

## **Minutes of the Third Session of the Task Force on Vehicular Communication**

**31 August 2023 12:00pm – 3:00 pm (CEST)**

### **I. Attendance**

1. The Task Force on Vehicular Communication (TF VC) met in a virtual format on the on 31 August 2023. The meeting was opened by its Co-Chair, Ms. J. Doherty (United States of America), who introduced another Co-Chair of the TF VC, Mr. D. Kay (United Kingdom of Great Britain and Northern Ireland) and Vice Chair Mr. Hang Sun (People's Republic of China). Apologies were provided for Co-Chair Mr. T. Naono (Japan) who was travelling and unable to join.
2. 50 experts from 11 Contracting Parties (Australia, Canada, China, Finland, Japan, the Netherlands, Republic of Korea, South Africa, Sweden, United Kingdom of Great Britain and Northern Ireland (UK) and United States of America (USA)), 1 International Organisation (ITU) and 8 Non-Governmental Organisations (AAPC, CLEPA, ERTICO, ETSI, IMMA, OICA, SAE International and Traficom) attended the meeting.

### **II. Adoption of the agenda**

*Documentation:* VCTF-03-01

3. The TF VC adopted the provisional agenda prepared for its third session (VCTF-03-01), with the addition of the item 2(b) which was added as "Report to the Task Force on the EV Workshop".
4. The TF VC adopted the agenda.

### **III. Approval of the minutes of the second meeting of the TF VC**

*Documentation:* VCTF-03-02

5. The Co-Chair from the USA consulted the participants on the adoption of the minutes of the second session.

### **IV. Report on the EV Workshop**

6. The Co-Chair from the UK provided a review of the EV Workshop, first noting that the workshop received presentations from, OICA, AVERE, CharIN, China and the UK.
7. Main highlights from the workshop were that there is a lot of work on standardisation, but that more work needs to be done. There were some reflections on the impact on battery durability, the need for cyber security to be considered and highlights on the benefits for consumers with the uptake in EVs.
8. The outcome of the discussions following the presentation was that there is a mix of views on regulations in this area, some suggesting immediate action vs. some saying it is too early. The need for distinctions of wireless vs wired communication was noted. There was no clear consensus on a timeline. Positively, there was general interest in monitoring the situation. It will be up to the IWG on ITS on how to take the work forward for WP.29, potentially opening it up for other groups or GRs under WP.29 to address this matter.
9. The Co-Chair from the USA opened the floor to the participants for discussion. She noted that from her perspective there was a lot of work still to be done and that this topic should continue to be followed. The Co-Chair from the USA closed this agenda item by asking the participants to flag or highlight anything that might come up in this area where they may deem it necessary for further discussion or to be addressed in another meeting.

## V. Presentations and substantive activities

### (a) Definitions

*Documentation:* VCTF-03-03

10. The Co-Chair from the USA asked that the participants go through this document very carefully and provide detailed feedback to this document.

11. The Co-Secretary from SAE International introduced VCTF-03-03. He highlighted primarily that there needs to be review by the telecommunications sector related to the term V2X as from the discussions with the industry during the EV workshop, it became clear that they are using V2X related to wired communications, while the telecoms industry is using V2X to refer to wireless. Many of the standards developed by the telecoms industry are based on V2X meaning wireless.

12. The participants went through the document in detail with experts giving feedback on the document. Some of the main points that came out of the discussion included.

a. There were many discussions on the word trustworthy. Some experts wanted to keep this word while others felt that the wording needed to be more precise and objective. The Co-Chair from the USA suggested that the final word be something that ensures the information is secure, between recognised sources and relevant.

b. The Secretary of the IWG on ITS proposed that there should be a clear distinction between the document being produced on definitions and the document giving guidance to WP.29

c. OICA proposed to change it from the list of various V2 various items but rather having V2X. The expert from the Netherlands proposed revising the list as follows: V2X Vehicle to everything, C-V2X Cellular - Vehicle to everything, V2D Vehicle to Device, V2G Vehicle to national Grid, V2H Vehicle to Home, V2I Vehicle to roadside Infrastructure, V2L Vehicle to Load, V2N Vehicle to Network, V2P Vehicle to Pedestrian and V2V Vehicle to Vehicle

d. The expert from Australia asked for some clarity regarding the scope of the document and the Co-Secretary from SAE International clarified the difference between the scope of the definitions and the scope of the work that will be potentially done by the group. The Co-Chair from the USA supported the idea that the focus for today was to address the definitions and the scope of what the group would do would be at a later stage.

