**Draft Meeting Minutes of the 5th session of the Taskforce on Advanced Driver Assistance Systems (TF on ADAS)**

Date: 15th & 16th of July 2021

Co-Chairs: Mr. Andrei Bocharov (Russian Federation), Mr. Antony Lagrange (EC)

Secretary: Mr. Marc Van Impe (AVERE)

Participants: Total about 80+ participants

1. **Welcome and Introduction**
* Mr. Andrei Bocharov acting as the Chair of the meeting welcomed the participants to the meeting, thanking all stakeholders for their feedback over the past weeks. The Chair noted that specific effort has gone into integrating all received feedback to the master document.
1. **Approval of the agenda**
* The Chair introduced the agenda ADAS-06-01Rev2, the meeting’s running order and outlined the meeting objectives. The agenda was subsequently adopted.
1. **Approval of the Meeting Minutes of the 4th meeting of the TF on ADAS**
* The Minutes of the 4th TF on ADAS meeting (ADAS-05-13Rev1) were adopted.
1. **Analysis of future ADAS use cases**
	1. Action item 4-1: Stakeholders to comment with safety concerns on the ADAS use cases.
	2. Action item 5-1: TF ADAS Secretary to update the use case compilation document
* The Chair noted that no new submissions were received. The agenda item will be kept in the agenda for future consideration of the use cases and related safety concerns. The Chair invited any input to be sent to the Secretary.

Action item 4-1 and 5-1 remain open.

1. **Drafting the new UN Regulation on ADAS**
	1. Action Item 5-2: Stakeholders to provide input about an appropriate term and definition to use to describe the system to be considered in the new UN Regulation, based on draft ADAS-05-02.
	2. Action item 5-3: TF ADAS Secretary to draft an updated Master Document compiling any received feedback and input from stakeholders, based on ADAS 05-02.
	3. Action Item 5-4: Stakeholders are invited to provide input to the content of the draft UN Regulation.
* The Chair noted that the main comments from the last Session’s minutes were integrated in master document ADAS-06-03Rev1. The Chair specifically noted that this is the first time in UN Regulation development that we are regulating the interaction between the driver and the system, as well as limited education considerations.
* The Secretary noted that an ADAS-06-03Rev3 version is in development incorporating the late input received by FIA.
* The Chair raised the naming and definition of ADAS in the draft UN Regulation for consideration.
* France submitted feedback that there is preference to continue with the use of ADAS as long as the boundaries between expectations of the driver and the system are clearly outlined.
* The Chair noted that Germany had reserved its position so far, while others had indicated their preference previously. The Chair invited OICA-CLEPA to present its position outlined in ADAS-06-10.
* OICA-CLEPA, touching on the last slide of the presentation, recognized that the naming should not cause confusion as to what systems are incorporated. OICA-CLEPA also recognized that the name should confirm that assisted and not automated systems are in consideration, while not only advanced but also basic systems could be included. The name should also not exclude the future integration L1 systems if possible. OICA-CLEPA felt that the use of ‘ADAS’ would be misleading as it would include temporary assistance with the DDT. OICA-CLEPA noted that it is unclear what ‘vehicle control’ in VCAS means. OICA-CLEPA brought forward the proposal of ‘Continuous Driving Assistance Systems’ and ‘Advanced Dynamic Driving Assistance Systems’, where ‘ADDAS’ would be considered the less preferred option considering potential confusion.
* The UK thanked OICA-CLEPA for the presentation and commented that the overview table as drafted by OICA-CLEPA helps to outline matters. The UK agreed that the use of ADAS would be misleading. The UK noted that informational ADAS is outside of the scope of this regulation. The UK would support the use of ‘control’ in the naming and therefore suggested the use of ‘Advanced Dynamic Control Assistance Systems’.
* AAPC thanked OICA-CLEPA for the submission and considered dropping the use of ‘Advanced’ from the term. AAPC pointed out that a similar discussion took place in FRAV which led to consideration of WP.1 discussion surrounding ‘Dynamic Control’ rather than DDT. The UK proposal would therefore link with WP.1 consideration. AAPC suggested the use of ‘Sustained’ rather than ‘Continuous’ which might otherwise imply the system being continuously active in the background.
* FIA thanked OICA-CLEPA however still supported the use of ADAS as a term. If however there would not be sufficient support, FIA would be willing to support CDAS or ADDAS as proposed by OICA-CLEPA to ensure that specific reference to Assistance Systems is maintained.
* The Netherlands discussed the matter further and considered ADAS too broad of a term, following internal discussion the Netherlands would have suggested Vehicle Dynamic Assistance System (VDAS) but would be open for other proposals. The Netherlands would prefer the use of Dynamic.
* ITU suggested Dynamic Control Assistance System (DCAS).
* Japan preferred the use of CDAS, noting the scope of the regulation being limited to continuous assistance systems.
* OICA-CLEPA suggested to reflect and return to the list of definitions on the second day of the Session.
* The Chair requested the Secretary to create an overview document for consideration on the second day

