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ITU-T F.749.6 (04/2023)

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Requirements of vehicle information for automated driving in vehicle gateway platforms

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Recommendation ITU-T F.749.6

Requirements of vehicle information for automated driving in vehicle gateway platforms

Summary

Recommendation ITU-T F.749.6 specifies the requirements of vehicle information for automated driving in vehicle gateway platforms. Recommendation ITU-T F.749.6 introduces vehicle information for an automated driving system (ADS), followed by two different approaches to represent automated driving system-dedicated vehicle (ADS-DV) by its ownership. Finally, this Recommendation specifies the requirements to support two different approaches to represent ADS-DV.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
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ADS, ADS-DV, requirements, vehicle information, VGP.

* To access the Recommendation, type the URL http://handle.itu.int/ in the address field of your web browser, followed by the Recommendation's unique ID. For example, http://handle.itu.int/11.1002/1000/11830-en.

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FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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Recommendation ITU-T F.749.6

Requirements of vehicle information for automated driving in vehicle gateway platforms

1 Scope

This Recommendation specifies the requirements of vehicle information for automated driving in vehicle gateway platforms (VGPs). This Recommendation introduces vehicle information for automated driving systems (ADSs), followed by two different approaches to represent automated driving system-dedicated vehicles (ADS-DVs) by their ownership. Finally, this Recommendation specifies requirements to support two different approaches to representing ADS-DVs.

This Recommendation addresses the following elements.

– vehicle information for automated driving;

– ownership of ADS-DVs;

– requirements.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

None.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1 automated driving system (ADS) [b-SAE J3016]: The hardware and software that are collectively capable of performing the entire DDT on a sustained basis, regardless of whether it is limited to a specific operational design domain (ODD); this term is used specifically to describe a Level 3, 4, or 5 driving automation system.

3.1.2 ADS-dedicated vehicle (ADS-DV) [b-SAE J3016]: An ADS-equipped vehicle designed for driverless operation under routine/normal operating conditions during all trips within its given ODD (if any).

3.1.3 dynamic driving task (DDT) [b-SAE J3016]: All of the real-time operational and tactical functions required to operate a vehicle in on-road traffic, excluding the strategic functions such as trip scheduling and selection of destinations and waypoints, and including, without limitation, the following subtasks:

1. Lateral vehicle motion control via steering (operational).
2. Longitudinal vehicle motion control via acceleration and deceleration (operational).
3. Monitoring the driving environment via object and event detection, recognition, classification, and response preparation (operational and tactical).

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