e. The expert from OICA suggested that the word position in the first paragraph be revisited as it was a bit unclear exactly what was meant.

f. The Co-Chair from the USA requested more clarity on the specificities related to the goals of vehicular communication and why the items like: Transport Efficiency, and negative impact of the environment were chosen. The Co-Secretary from SAE International clarified the reasons for the terms was to try to identify the reason for using communications in the transport world and this would then guide the group as to what would be the most important things to look at. The Secretary of the IWG on ITS suggested that changing the word from “goals” to “potential benefits” would aid potentially help, the Co-Secretary from SAE International and the Co-Chair from the USA agreed with this suggestion.

g. The expert of ETSI highlighted that the information that would be collected from the vehicle sensors would be very important to the traffic authorities for traffic efficiency and therefore it something that needs to be explored further. The expert from the Netherlands agreed with this idea.

h. The Co-Chair from the USA asked for clarity on what environmental impacts were and the expert from ETSI confirmed that this related to fuel efficiency. The expert from ETIS highlighted that motorway providers are more interested in safety related items under the goal list but there was less interest in that from the traffic operators in cities.

i. The expert from China noted that under the “Safety and Traffic related information sharing” section, the element related to information from infrastructure was missing. The Co-

Chair from the USA suggested that the introductory sentence be revisited as it needs to be more specific and less broad.

j. The expert from Japan asked whether simple emergency brakes is covered. The Co-Secretary from SAE International confirmed that this was included in (c) collision avoidance and (d) protecting vulnerable road users. The Co-Chair from the UK suggested that the protection of vulnerable road users be expanded further. The expert from the Japan agreed, saying that the current state only shows the vehicle control aspect but would need to also cover the ways to protect the vulnerable road user.

k. The Co-Chair from the USA suggested that the language under (f) Emergency Services, should be modified a bit away from the current language as the goal is to have the objective achieved but there is no certainty it will happen. The expert from OICA also noted that within this definition there should be some form of communication to other vehicles which can ease the access of emergency services to the vehicle(s) in distress. The expert from Netherlands, asked whether there was the intention to have the vehicle potentially communicating with emergency services for the purpose of intervention e.g. standing still or avoiding an incident area. The Co-Secretary from SAE International confirmed that this would be added as an additional piece.

l. The expert from ETSI questioned whether V2X should cover (i) infotainment and convenience or whether it should be mentioned as an “in addition to” item. The Co-Secretary from SAE International noted that in the document tried to cover all vehicular communications The expert from OICA supported the view of ETSI in terms of transmitting “convenience data” on their channels as those developing the standards already have a lot to cover in this area.

m. The Co-Chair from the USA also reiterated that environmental items should be addressed at the beginning with a specific focus on fuel economy. The expert from ETSI suggested that something related to maps (e.g. dynamic maps) should be included. The expert from AAPC suggested clarifying that the items which have been defined are not the ones which the group will set out to regulate. The Co-Chair from the USA suggested removing the final sentence completely to avoid this confusion.

n. The expert from the Netherlands noted that anything that the final sentence relating to connections in the charging point should be noted as wired communication. He suggested including Ultra-Wide Band Communication in the types of wireless communication and the removal of wireless communication associated with dedicated short-range communications.

o. The expert from China noted that the data aspect is missing from the Types of Communication Section, and he noted that vehicular communication messages were only one format for information, and it should be aligned with the rest of the document.

j. The expert from OICA asked for clarity on toll transponders and the Co-Secretary from SAE International noted that there was a difference from the ones used in the USA and Europe. The expert from OICA noted that he is hesitant to connect to V2X and that the TF VC could discuss this further. The expert from ETSI suggested that the point should just be limited to short range radio rather than specifying it.