ACTION ITEM 6-1: TF ADAS Secretary to create an overview document of naming by the next session

* Returning to ADAS-06-03Rev2, the Chair invited discussion on the section of ‘Definitions’ where feedback had been received by AAPC. The Chair invited AAPC to present ADAS-06-09.
* AAPC introduced the document noting the ongoing discussions in FRAV on the role of the ‘user’ as outlined in FRAV-16-12, as well as the discussions in WP.1 on dynamic control. The AAPC noted that use of the erm Dynamic Driving Task may be too closely associated with ADS where it may rather need to be considered as a concept of Dynamic Control, acknowledging the involvement of the human driver in the control of the vehicle. AAPC argued it is worth drawing a line between the concept of the ‘user’ and the ‘driver’ as an ADAS system will always involve a driver.
* OICA-CLEPA thanked AAPC for the contribution, noting that up to now there was no need to define the ‘driver’ in ECE R79 either. OICA-CLEPA commented that the proposed definitions may not be fully in line with one another, noting for instance that the driver would be ‘engaged’ in dynamic control where ‘dynamic control’ is defined as the ‘performance of real-time operational and tactical functions’. OICA-CLEPA questioned whether we are not overcomplicating the matter.
* The Chair noted that there is a need to provide a simple definition of the driver considering that repeated reference is made to the term in the text. The Chair noted also submission ADAS-06-02 which outlines the important role of the driver in ADAS systems where ADAS systems do not fully substitute the role of the human driver.
* The UK commented that we might be approaching the issue in the wrong way, noting that we may be creating definition without having clear whether they are actually needed. The UK proposed to revert to the definitions when progress has been made in drafting the provisions, and following analysis of the use cases.
* CLEPA supported OICA, recommending a return to ECE/TRANS/WP.29/1140 which already provides an outline of definitions as agreed by WP.29. CLEPA did not see the need to renew this work.
* AAPC pointed out that only two terms were proposed based on extensive discussions in FRAV. In the discussions, AAPC felt the need to point out that the driver should be considered as a human being.
* FIA supported the integration of a definition for a driver.
* The Chair returned the discussion to ADAS-06-03Rev2 introducing the proposed definitions of the Dynamic Driving Task, the Driver, et al.
* AAPC noted that the role of a human being may shift during operation of a system which is extensively being considered within FRAV discussions. AAPC noted it may be worth to ensure consistency with the use of ‘driver’ definitions across efforts in WP.1 relating to traffic laws, FRAV and elsewhere.
* AVERE noted that in the definition of the driver, use of ‘in-vehicle’ would exclude parking assist functions as the human driver would no longer be seated in the vehicle.
* OICA-CLEPA agreed that consistency is important, however felt that the description of the driver in the context of this regulation may differ from the consideration of the concept of the driver in other efforts. OICA-CLEPA stressed consistency with ECE/TRANS/WP.29/1140. If it is considered that a definition for a ‘use case’ would be required, this should be carefully considered at a later time. Regarding the Operational Design Domain, OICA-CLEPA was not convinced that the use of ADS terminology would be appropriate in the context of ADAS systems, suggesting the use of ECE R79 terminology. OICA-CLEPA would need more time for the consideration of other definition.
* The Chair thanked OICA-CLEPA and confirmed that more time could be taken to consider the definitions. Specifically related to ODD, the Chair noted that the alternative of ‘system boundaries’ is also possible though both terms effectively would mean the same thing. The Chair invited further feedback on the definitions.
* The Chair reviewed Sections 3 and 4 which were endorsed by TF on ADAS.
* The Chair touched on section 5 on ‘Specifications’ and subsection 5.1
* OICA-CLEPA, regarding 5.1 adopting the approach of ECE R157, noted that all requirements should be subject to audit irrespective of whether some requirements would be subject to tests or not.
* The Chair confirmed the same interpretation and noted that the leadership will ensure this is appropriately reflected.
* Regarding 5.1.1.1, the Chair invited the Netherlands to explain its comments.
* The Netherlands supported the existing 5.1.1.1 and solely wished to confirm that the intention is to ensure pro-active driver engagement. The table is intended to provide clarification of the links between the different provisions.
* OICA-CLEPA explained its concern with 5.1.1.1 arguing the statement would not be necessary. The requirement may be in conflict with the jurisdiction in some markets where ADAS may be defined differently. OICA-CLEPA would therefore prefer the removal of this paragraph.
* The UK suggested the removal of ‘invites’ from the provision.
* Japan noted that is not clear at this time what systems would be included under this provision or not. Japan noted that this should be either specified, or as suggested by the Co-Chair, should be argumented by the manufacturer in the documentation. In this latter case, this should be reflected elsewhere in the document.
* FIA noted that, if 5.1.1.3 and 5.1.1.4 would be deleted, their comments would no longer be applicable.
* OICA-CLEPA suggested to amend the wording of 5.1.1.1 to “to remain sufficiently engaged”.
* The Chair thanked all comments and moved on to consider 5.1.1.6 and below, noting the removal of 5.1.2 as a header.
* OICA-CLEPA introduced the proposed changes to 5.1.1.6-5.1.1.8. Regarding 5.1.1.6, OICA-CLEPA suggested to move the provision to the ‘Introduction’ section. Regarding 5.1.1.7, OICA-CLEPA noted it would be unclear what ‘real time road conditions’ would imply noting that not all possible conditions would or could be detected. OICA-CLEPA felt that provisions to respect expectations from other traffic participants were not appropriate. Similarly, regarding 5.1.1.8, deactivation frequency requirements were not proposed elsewhere even for more automated systems.
* Japan argued that ADAS systems should not negatively affect traffic flow which may be of particular importance in the context of ADAS.
