#	Issue	Additional Details
1	Require a recognized user-centered design process in Audit pillar (provide documentation of process followed and iterations) e.g following ISO principles	- Checklist for Manufacturer during Design (within SMS or Safety Case section) 1. Use of established procedures to define intended users, user needs, use cases and interfaces 2. Identify use-related hazards including mode confusion and categorize critical tasks and develop and implement risk mitigation or control measures 3. Consult/Apply relevant body of knowledge, guidelines and standards, prototype 4. Verify design with user testing (<u>real users</u>). Based on results, review/modify steps 1-3 and re-test 5. Document the whole process with sign-off from human factors experts 6. Track system performance in the field 7. Considerations for diverse users/users with disabilities
2	Potential for Minimal requirements on HMI	- Dedicated display area - must be dedicated to ADS signals and messages when system is active. Can be repurposed when system is not active. - Symbols o Interaction with UNR 121 (*MVSS 101) in terms of symbols and user interaction (ISO 2575) o Appropriate use of colour conventions - ADS active indicator colour

3	Clarify system states (Active, engaged, standby, on/off)	 **"Off"** *System is prevented from providing assistance to the driver* **"On"** System or a DCAS feature has been requested to provide assistance to the driver **"Stand-by"** System or a DCAS feature is not providing control output **"Inactive"** *System or a DCAS feature considers itself to be outside system boundaries or preconditions not met* **"Passive"** *System or a DCAS feature considers itself to be within the system boundaries and preconditions are met* **"Active"** *Control output being provided by the system or feature* - Need to clarify – potentially look at DCAS regulations - State diagram for discussion? Include in regulation?
4	Clarify requirements to make them more precise and verifiable.	User section requirements needs further definition/precision in most requirements (ie. What kind of warnings (auditory, haptic, visual, multi-modal), symbols, duration, escalation) – Could draw from DCAS or ALKS. Additional items to consider: - Define what is safety-relevant information - Clarify what are effective measures to re-engage user - Strategies to assist in regaining user situational awareness - How much time to give to re-engage user before moving to MRC - How to determine if a user is "suitably engaged"
5	User testing procedure & pass/fail criteria	

6	Documentation and information requirements need to be addressed	Documentation information is very generic, will need to have a requirement in Audit how it is done - Content of documentation to users - Method of delivery - Readily understandable - Accessible
7	From Annex 10, User Monitoring requirements	- Liaise with group in GRSG on driver distraction - ALKS requirements - DCAS requirements
8	From Annex 10, Mode confusion	Commonality Potentially addressed w/ user-centered design and the minimal HMI requirements in Issue 2 (above)
9	Definition/classification of systems that require a fallback user vs those that do not	It would simplify some of the requirements if a type can be referred to within the requirements E.g.: ADS Type I feature – requires a fallback user ADS Type II feature – does not require a fallback user
10	Consistency & applicability of use of ADS vs ADS feature throughout requirements	In some cases, "ADS" is suitable, in others "ADS feature" is more appropriate but use is inconsistent throughout the document.