Submitted by the Secretary ADAS 03-18

**Secretary’s notes of the 1st day’s RMF discussion of the 3rd TF ADAS session**

* OICA-CLEPA introduced document ADAS-03-17 as a summary of the discussion of the TF ADAS RMF Special Sessions that took place on the 7th and 10th of April. The document presents the outstanding, (likely) resolved and undiscussed, or open topics for consideration by TF ADAS. Open discussions include whether an RMF should ensure that the function can be overridden by the driver while ensuring protection against unintentional override, specific provisions for the definition of a critical situation versus general principles, bringing the vehicle to a standstill beside the road, external warning of the system to other road users, and applicability to M2/M3 vehicles.
* The Chair inquired whether the submission by Japan ADAS 03-14 was covered.
* OICA-CLEPA confirmed this to be the case.
* FIA suggests that flashing stoplights may be sufficient rather than activation of the horn (if this would be in conflict with national regulations and traffic rules).
* The Chair suggested to consider the document again on the second day of the session, though aim to strive for an approval of the outstanding items presented on the first page.
* Sweden thanks OICA-CLEPA for the good discussion at the Special Session. Sweden felt that several textual changes were still to be made and discussed, and considering that several stakeholders were not at the special session meetings the document could not be ready for approval by all.
* The Chair pointed out that there are several rounds of review for approval in the Taskforce, GRVA, etc. As the document is posted online, written input should be provided by stakeholders. The Chair asked again whether we can reach endorsement for the items as to be resolved.
* The United Kingdom indicated that it may be premature to give endorsement to the document and the open items. The United Kingdom suggested to give the stakeholders until the next Taskforce meeting to properly review and discuss the document.
* The Chair clarified that he was only referring to the items under ‘likely resolved’.
* The United Kingdom confirmed again that even the ‘likely resolved’ items would have to be considered as part of the whole where other elements still have to be considered. This can be done only when we arrive closer to a whole proposal.
* Sweden supports the United Kingdom’s statement. As the document was just submitted, Sweden did not feel ready to endorse at this time.
* The Netherlands confirmed support for the UK and Sweden’s comments.
* The Chair subsequently requested comments or input on the items in ‘discussion still ongoing’. As no comments were received, the Chair suggested to briefly discuss the item on the external warning by the system, indicating that requirements may conflict with national law.
* OICA-CLEPA agreed with the Chair’s statement and argued external acoustic warning would not be desirable, but acknowledged the potential benefit of providing external warnings to attract attention to the vehicle. As such, 5.1.6.3.6.XX was proposed to allow the manufacturer to identify and define strategies to warn other road users to draw attention to the vehicle.
* Japan thanked OICA-CLEPA for the good meeting last week. Japan explained that horn activation would not need to be activated in case the system performs a perfect RMF (as it would be able to avoid VRUs). However, with limited systems, VRUs should be warned (for instance by application of the horn) so that they can avoid the system under RMF.
* The Chair noted that this complicates the issue potentially as driver behavior or horn use may differ in various markets. The Chair asked whether alternative audible warning systems may be used?
* Japan thanked the Chair and suggested that an alternative may be to enforce low speed approaches, or other audible warning messages.
* OICA-CLEPA pointed out paragraph 5.1.6.3.6.5 which in their opinion should resolve this concern and remove the need for an acoustic warning system. However, the option of an acoustic warning system could be added as an alternative to fulfilling the provision.
* The United Kingdom appreciated the concern of Japan but pointed out that the creation of additional noise would be the core of the issue. The UK was appreciative of OICA-CLEPA’s point that the system should be able to appropriately handle the situation of a present VRU. There may not be the benefit of using a horn in situations where it may not be needed.
* The Chair asked if the approach raised by the UK would be acceptable to Japan?
* Japan indicated to be willing to discuss based on the concern raised. Japan asked the UK or other CPs to clarify the difference with R116 with respect to RMF (if needed after the session).
* The Chair asked stakeholders to provide comments with respect to the need for provisions for M2/M3.
* OICA-CLEPA would be strongly in favor of not including specific provisions for M2/M3 systems. The proposal is based on Japanese national guidelines, but OICA-CLEPA did not see a potential conflict. OICA-CLEPA sees a strong concern with misuse (for instance by bus passengers in extreme cases) and therefore suggests such requirements to be applied on the national level.
* The Chair thanked OICA-CLEPA and echoed this concern.
* Japan strongly requests these requirements to be included due to experiences with bus accidents in Japan where the driver lost consciousness, therefore Japan considers RMF very important for buses and coaches. Due to the requirements of the 1958 agreement, Japan would not be able to add additional requirements if the system has been approved in other markets. An RMF should be activatable by the passenger, but de-activatable by the driver. If these requirements are not included, Japan cannot accept the current constellation.
* The Chair pointed out that various solutions may be possible, such as administratively indicating that at the national level authorities are allowed to impose additional requirements. Requirements for M2/M3 introduce various challenges such as the location of the buttons and their activation requirements.
* OICA-CLEPA pointed out that the system itself would have to detect the inability by the driver to drive and as such an intervention by passengers would not be needed. The manual activation of the function was discussed and two options were brought forward in 5.1.6.3.1. OICA-CLEPA would like to avoid a situation in f.e. a school bus would give children the ability to activate the function, however would be less concerned with the ability of passengers close to the driver to activate the system. As such OICA-CLEPA felt that this concern is sufficiently covered.
* Norway noted that this discussion was of interesting. In Europe, the bus driver himself is subject to extensive regulations and licensing (health checks, driving times, alcohol interlocks, etc.).
* The United Kingdom shared the concerns with respect to misuse of the function and felt that these requirements would be premature to add to the regulation. The contracting parties could be allowed to introduce additional requirements for the manual activation of the RMF, while not mandating manual activation.
* The World Blind Union indicated that they would send additional comments with respect to acoustic warning of the system following the session.
* Japan indicated that similar health checks are also in place in Japan but is facing with the challenges of an aging society. Japan urged caution to carefully read the proposal – which does not requires manual activation. The requirements with respect to acoustic warning to the passengers have been put forward in order to warn passengers about the potential risk for a collision due to the activation of RMF. Japan would not have time to discuss this section in depth and therefore would request stakeholders to review the proposals in depth.
* The Chair inquired whether Japan could find the UK proposal acceptable.
* Japan acknowledged the proposal which may provide a resolution, but requested other contracting parties to review the Japanese proposal.
* The Co-Chair suggested delaying the M2/M3 provisions to a later stage.
* The Chair requested everyone to review the proposal and indicated to return to it tomorrow and requested OICA-CLEPA to review the issue of unintentional override outlined in 5.1.6.3.5.
* OICA-CLEPA indicated the challenge of defining appropriate language to resolve the concern with unintentional override. A balance has to be found where the driver is able to override the system in case of mis-activation, but the system should not be too easily overridden (i.e. due to unintended application of the accelerator).
* The Chair indicated the system should not be too easily overridden.
* The Sweden commented that unavailability of the driver is not very explicitly defined within the text, and as such it would be difficult to define under which conditions the system should be able to be overridden.
* OICA-CLEPA reminded contracting parties that scenarios should also be considered where the driver may become available again and as such overriding the system should be crucial. There are two options: Overriding the system could be very difficult, but in case overridden the function fully deactivated. Alternatively, the system could be easier to override, but the system continues to be present and potentially provide support.
* The Chair pointed out the overriding the system might not desirable under specific scenarios.
* Germany requested OICA-CLEPA to clarify an overview of all scenarios an ‘RMF’ may kick in. It was Germany’s understanding that RMF would only activate in case of a health issue.
* Japan believes the OICA-CLEPA proposal only capture significant cases where the driver is unavailable, but pointed out that there may be scenarios where the driver is not available but (unintentionally) applies the accelerator.
* The UK pointed out that the discussion of all scenarios may make it extremely challenging for an Approval Authority to evaluate unavailability of the driver. The UK potentially suggested a two-step approach to deactivation of the system.
* The Chair agreed that more exact wording may be needed for the paragraph.
* OICA-CLEPA pointed out that the final sentence of the proposal in 5.1.6.3.5 should resolve these concerns as manufacturers will need to explain in depth the performance of the system to the Technical Service per the requirements of Annex 6. These requirements will result in a deep discussion with the Technical Service about the activation conditions of the system.
* The Chair indicated that more specific wording may be required, however suggests closing this item at this time. The raises for attention the item with respect to specific provisions for the definition of the critical situation (paragraph 5.1.6.3.6.6.1).
* OICA-CLEPA explains that the manoeuvre would only be started if it would not require another vehicle to unmanageable decelerate. The subsequent paragraphs describe such deceleration. It will be problematic to define specific requirements that apply in the many situations the system may be used. OICA-CLEPA raised the question whether 5.1.6.3.6.6 would be sufficient (i.e. review by the Technical Service), possibly until the discussion on the Minimum Risk Manoeuvre as ongoing for UN Regulation 157 is resolved.
* The Chair indicated to be supportive of this latter approach, with the subparagraphs as design restrictive conditions.
* The Co-Chair agreed with this approach.
* Sweden indicated this to be a rather big question. Rather than the specific requirements, Sweden indicated a need for specific definitions (i.e. unmanageable deceleration). The question needs to be reviewed carefully.
* The Chair asked Sweden to submit written definitions that are currently missing in the proposal.