* The Chair moved the discussion on to 5.1.2 which would require the manufacturer to outline in the document the role of each system and/or use case within the scope of the type-approval of the complete ADAS system.
* OICA-CLEPA explained that more thought would have to be given on this text but asked the Chair to explain further what more would be expected from the manufacturer beyond what the manufacturer currently already would provide.
* The Chair pointed out that the provisions in 5.1.2 contain specific consideration of the various use cases and as such would aid the document generation by manufacturers.
* FIA, regarding 5.1.3.2, noted that all vulnerable road users should be detected irrespective of the operational environment.
* The Secretary suggested to revert to this section on the second day so that the comments from FIA could be considered.
* AAPC argued that some of the language may be confusing as the use cases do not play a role in performing the DDT. The use case plays a role in the assessment of the performance.
* AVERE noted that it may not be appropriate to consider ‘use cases’ in the context of these provisions, but to consider ‘systems and subsystems’ as this would be more in line with the manufacturer’s considerations of system development.
* The Chair accepted consideration of either ‘use case’ or ‘system’, as well as the consideration of both ‘ODD’ and ‘system boundaries in this provision. The Chair moved the discussion on to 5.1.4 bringing forward the use of either ‘ODD’ or ‘System Boundaries’ for consideration.
* OICA-CLEPA noted that if we already accept that not all environmental elements as listed could be detected by a system, what the purpose of the provision specifically would be.
* The Chair noted that the provision aims to ensure that the driver is appropriately made aware that e.g. in heavy rain conditions the ADAS system would not be able to provide appropriate support. As such, these limitations should be reflected in the documentation from the manufacturer so that the driver can be appropriately informed.
* OICA-CLEPA commented that this should be included in the detailed description of the system that must be provided anyway to the Technical Service and that driver information requirements are handled elsewhere in the regulation. As such, OICA-CLEPA does not see the benefit here.
* The Chair confirmed that we should avoid redundancy. If this provision is addressed elsewhere, it should be removed. However, the Chair noted that it should be ensured that this information is submitted by the manufacturer in detail. In addition, the regulation is being drafted in consideration of the concern that advanced ADAS systems should not lead to confusion with automation.
* ITU expressed its concern with these issues. ITU explained that there should be two considerations: (i) very careful consideration of what the interface is going to be in the HMI, and (ii) the confusion with all the confusion about what is handled or not handled. Not handling a situation would imply a hand-over which ITU feels should be eliminated.
* The Chair noted that ITU raised important points, explaining that HMI is handled elsewhere and should be the same between different manufacturers and systems. The Chair however pointed out that harmonization of the HMI may require the development of standards.
* OICA-CLEPA expressed its concern with the discussion which touched on the symptoms rather than the core issues of the matter. If the appropriate requirements are drafted regarding driver engagement and information provision, further harmonization of the HMI should not be the core objective.
* FIA felt that this discussion is valuable and that these provisions address the needs for transparency regarding the system’s boundaries. Drivers currently do not recognize the limits that the system might have and how the driver is expected to appropriately react.
* AVERE supported OICA-CLEPA’s statement and pointed out that no standards are in place for novel ADAS systems that would require approval. In addition, one should consider that there are substantial differences that may be required in the ADAS approach depending on the infrastructural environment of the market in question.
* The Secretary suggested to clarify that this provision was relevant with respect to the documentation provided to the Technical Service, but that a requirement regarding similar information is provided further down in the driver information section.
* The Chair noted that no comments were received regarding 5.1.6 and as such the text was turned to black. Regarding 5.1.7, the Chair invited input regarding ADAS interaction with other vehicle systems.
* Regarding 5.1.7, OICA-CLEPA noted that this section may be used in case that pre-conditions would be defined for system operation. As such, OICA-CLEPA suggested to maintain as a placeholder.
* AVERE noted that this information may already be sufficiently described in the system design information that is provided to the Technical Service.
* The Chair brought forward 5.2 and subsections for discussion. The Chair explained that the intention of 5.2.1.1 is to predict how the driver’s behavior might change due to the ADAS operation.
* OICA-CLEPA questioned whether these requirements are not already sufficiently considered in other sections of the regulation. As a manufacturer, it would be a challenge to understand what would be required to be submitted in order to respond to this section.
* The Chair explained that the provision was introduced with the intent of ensuring that a preliminary assessment is made of the change in the driver’s behavior when the system is used. The manufacturer would have to explain how the system assists the driver and define how the system would not mislead the driver, and ensure appropriate use.
* OICA-CLEPA noted that it would be unclear how some of the ‘estimations’ should be made. It may be sufficient to base the provisions on the CEL annex and to expand when it comes to avoiding driver abuse of the system. From the statements of the Chair, OICA-CLEPA understands however that the intent is to avoid misleading and overreliance. OICA-CLEPA suggested the removal of the requirement.
* The Chair requested OICA-CLEPA to provide input in writing to improve this provision and to explain where the redundancies currently exist.
* AAPC suggested to remove this provision in consideration of the requirements being sufficiently covered elsewhere.
* OICA-CLEPA supported this statement.

