Submitted by the expert from ITU

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(For review during the
Troy meeting 20-24 May 2024)
Agenda item 5(c)

ITU Expert Group on Communications Technology Supporting Automated Driving

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Expert Group Structure

- See: www.itu.int/en/ITU-T/extcoop/cits/Pages/egcomad.aspx
- Co-Chairs are:
  - Jan Luehmann (OICA) VW CARIAD
  - Hideaki Takahashi (Nokia)
- Vice-Chairs are:
  - Rémi Bastien (FISITA)
  - Yuming Ge (CAICT)

Expert Group Objectives

Use Cases

1. Vehicular communications for merging automatically into congested lanes

2. Vehicular communications for advanced emergency braking to protect VRUs

3. Ensure technical and economic* sustainability for vehicular communications
   *(*circular economy)*

The goal of the Expert Group is to elaborate the requirements for such systems with a roadmap focused on an applicability for new vehicles that are equipped with driver control assistance systems (DCAS) and/or automated driving systems (ADS), earliest in 2032

Working Group on Requirements for merging automatically into congested lanes

- Working Group Chair
  - Ganesh Jayaram (OICA) VW CARIAD
    ganesh.jayaram@cariad.technology
- Working Group Vice-Chair
  - Johannes Springer (5GAA) T-Systems
    johannes.springer@t-systems.com
- The initial implementation of automatically merging is expected to be for light vehicles with ADS or DCAS active, needing a space to merge into a new lane
- The Working Group will have the task of determining the size of the vehicles to be supported and the related space needed

Working Group on Requirements for merging automatically into congested lanes (2)

- A non-exhaustive list of items that the Working Group will do is
  - Define the requirements for vehicles to merge automatically, safely, and with the required reliability
  - Build a consolidated functional safety perspective for automated merging across major vehicle manufacturers
  - Collect large, complex examples of the merging environment in all major jurisdictions as well as appropriate other jurisdictions
  - Determine the penetration of equipped vehicles necessary in each jurisdiction to achieve the determined-reliable merging by vehicles with ADS or DCAS active
  - Identify the level of failure that authorities in different jurisdictions might be able to accept
- Vehicle functional safety experts are encouraged to support this effort
  - Please contact Ganesh Jayaram (ganesh.jayaram@cariad.technology)

Working Group for Requirements for Protecting VRUs

- This Working Group is being established with FISITA leadership