**ACTION ITEM: Sweden to send proposal definitions.**

* Japan has not yet decided with respect to the options, but requested the technical background from OICA/CLEPA with respect to the indicated values. Japan indicated that the outright deletion of the paragraphs may not be supportive of the technical nature of the proposal.
* OICA-CLEPA indicated to have provided some justifications in ADAS 03-04 and noted that due to the fact that other road users would be made aware of the emergency nature of the manoeuvre sooner which in turn justifies adjusting the values.
* Germany believed more discussion of the values would be required, but confirmed that under the point of view that a quick solution is needed, the proposed approach was put forward.
* The Co-Chair suggested considering 3.7 m/s² deceleration as basis ‘unmanageably decelerate’.
* Japan indicated that whichever option is followed, OICA-CLEPA is requested to provide technical data for each value for future consideration.
* Germany supported Japan’s comment and indicated that such data would be relevant for ALKS discussions.

**ACTION ITEM: OICA-CLEPA to provide technical data with respect to the critical situation values for future consideration**

* On 5.1.6.3.7 and subparagraphs, OICA-CLEPA attempted to provide a solution with regard to the applicability of provisions when it comes to bringing the vehicle to a stop to the side of the road.
* Japan commented with respect to 5.1.6.3.7.3 & .4 that a low speed manoeuvre or activation of the horn could be appropriate solutions. With respect to hard shoulders, the concern related to the presence of road workers.
* The United Kingdom indicated a concern with respect to hard shoulders which are there for high-speed roads. The requirement of 10 km/h requirement may pose an additional risk in such situations. Any workers that on the hard shoulder should be protected by additional vehicles and measures to make sure that they aren’t hit by vehicles. As such, such a requirement would seem excessive to have. Slowing down to 10 km/h introduces more of a risk than bringing the vehicle off the road and to the hard shoulder.
* The Chair agreed with the point from the United Kingdom. This item was closed for discussion for the day and would be opened again on the second day.
* The Secretary confirmed it would upload rough drafts of today’s session.