ACTION ITEM 6-2: OICA-CLEPA to provide input on redundancies in section 5.2 and provision 5.1.1.1 of the draft Master Document.

* The Chair continued by bringing 5.1.2.2 forward for consideration, which establishes requirements on the educational program to be provided by the manufacturer to the driver.
* The Netherlands would support the introduction of these provisions in the regulation. The Netherlands pointed out that the transfer of ownership may prove a challenge but noted this is a topic for future consideration.
* OICA-CLEPA expressed its concern with these provisions and pointed out that mandatory educational courses would be a measure far beyond what is reasonable to remedy the concerns. OICA-CLEPA pointed out that repeated statements have been made regarding driver confusion with ADAS systems or ADAS misleading the driver, but such statements have lacked detailed evidence or information that would allow analysis.
* The Chair thanked OICA-CLEPA for the statement and noted that in Russia a minority of the accidents are caused by poor vehicle performance (including malfunctions). This still amounts to over 5,000 accidents amongst over 600,000 of those on a yearly basis. In addition, the Chair noted the contributions by Norway which outlined a single death caused due to misuse of ADAS, nonetheless Norway was so attentive addressing this case and has provided detailed proposals on this issue.
* AAPC noted that these provisions may not be appropriate within the context of the WP.29 scope of activities. Nonetheless, AAPC is supportive of the general intent but would suggest reviewing the specific provisions.
* The Chair noted that the WP.29 framework document made reference to educational materials and would revert to this issue on the second day.
* AVERE noted that it is important to address the issue of appropriate information provision to the drivers, but that we should carefully consider the extent of the issue. AVERE noted that statements have been made about driver misunderstanding or overreliance, or over expectation by the driver, but that insufficient evidence has been brought forward that outline the actual scope of the issue. In addition, AVERE argued that on balance it would be critical that appropriate consideration is also given to the safety benefits that are provided by ADAS which had been insufficiently considered up to this point. AVERE supported AAPC and OICA-CLEPA’s statements that this provision may not fall within the scope of WP.29 activities, nor be compatible with the European division between type-approval and consumer protection/market surveillance authorities, especially when it comes to the marketing of systems.
* ITU noted that a product that requires training on details is a questionable product. The information needed for the driver should be limited.
* OICA-CLEPA supported the previous statement by AAPC and explained that it cannot be considered acceptable that the manufacturer is held accountable for the forced education of the driver in order to use a system.
* The Chair, touching on 5.2.1.2.2, invited comments on the proposed provision.
* OICA-CLEPA commented that it supports the appropriate marketing of systems, but believed that it would fall outside of the scope of type-approval activities. In addition, this issue could be addressed by the definition of the systems to be considered by this regulation.
* Netherlands agreed that it should be checked whether WP.29 is the appropriate platform to regulate, but agreed the principle that this issue could be a source of driver confusion about the capabilities of the system.
* The Chair proposed to put the provision in brackets and suggested alternative wording. The Chair invited comments to 5.2.2.
* OICA-CLEPA explained that these provisions are already reflected in the previous section.
* AVERE proposed to remove the provisions for the time being but to maintain the header as a placeholder in case new input would be provided.
* The Chair would invite submissions to this section, however invited stakeholders to consider whether the section would be redundant.

ACTION ITEM 6-3: Stakeholders to considers whether section 5.2.2 in the draft Master Document is redundant.