## **(b) V2V: Enhancing Vehicle Safety**

13. Nothing was presented under this item.

## **(c) Recommendations**

14. The Co-Chair from the USA asked the participants to highlight to the Co-Chairs or the Vice-Chair if there were any other speakers the group should hear from as it relates to vehicular communications which would be of interest to WP.29.

15. The Co-Chair from the USA recalled to the participants that the task of the group was to look at the areas that WP.29 should focus on, not necessarily to make regulations.

16. The expert from the Netherlands proposed the trustworthiness of the manoeuvres of vehicles and qualification/verification of the information being exchanged between vehicles. The Co-Chair from the USA agreed with this comment and highlighted that the trustworthiness should include:

- a. The security of the information
- b. Confirmation of the parties exchanging the information
- c. The relevance of the information
- d. The quality and quantity of the information and
- e. The reliability of the information.

17. The expert from the ETSI noted that the TF VC needs to address the long-term plan for the V2X Communication and the role of regulation in triggering conditions (e.g. emergency braking and what the vehicle would do when this happens)

18. The expert from OICA suggested that the TF VC should explore what other transport/industry sectors have done in this work in the area of communication as it relates to how to deal with the “garbage-in/garbage-out” problem. WP.29 could potentially reach out to other WPs to see if this has been done. He also noted that there needs to be some guarantee to the automotive industry that all the information as suggested can be transmitted, that is, there is enough infrastructure and bandwidth. He also asked that when addressing the items, recommendations to WP.29 should answer the question “Do we need this improve safety?” The Co-Chair from the USA supported this and proposed this question be asked for each item as the TF VC moves forward with addressing the definitions.

19. The expert from AAPC suggested a process in terms of addressing the items for V2X, the theoretical approach which can be addressed as an example with an investigatory approach. He suggested that the next step could be to look at the experimental approach, asking the question of “What are the things that can contribute to safety?” and “What kinds of technology are coming on to market that directly related to WP.29?” and finally reviewing the applications and looking at what WP.29 can do to facilitate these things.

20. The expert from ETSI added that the TF VC should ask the questions of “What is the use case of an item and whether there is a standard or profile of this item?” He suggested that the TF VC start with a simple use-case and start with that. The Co-Chair from the USA questioned whether this topic had been brought up in the TF on Cyber Security. The Secretary of the IWG on ITS confirmed that it has not dealt with the specifications of the transmitter.

21. The expert from OICA added that it was important to use the TF VC to coordinate actions with other organisations and other authorities in order to implement everything at the same time since there will be considerable resources to do these items (e.g. spectrum resources). The Co-Chair from the USA noted that this would be bigger than the current task at hand, as the TF VC needs to first identify what WP.29 needs to do at this moment and noted that this recommendation should be taken to the IWG on ITS. The expert from ETSI supported the idea from the expert from OICA in terms of the long-term plan.

22. The expert from Australia noted that an area that the TF VC can use as a potential use case is Intelligent Speed limit Advisories (ISAs), with a database to push out information to vehicles, linking it to the emergency services space, potentially slowing down the vehicle when there is an emergency vehicle going through. He advocated that this would improve road safety.

23. The expert from Netherlands highlighted that another thing to consider is the liability of data, “Who is responsible?” and “How are we going track and log this?”. There needs to be some tracking. He suggested that the TF VC should try to help in preventing the liability from being handed over to the authorities. Information should be shared as an information point rather than decision point. It should be addressed from a legal perspective but not from the technical perspective.

24. The Co-Secretary from SAE International noted the significant challenge highlighted by the experts from AAPC and OICA related to the order of items as they relate to vehicle regulation and spectrum and telecommunication standards. There needs to be some sort of discussion or

agreement between both sides to start working on things in parallel. The Co-Chair from the USA agreed with this proposal.

## **VI. Other business**

25. The Co-Chair from the USA reminded the participants to highlight if there were any other experts the group should hear from.

26. The Secretariat informed the participants that good progress was being made on the ITS Publication and invited the participants to provide feedback by the 30 September 2023.

## **VII. Next session**

27. The Co-Chair from the USA suggested that the TF VC look at the definitions paper again with the revisions and look at the recommendations list to narrow down for the items to be recommended to WP.29.

28. The date of the next meeting will be announced to the group and set before the November WP.29 Session.

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