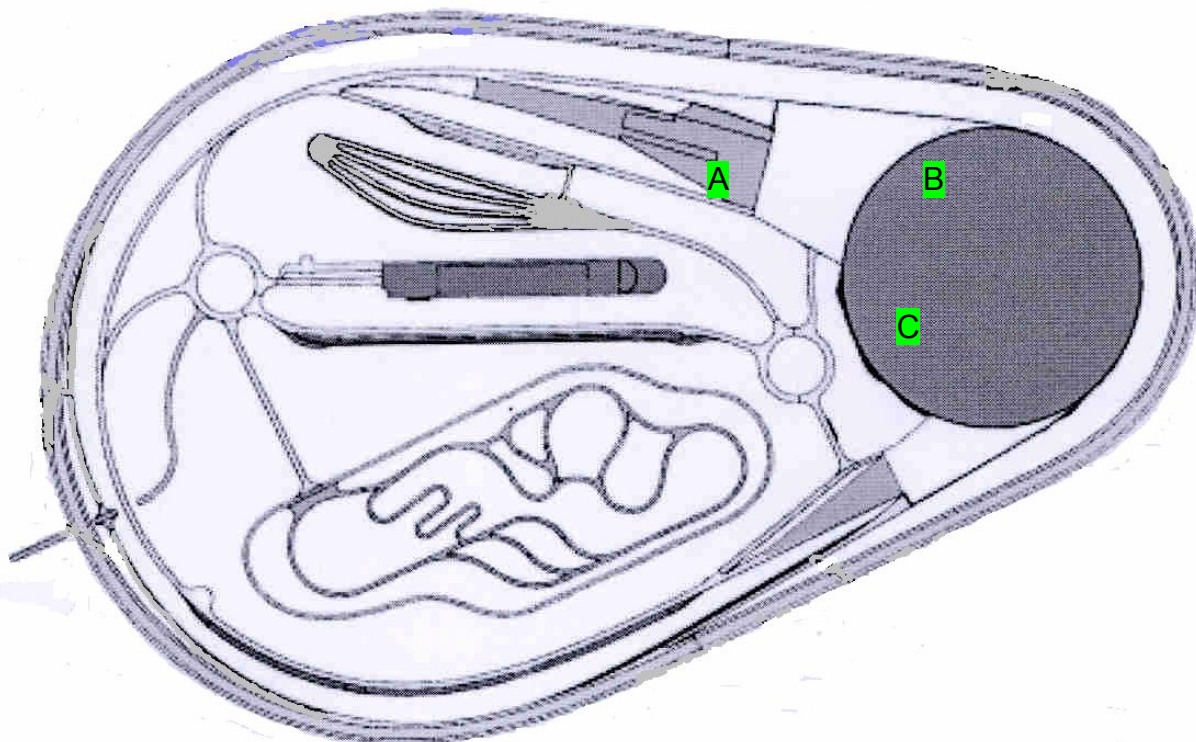


GRRF EVSC Ad-hoc Working Group Meeting
6th/7th July 2005

Agenda for the 6th – Vehicle Demonstration Programme at Boxberg

Venue: Mercure Hotel Stuttgart Münchingen, and Bosch proving ground Boxberg

- 8.30 – 9.00 hrs** Demonstration briefing
- 9.15 hrs** Depart Mercure hotel for Boxberg by coach
- 10.45 hrs** Arrive at Boxberg and carry-out admission formalities. Additional observers (those who travel to Boxberg independently) join the coach.
- 11.00 hrs** Coach enters test ground
- 2 laps of high speed circuit
 - coach parks at test area 'B'
 - observer group 'red' walks to test area 'A' and observer group 'yellow' walks to test area 'C'
 - observer group 'blue' remains at test area 'B'
 - trailer located at each test area for use as a viewing stand
 - each trailer contains refreshments which can be consumed through-out the day
 - coach provides toilet facilities



- 11.15 hrs** Demonstrations start
- split- μ single lane change in area 'A' (directional control)
 - double lane change and J-turn in area 'B' (roll-over control)
 - constant radius circle, J-turn and double lane change in area 'C' (roll-over control)
- 12.15 – 12.25 hrs** Observer groups change test areas (walk)
- 'red' group from 'A' to 'B'
 - 'blue' group from 'B' to 'C'
 - 'yellow' group from 'C' to A
- 12.25 – 13.25 hrs** Demonstrations continue
- 13.25 – 13.35 hrs** Observer groups change test areas (walk)
- 'red' group from 'B' to 'C'
 - 'blue' group from 'C' to 'A'
 - 'yellow' group from 'A' to B
- 13.35 – 14.35 hrs** Demonstrations continue
- 14.35 – 15.00 hrs** Vehicles and observers meet in area 'C' to enable observers to view vehicles at close quarters
- 15.00 hrs** Depart Boxberg
- 16.30 hrs** Arrive Mercure hotel
- 17.00 – 18.00 hrs** Review/general discussion regarding the demonstrations and implications for the proposed amendment to ECE Reg.13
- 19.30 hrs** Evening meal in the Mercure hotel sponsored by Knorr-Bremse

