Submitted by SIG UN R 157 Leadership

List of open issues

Topic	Sub-topic	Open issue(s)	Possible solution(s) and conclusions
Speed increase	How to regulate vehicle behaviour in nominal/complex situations?	- Current approach in UN R 157 for minimum headway/safety distance appropriate?	New approach: generic requirement based on traffic rules, amendment table, preventing collision, RSS, 2 seconds, etc.?
		- How should the speed limit, which varies in each country, be treated under the Regulation? (JP)	
		- No negative effect of the safety distance on traffic flow (EC)	
		- Line between type approval/traffic rules (JP: Are there any cases where following traffic law could cause danger? If so, how should we treat those cases in regulation)	
	Expected reaction of the vehicle to critical situations	- Any differences with ALKS low speed which need particular consideration?	
		- Cut in scenarios as defined currently in UN R 157 appropriate for higher speeds (> 60 km/h)?	
		- To what level should pedestrian crossing be covered? (it could be difficult to avoid a collision in a high-speed area but what should be the level required under the Regulation?) (JP)	
		- Is it necessary to consider situations where lane marking is not visible?	
		- Is evasive emergency manoeuvre required? Distinction < 80 km/h and above?	
T		- Shall different types of lane change be defined (nominal, during MRM and evasive)?	
Lane change		- What are the items that need to be strengthened when compared to ACSF category C?	
		- Need to define what is a safe lane change (parameters or general principles?)	
		- Need to define triggering conditions for lane change. Should aim to prevent erratic lane change. (NO)	
		- Shall driver interruption during auto lane change be acceptable? What kind of action should be required for override during auto lane change? (JP)	
		- Is there any other additional requirement necessary for the Level 3 lane change function? (JP)	
		- Is it necessary to decide a minimum detection range for directions other than forward (side, diagonal)? (JP)	
Doth	1. Traffic situations	- Any additional traffic situations which need particular attention and possibly need to be introduced? (based on VMAD input)	
Both (Speed & Lane Change)	2. MRM	- Is it acceptable to halt the vehicle within the lane (or lane change to the shoulder should be mandatory)? (JP)	
	3. HMI	- Any change/improvement to current HMI requirement given that more time will be spent without any intervention from the driver? Further harmonization needed?	
	4. Test, Audit & In-service monitoring	- During Type Approval, what type of tests should be conducted or provided by the documentation? (Should current requirement be further clarified?) (JP)	

Submitted by SIG UN R 157 Leadership

		- Need to improve present test, especially track tests?	
		- Does the audit and in-service monitoring need enhanced?	
Clarifying Regulation	1. Emergency vehicles	- How should a vehicle respond? Is it with transition demand or shall it create a corridor?	
		- Does the system need to react to the direction of an enforcement officer? (UK)	
	2. Detectable collision	- What is a detectable collision? (UK)	
HDV ALKS below 60 km/h*		- What are the items that need to be changed from M1? (JP)	
		- Influence of vehicle dynamics for safety distance to the front/detection range.	
		- Effect of the trailer.	

^{*}Please also see UNR157-02-10 and update expected by industry for upcoming meeting.