*On the second day* *of the Session*

* The Chair invited the Secretary to introduce ADAS-06-15.
* The Secretary introduced an overview of the system naming proposals that had been discussed during the first day of the Session as well as during previous sessions. The Secretary outlined the three top proposals that had received the most support up to this point.
* AAPC voiced its support for Dynamic Control Assistance Systems, noting that the use of Dynamic Control would outline specifically the systems that are under consideration involving real-time tactical operation.
* UK supported AAPC’s statement and echoed the preference for Dynamic Control Assistance Systems. The UK indicated that ‘Continuous Driving Assistance Systems’ would require outlining what Continuous means.
* FIA indicated its support for Dynamic Control Assistance Systems
* OICA-CLEPA indicated its tentative support for Dynamic Control Assistance Systems however indicated its concern with ‘Dynamic Control’ which has not yet been defined. Therefore OICA-CLEPA would prefer the alternative of ‘Dynamic Driving Assistance Systems’.
* Japan echoed OICA-CLEPA’s concern and indicated its preference for ‘Dynamic Driving Assistance Systems’ or ‘Continuous Dynamic Assistance Systems’. According to Japan, the main intent is to ensure that systems such as AEB would not be considered under the regulation, as such Japan would see benefit with the use of ‘continuous’.
* The Chair proposed the alternative ‘Continuous Dynamic Control Assistance Systems’.
* AAPC expressed its concern that we may overcomplicate the naming of the system which should be easy to understand for consumers and regulators equally. AAPC stressed that it would be a matter of how the named system is defined within the regulation, rather than a matter of integrating all considerations into a single name.
* FIA supported by the statement by AAPC.
* AVERE indicated that Dynamic Driving would exclude AEB-like systems by default considering the reference to dynamic driving behavior. AVERE agreed with AAPC that it is a matter of how the system is defined in the regulation.
* UK indicated its preference for Dynamic Control Assistance Systems as ‘driving’ may lead to the misconceptions about the functions performing the whole DDT in a given environment, as indicated by the Netherlands during the first day.
* The Chair noted preference for Dynamic Control Assistance Systems and invited stakeholders to comment by the September’s session. The Chair suggested that the naming may be proposed to GRVA as well.
* Japan indicated its continued preference for Continuous Driving Assistance Systems rather than Dynamic Control due to the continued responsibility of the driver to continue driving while using the system.
* OICA-CLEPA requested to introduce a placeholder in the current text in order to define Dynamic Control in order to confirm continuous rather than temporary functions are in the scope of consideration.
* AAPC echoed this statement.
* OICA-CLEPA noted that the title of this regulation may be totally unknown to the final user, similarly to how e-Call is defined as AECS in UN Regulation.
* Japan indicated that dynamic control is unclear which would sound like ESC and rear-wheel steering which would only improve vehicle dynamics.
* The Chair invited the UK to create a document in order to indicate the language differences between ‘Control’ and ‘Driving’.
* The UK confirmed that it will submit a document, noting that ‘driving’ is a more extensive concept than ‘control’.
* CLEPA suggested to use ‘Continuous Control’.
* AAPC agreed with the UK and noted that DCAS and Dynamic Control would have to be defined.
* The Secretary noted that irrespective of the naming convention that is chosen, many of the concerns could be resolved by appropriately defining what the various terms would mean. These definitions could aid in defining what functions would be considered in- or outside of the scope of the regulation.

ACTION ITEM 6-4: The UK to draft a document outlining linguistic differences and preferences between the various naming proposals, on ‘Control’ and ‘Driving.

