

UK suggestions – requirements for R79 categories

It may be helpful to lay out our basic understanding and proposal for different requirements for the different categories of Corrective Steering and ACSF.
(For category A see separate table below)

	Corrective	ACSF - B	ACSF – B+C	ACSF – B+D	ACSF - E
Basic function	Steering correction/ Lane keeping (discontinuous, [2] second gap between interventions)/ tactile warning to driver	Lane-guidance (in centre of lane)	Lane guidance plus lane change on driver command	Lane guidance plus lane change offered when safe, and performed on driver agreement	Lane guidance and overtaking when driver selects mode.
Conditions for operating	N/A – left to manufacturer	0-250+ km/h on multi-lane highway with no pedestrians allowed. AND 0-110km/h on other roads as long as restart from stationary is by driver command, not when vehicle in front moves off *	As B. Lane change on command limited to 80-250+ km/h on Multi-lane highway with no pedestrians permitted.	50-250+ km/h. Multi-lane highway with no pedestrians permitted.	80-130km/h. Multi-lane highway with no pedestrians permitted.
Minimum Driver monitoring	None	Hands on steering wheel + seat belt released warning + seat not occupied warning	As B	As B	Attention monitoring – not necessarily hands on wheel? Eyeball monitoring?
Transition demand from Driver Monitoring	None	Yes if hands off wheel etc. (as box above)	As B	As B	If monitoring system suspects driver not alert

*(or pedestrian/ cycle/ animal/ motorcycle sensors fitted).

	Corrective	ACSF - B	ACSF – B+C	ACSF – B+D	ACSF - E
Other TD triggers	None	System failure; conditions for operation no longer satisfied (e.g. speed, white lines);	As B. Plus failure of certain sensors may disable overtake functionality but lane guidance can continue if all relevant sensors working	As C	As C
TD ignored?	N/A	System turns off after warning driver (audible and/or tactile: e.g. sudden deceleration pulse, increasing volume of warning noise/chime)	As B	As B	MRM, then if necessary emergency stop
Warning for failure, symbol denoting operation.	Yellow failure warning. Symbols harmonised later.	Yellow failure warning. Symbol to be harmonised later. Tell-tale to show system active.	As B but additional warning indicator to remind driver overtaking feature active.	As B. Special symbol to show when overtaking suggested.	As B. If two states, carries out overtaking or not, then needs to be clear to driver which state.

Requirements for category A ACSF

	Category A
Basic function	Low speed parking and manoeuvring
Conditions for operating	Stationary and speed must be maintained below 10km/h
Minimum Driver monitoring	<i>Dead man's handle</i> system on hand-held device, if driver not in driver seat. If driver in driving seat, no monitoring.
Transition demand from Driver Monitoring	None – vehicle must stop if malfunction/obstacle sensed/ <i>dead man's handle</i> activated/hand-held device no longer active (flat battery) or communicating. Then up to driver to restart with system now switched off automatically.
Other TD triggers	N/A
TD ignored?	N/A
Warning for failure	Warning light ? Or absence of operation sufficient?
Tests	Test for spotting pedestrian, child/toddler pedestrian, motorcycle, pedal cycle, small dog (?)