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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Intelligent Transport Systems (ITS).

The present document is based on input provided by various European projects, AutoNet 2030, CODIS, Truck Platooning Challenge, ENSEMBLE, TIMON, HIGHTS, Intercor, C-ROADS, VRUITS (improving the safety and mobility of Vulnerable Road Users through ITS applications), PROSPECTS (Proactive Safety for Pedestrians and Cyclists), XCYCLE (Advanced measures to reduce cyclists' fatalities and increase comfort in the interaction with motorised vehicles), SafetyCube (Safety CaUsation, Benefits and Efficiency) and SENIORS (Safety Enhanced Innovations for Older Road userS). The present document considers input from liaising with SDOs such as SAE, IEEE, CEN/ISO and 3GPP.

Modal verbs terminology

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"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

The present document considers Multi-Channel Operation (MCO) technology agnostic concepts for the realization of single technology solutions. The present document does not consider mixed IEEE and 3GPP based ITS technologies MCO concepts since multiple technology coexistence solutions are needed to realize such concepts, which are currently not available.

1 Scope

The present document provides an overview of the potential requirements for Multi-Channel Operation (MCO) in C-ITS and the technical capabilities and limitations of C-ITS with respect to MCO. It further proposes a concept for MCO that supports a multitude of C-ITS applications, services and functions. Finally, the present document derives recommendations to update relevant ETSI ITS specifications related to MCO and develop new ones.

2 References

2.1 Normative references

Normative references are not applicable in the present document.

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long-term validity.

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