* The Chair brought forward ADAS-06-03Rev3 for discussion referencing the fact that FIA’s submission was now integrated in addition to the first day session’s notes. The Chair invited comments to 5.3 within the regulation.
* OICA-CLEPA questioned whether this section should not be moved to another part of the regulation.
* The Chair suggested to move the section to the CEL Annex.
* The Chair invited comments on 5.4.1., though no input was received.
* Touching on 5.4.2, the Chair invited OICA-CLEPA to introduce ADAS-06-10.
* OICA-CLEPA introduced the presentation which outlined a need to introduce a flexibility in driver monitoring approaches which would depend on the capability of the system in question. OICA-CLEPA suggested a minimum of hands-on wheel confirmation, however suggested the introduction of additional measures to ensure sufficient driver engagement if specific R79 limits are exceeded (i.e. based on use cases, performance, thresholds). In addition, a section (5.4.2.1) would be introduced to require industry to outline fallback strategies in case a driver remains disengaged from the driving task, including a description of the driver engagement monitoring strategy and any additional visual, audible and/or haptic warnings as appropriate.
* The Chair invited OICA-CLEPA to elaborate on the types of measures that would be considered.
* OICA-CLEPA noted that 5.4.2.4.1 and 5.4.2.4.2 were inspired by the same ALKS provisions on the topic, explaining that at least two engagement criteria would have to be defined.
* The Chair responded that 5.4.2.4.2 that the final paragraph may need to clarified to better refer to the deactivation of control.
* OICA-CLEPA noted this is referenced elsewhere but would be willing to work on the language.
* The Chair inquired whether it would be advisable in these types of ADAS systems to allow the driver to take their hands off the steering wheel.
* OICA-CLEPA noted that the provision for 5.4.2.3 allowing for hands-off would not be applicable to the more complex systems that would go beyond the R79 requirements at this time. OICA-CLEPA noted however that alternative monitoring options may allow for various strategies that would improve the comfort of the driver. OICA-CLEPA additionally noted that the requirement for the driver to supervise has nothing to do with an ADAS in line with framework defined by ECE/TRANS/WP.29/1140. OICA-CLEPA noted that Category 2B in said document exactly reflects the intended system.
* FIA disagreed with the definition and on why hands-off systems should be considered. FIA agreed that only level 2 systems are under consideration, but is concerned that a ‘door’ would be opened to level 3-like systems in the first draft. FIA commented that the regulation should tie to the current generation of ADAS systems and not allow level 2+.
* OICA thanked FIA for the statement that the regulation should reflect current technology.
* AAPC supported the statement by OICA-CLEPA and noted that there are systems on the market that allow hands-off driving but ensure that the driver is appropriately engaged. The regulation should focus on ensuring that the hands-off system is considered to be safe.
* AVERE supported OICA-CLEPA’s statement and indicated its hope that this regulation would allow for flexibility in approving new ADAS systems that may not have previously been considered.
* Japan thanked the various stakeholders and felt that the statements by FIA are important to consider. Japan therefore inquired whether the statement by FIA reflects the position of the whole FIA organization or whether this reflected the position of a specific expert.
* CLEPA supported the statements by OICA, AAPC and AVERE. CLEPA reminded the taskforce that the intent of this effort is to ensure the approval of systems that are currently already ready for market introduction or available to consumers in certain markets.
* The UK noted the concern of Contracting Parties that these systems may lead to more mode confusion and that therefore that the right approach to driver monitoring and engagement is important to consider. The UK agreed with OICA-CLEPA that inspiration from ALKS could be taken, but that there may be a need to go beyond these requirements as drivers would be required to immediately intervene at any point. Therefore, there should be careful consideration of the approach taken to ensure that driver actions do not lead to the assumption that the system would continue in automated control.
* The Chair invited stakeholders to provide input on the proposed provisions by OICA-CLEPA by the September session.
* OICA-CLEPA noted that the driver does not need ‘to take back control’ because he was never out of it. In addition, OICA-CLEPA noted these provisions aim to take steps in order to alleviate some of the concerns as outlined by the UK.

ACTION ITEM 6-5: Stakeholders to comment on the OICA-CLEPA proposed 5.4.2 provisions in the draft Master Document.

