



Federal Ministry
for Digital
and Transport

Working paper: ITS-10-02
10th session of the IWG on ITS
Provisional agenda item 3

Considerations on the continuation of vehicular communications activities

Content

- (1) Status Quo (TF VC)
- (2) Need for regulatory activities
- (3) Proposal “Way forward”

Current Status

TF-VC draft finale report,
including

- Definitions, terminologie
- Applications, UseCases
- Benefit assessment

not including

- Market introduction szenarios

8th TF on VC, 05 September 2024
Agenda item 3a7

Vehicular Communications Definition, Types, Value, Uses, and Considerations **Prepared for the Task Force on Vehicular Communications (TF on VC)**

This document provides an overview of Vehicular Communications (VC) including its definition, types, value, uses, and considerations. This document has been prepared to provide background information about VC to WP.29 participants.

Achieving VC capabilities can benefit from collaboration between policymakers, industry stakeholders, and researchers to deploy and protect relevant communications technologies.

At its 188th session in November 2022, WP.29 requested the Informal Working Group (IWG) on Intelligent Transport Systems (ITS) to perform preparatory activities and to explore the potential role of WP.29 related to VC (no document is the outcome of those preparatory identify potential activities for further consid

This document was created by input from WI communications experts from SGAA, AAPC, CATARC, CLEPA, ERTICO, ETSI, IMMA, OIC

I-VC Definitions

In this document, the wording:

“Transmitted material” includes data, comma

V-VC Considerations and Challenges

Although there are many benefits from VC, it is important to be aware of the considerations and challenges faced when using VC. These considerations and challenges, including possible countermeasures, vary across uses/applications, countries, and regions. Taking into account the considerations and challenges in the development of VC applications might translate into specific requirements. Considerations and challenges include, but are not limited to:

a. → *Cybersecurity*: Communications are sensitive to cybersecurity threats, including hacking attempts and unauthorised access. Malicious actors might attempt to exploit vulnerabilities in communications protocols and compromise the integrity of transmitted material exchanged between vehicles and external systems.

Possible countermeasures include: Many vehicle manufacturers have implemented systems to secure vehicles and their information (e.g., following ISO 21434 in conforming to UNR155), often named CyberSecurity Management System (CSMS).

Similarly, many road transport infrastructure operators have implemented systems to secure their components and information (e.g., following ISO 27001), often named Information Security Management System (ISMS).

b. → *Privacy*: Information exchange among vehicles and road transport infrastructure

Regulatory Need

1. Document WP.29 192-10 (NL, regulatory activities is necessary to avoid unwanted side effects)
2. CBA ADS Workshop (risc of decreasing traffic efficiency must be counteracted)
3. VC is a suitable instrument towards adressing VRU issues (70% passenger car involvement)
4. Regulatory activities are necessary to overcome market barriers
5. International harmonization required (Planning confidence for OEMs + relevant financial effort necessary)

Proposed way forward

1. Establishing a TF underneath a GR to build first regulatory draft on a specific, technically fully developed and controllable usecase
2. Usecase shall be selected and agreed at WP.29 level in early 2025
3. Selected usecase shall leave space for technological evolution for future applications (not being technology restrictive)
4. Defining a harmonized vehicle based communication interface (addressing the issues raised by the ITS/VC Taskforce)

Thank you for your attention !

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