See over for demonstration run details

Vehicle Demonstration Runs at Boxberg 6th July 2005 **(Area A)**

11.15 – 12.15 hrs: 20 minutes per phase, red observer group
12.25 – 13.25 hrs: 20 minutes per phase, yellow observer group
13.35 – 14.35 hrs: 20 minutes per phase, blue observer group

Area A, Phase 1: Split- μ single lane change (directional control)
4x2 tractor + 3 axle semi-trailer (Wabco)

Run 1: ESP OFF (hazard warning lights flashing)
Run 2: ESP ON
Run 3: ESP OFF (hazard warning lights flashing)
Run 4: ESP ON

Run 5>: with observer – ESP OFF – ESP ON

Area A, Phase 2: Split- μ single lane change (directional control)
6x2 truck (Knorr-Bremse)

Run 1: ESP OFF (hazard warning lights flashing)
Run 2: ESP ON
Run 3: ESP OFF (hazard warning lights flashing)
Run 4: ESP ON

Run 5>: with observer – ESP OFF – ESP ON

Area A, Phase 3: Split- μ single lane change (directional control)
4x2 solo tractor (Wabco)

Run 1: ESP OFF (hazard warning lights flashing)
Run 2: ESP ON
Run 3: ESP OFF (hazard warning lights flashing)
Run 4: ESP ON

Run 5>: with observer – ESP OFF – ESP ON

Vehicle Demonstration Runs at Boxberg 6th July 2005 **(Area B)**

11.15 – 12.15 hrs: 20 minutes per phase, blue observer group
12.25 – 13.25 hrs: 20 minutes per phase, red observer group
13.35 – 14.35 hrs: 20 minutes per phase, yellow observer group

Area B, Phase 1: Double lane change (roll-over control)
4x2 tractor + 3 axle skeleton semi-trailer (Knorr-Bremse)
4x2 coach (EvoBus)

Run 1:	tractor + semi-trailer	ESP OFF (hazard warning lights flashing)
Run 2:	coach	ESP OFF (hazard warning lights flashing)
Run 3:	tractor + semi-trailer	ESP ON
Run 4:	coach	ESP ON
Run 5:	tractor + semi-trailer	ESP OFF (hazard warning lights flashing)
Run 6:	coach	ESP OFF (hazard warning lights flashing)
Run 7:	tractor + semi-trailer	ESP ON
Run 8:	coach	ESP ON

Run 9>: with observer(s) – ESP OFF – ESP ON

Area B, Phase 2: J-turn (roll-over control)
4x2 coach (EvoBus)

Run 1:	ESP OFF	(hazard warning lights flashing)
Run 2:	ESP ON	
Run 3:	ESP OFF	(hazard warning lights flashing)
Run 4:	ESP ON	

Run 5>: with observers – ESP OFF – ESP ON

Area B, Phase 3: J-turn (roll-over control)
4x2 tractor + 3 axle skeleton semi-trailer and
3 axle tanker semi-trailer (Knorr-Bremse)

Run 1:	skeleton semi-trailer	ESP OFF (hazard warning lights flashing)
Run 2:	skeleton semi-trailer	ESP ON
Run 3:	skeleton semi-trailer	ESP OFF (hazard warning lights flashing)
Run 4:	skeleton semi-trailer	ESP ON
Run 5:	tanker semi-trailer	ESP OFF (hazard warning lights flashing)
Run 6:	tanker semi-trailer	ESP ON
Run 7:	tanker semi-trailer	ESP OFF (hazard warning lights flashing)
Run 8:	tanker semi-trailer	ESP ON

Run 9>: tanker semi-trailer with observer – ESP OFF – ESP ON

Vehicle Demonstration Runs at Boxberg 6th July 2005 **(Area C)**

11.15 – 12.15 hrs: 20 minutes per phase, yellow observer group
12.25 – 13.25 hrs: 20 minutes per phase, blue observer group
13.35 – 14.35 hrs: 20 minutes per phase, red observer group

Area C, Phase 1: Constant radius circle (trailer roll-over control)
4x2 tractor + 3 axle semi-trailer (Haldex)

Run 1:	constant radius	TRSP OFF	(hazard warning lights flashing)
Run 2:	constant radius	TRSP ON	
Run 3:	constant radius	TRSP OFF	(hazard warning lights flashing)
Run 4:	constant radius	TRTP ON	

Run 5>: with observer – TRSP OFF – TRSP ON

Area C, Phase 2: J-turn (trailer roll-over control)
4x2 tractor + 3 axle semi-trailer (Haldex)

Run 1:	J-turn 40 km/h	TRSP OFF	(hazard warning lights flashing)
Run 2:	J-turn 40 km/h	TRSP ON	
Run 3:	J-turn 50 km/h	TRSP ON	
Run 4:	J-turn 40 km/h	TRSP OFF	(hazard warning lights flashing)
Run 5:	J-turn 40 km/h	TRSP ON	
Run 6:	J-turn 50 km/h	TRSP ON	

Run 7>: with observer – TRSP OFF – TRSP ON

Area C, Phase 3: Double lane change (roll-over control)
Light van (DaimlerChrysler)

Run 1:	ESP OFF	(hazard warning lights flashing)
Run 2:	ESP ON	
Run 3:	ESP OFF	(hazard warning lights flashing)
Run 4:	ESP ON	

Run 5>: with observer – ESP OFF – ESP ON