* The Chair invited FIA to introduce ADAS-06-14.
* FIA introduced the presentation indicating its concern with the introduction ADAS level 2+ if the existing level 2 ADAS systems are not appropriately improved to be more reliable. This is the main concern from the consumer perspective, consumers should not be confused with respect to who is in control of the vehicle. FIA agreed that functionalities available on all markets should be considered when scoping the regulation. FIA explained it does not intend to bar the introduction of new functionalities to consumers.
* The Chair requested FIA to review the regulation draft in view of the concerns outlined by FIA.
* FIA noted that this input was prepared one month ago and that the latest drafts of the regulation are trending in the right direction.
* AVERE requested FIA to explain how it defined level 2+ as the presented materials appeared to outline hands-off systems only.
* FIA thanked AVERE and commented that it would return with input by the next session.
* OICA-CLEPA invited FIA to come with evidence to defend the position it maintains with regard to hands-off systems as manufacturers have not seen negative feedback from its customers on these systems in the respective markets where hands-off systems are allowed.
* The Co-Chair inquired if industry could respond to the issue of maintaining the driver in the loop during short/long periods of hands-off. Would industry be asking for both? The Co-Chair further inquired how it would manage to keep the driver in the loop from a practical perspective.
* ITU stressed that evidence should be brought forward by FIA that outlines whether having the system would actually be worse than not having the system. ITU stressed that fear of poor performance should not hold back the introduction of such systems as long as appropriate safety strategies are maintained.
* FIA indicated the misunderstanding from industry that FIA does not want additional systems to be introduced. FIA however felt it is important that these systems are more reliable and clearer about the indication where the system would appropriately work or not.
* The Chair noted that the regulation needs to define formal criteria to establish to approve systems against, specifically when it comes to assistance systems.
* ITU noted that the issue is what the boundary is between the ADAS and the ADS system. ITU explained that it is unclear what the gap between both. From ITU’s perspective, is that this regulation should cover ADAS systems right up to the edge of ADS. If hands-off systems are artificially kept out of the regulation, this would leave a huge gap between ADAS and ADS systems that allow hands-off.
* The Chair responded that the intent is to create this dividing line between ADAS and ADS.
* The UK felt that the division between ADAS and ADS is quite clear, in the sense that in ADAS the driver is responsible. The UK noted the problem is that the closer one gets to automation, the more the driver would be inclined to be distracted. This is a concern of mode confusion is shared by many contracting parties. The intent may not be to specifically restrict capability, but rather to ensure that proper driver engagement is maintained as systems become more capable.
* AAPC stated that if the system requires the driver to be attentive and supervising the system, it’s an ADAS. If it does not do so, it’s an ADS. Under the ADAS regulation, the intent is to ensure that the driver appropriately treats the system as an ADAS even though the capability may be extended.
* AVERE shared the concern raised by the UK, but also voiced the concern regarding previous statements that imply an artificial restriction of ADAS based on a presumed gap in capability. AVERE noted that the right strategy is the approach proposed by OICA-CLEPA of requiring increasingly complex driver engagement strategies in line with the complexity of the assistance provided.
* OICA-CLEPA noted that we should not be discussing the dividing line between ADAS and ADS. This has been sufficiently defined in ECE/TRANS/WP.29/1140. The focus should be on this regulation and to outline the appropriate requirements to ensure that approved systems are safe.
* The Chair closed the discussion on driver monitoring for the time being and raised the provision of 5.4.4 for discussion, inviting OICA-CLEPA to respond to the FIA comment.
* OICA-CLEPA stated that it is important to introduce a new framework that allows for more flexibility so that amendments of requirements based on each new use case and new function would not be required. When reviewing the use case, it is difficult to define the provisions that would cover all scenarios appropriately.
* The UK inquired how the provisions regarding to lane keeping and lane changes are going to link to the use cases.
* The Chair noted that in agenda item 4 a list of use cases is made available. The Chair suggested two ways: (i) review the use cases and define provisions to address those use cases appropriately, or (ii) take the provisions as agreed and analyze whether the use case could be appropriately assessed. If not, new provisions could be drafted. The Chair proposed to perform this exercise according to (ii) at some point in the future.
* OICA-CLEPA thanked the Chair and agreed with the second approach, noting that going use case by use case would require all potential use cases to be drafted preemptively. This is not the intent of the regulation in question. With a first finished draft, the quality of the regulation can be reviewed by using the use cases.
* The Chair invited OICA-CLEPA to review the FIA comments and to draft more provisions if needed in order to address these comments.
* OICA-CLEPA noted that we should refrain from defining detailed requirements for each and every potential use case.
* AVERE also supported the (ii) approach noted by the Chair.
* The Chair inquired if OICA-CLEPA believes these provisions would be sufficient to cover all use cases.
* OICA-CLEPA believed this to be the case as high-level functional requirements.
* The Chair introduced 5.4.4.4 for discussion.
* FIA requested to remove their comment on this provision.
* The UK explained that it would not be in a position to endorse this section in terms of lane keeping, maintaining a safe distance, lane changing. The UK indicated its intent to review these provisions over the Summer.
* The Chair welcomed any input to these and other sections.
* The Chair proceeded to 5.6 on the Human-Machine Interface, noting that changes were proposed by the Co-Chair.
* OICA-CLEPA suggested that it may be of value to consider a more general thinking of what should be indicated to the driver, especially in view of the flux of different signal and warning requirements in other regulations.
* AVERE agreed with OICA-CLEPA’s statement and cautioned that the benefits of in-vehicle interface information should be balanced against the concerns of driver information overload. The provision as listed in 5.6.3.4 could for instance bar navigation from providing information to the driver, similarly the user interface can play an important role in ensuring that the driver is appropriately aware of the factors influencing ADAS intent.
* The Chair noted that navigation systems would be excluded for restrictions, but that for instance a driver should not be made aware of all parked vehicles in its environment.
* AVERE noted that we should take care as this information may especially be useful or valuable in specific use cases or environments. A driver may wish to be informed of nearby objects/parked vehicles within the context of f.i. a low speed parking manoeuvre.
* The Chair lastly noted that the CEL provisions are listed in Annex 3 and Audit provisions are listed in Annex 4. The Chair requested industry and other stakeholders to consider merging both annexes into a single annex considering their similarity.

ACTION ITEM 6-6: Industry & Stakeholders to consider annexes 3 and 4 of the draft Master Document and provide input

Action items 5-2 to 5-3 can be closed. Action Item 5-4 remains open.

1. **Consideration of the pending proposals for amending UN Regulation No.79**

6.1. Action item 5-5: OICA-CLEPA to engage with the UK and Japan to draft an updated proposal following from GRVA-10-24.

6.2. Action item 5-6: AVERE to follow up with Contract Parties to consider an updated proposal based on GRVA/2021/07.

6.3. Action item 5-7: OICA-CLEPA to organize a separate discussion with interested stakeholders to find a compromise on GRVA/10/22.

6.4. Action item 5-8: Industry to provide an updated ACSF C for HDV proposal by the July TF ADAS session.

* Touching on the RMF proposal (GRVA-09-43 and WP.29/2021/82), the Chair requested any stakeholder to confirm whether there was an updated proposal available on the RMF function. No input was received
* The Chair invited OICA-CLEPA to provide an update on the ACSF B1 proposal (GRVA-09-37).
* OICA-CLEPA confirmed that there are no updates at this time.
* The Chair invited AVERE to provide an update on the second ACSF B1 proposal (GRVA/2021/07).
* AVERE explained that it had not been able to develop and discuss a compromise proposal as requested. While AVERE invited feedback from Contracting Parties, it expressed its hope that the issue could be resolved within the new UN Regulation.
* The Chair invited AVERE to introduce ADAS-06-08 containing a compromise proposal following GRVA-10-22.
* AVERE introduced the proposal outlining a change in approach which would now require an abort of the lane change manoeuvre is the system detects that an available gap would no longer be available between the command of the driver and the intended start of the lane change manoeuvre. In addition, the manufacturer would have to provide an overview of the control strategies to the Technical Service.
* UK thanked AVERE, however inquired about the language used in the final sentence of the first provision (i.e. use of ‘refrain’).
* AVERE confirmed that it would be willing to discuss this language for any improvements.
* OICA-CLEPA tentatively supported the initiative of AVERE however noted that some of the language may need to be discussed.
* The Chair invited AVERE and OICA-CLEPA to discuss the compromise proposal with various Contracting Parties ahead of the September TF ADAS session.

ACTION ITEM 6-7: AVERE and OICA-CLEPA to review ADAS-06-08 with interested Contracting Parties by the 7th TF on ADAS Session

* The Chair invited OICA-CLEPA to introduce ADAS-06-07 and ADAS-06-08 regarding ACSF C for trucks and trailers.
* OICA-CLEPA outlined the proposal, confirming that the aim is not to touch on the minimum required available requirements as currently regulated in R79. Touching on Annex 1, OICA-CLEPA confirmed that the same approach is possible for trucks with an No O3/O4 trailer, however proposes to introduce new requirements for trucks respectively with trailers without and with sensors which may or may not be able to assist in the lane change function. In cases of trailers without sensors, the truck would have to cover the sensory area on its own. In cases of trailers with sensors, the trailer will assist with its own sensory package to perform detection of available space.
* The Chair invited all stakeholders to review the proposals ahead of the workshop session to be organized by OICA-CLEPA.
* AVERE, as food for thought for the workshop, inquired whether the OICA-CLEPA would like the critical situation tolerance proposal to also ideally apply to lane changes for trucks. AVERE inquired whether the described minimum available space of 55m applied at low speeds.
* OICA-CLEPA confirmed it would take this on board.

ACTION ITEM 6-8: OICA-CLEPA to organize a workshop to discuss the ACSF C proposal for HDVs.

Action item 5-5 remains open. Action items 5-6 to 5-8 can be closed.

1. **AOB**
* The Chair informed the taskforce that the next session is intended to take place on the 21st or 22nd of September.
* OICA-CLEPA noted that the AEBS-HDV-06 session is taking place on those dates.
* The Secretary noted that this is not indicated on the Wiki calendar, but that new dates will be considered if possible.
* The Chair requested all stakeholders to provide input as soon as possible, and confirmed that the Secretary would make all documents available before the middle of August.
1. **List of Action Items**
* The following action item remain open:
	1. Stakeholders to comment with safety concerns on the ADAS use cases.
	2. TF ADAS Secretary to update the use case compilation document.
	3. Stakeholders are invited to provide input to the content of the draft UN Regulation.
	4. OICA-CLEPA to engage with the UK and Japan to draft an updated proposal following from GRVA-10-24.
* The following new action items have been opened:
	1. TF ADAS Secretary to create an overview document of naming by the next session
	2. OICA-CLEPA to provide input on redundancies in section 5.2 and provision 5.1.1.1 of the draft Master Document.
	3. Stakeholders to consider whether section 5.2.2 in the draft Master Document is redundant.
	4. The UK to draft a document outlining linguistic differences and preferences between the various naming proposals, on ‘Control’ and ‘Driving.
	5. Stakeholders to comment on the OICA-CLEPA proposed 5.4.2 provisions in the draft Master Document.
	6. Industry & Stakeholders to consider annexes 3 and 4 of the draft Master Document and provide input
	7. AVERE and OICA-CLEPA to review ADAS-06-08 with interested Contracting Parties by the 7th TF on ADAS Session
	8. OICA-CLEPA to organize a workshop to discuss the ACSF C proposal for HDVs.
1. **Next meeting**
* The 6th TF on ADAS meeting will tentatively take place on the 21st and 22nd of September 2021.