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**Road Vehicles—Performance Requirements and Test
Methods for Hands Free Communication and Voice
Interaction**
道路车辆免提通话和语音交互性能要求及试验方法

(English Translation)

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Road Vehicles—Performance Requirements and Test Methods for Hands Free Communication and Voice Interaction

1 SCOPE

This document specifies the performance requirements for hands-free communication and voice interaction of road vehicles, and describes the corresponding test methods.

This document is applicable to the vehicles of Categories M₁ and N₁ fitted with onboard loudspeaker hands-free communication terminal, onboard emergency call terminal and onboard voice interaction terminal.

2 NORMATIVE REFERENCES

The following normative documents contain provisions which, through normative reference in this text, constitute essential provision of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

ITU-TG.122-1993	Influence of national systems on stability and talker echo in international connections
ITU-TP.51	Artificial mouth
ITU-TP.57	Artificial ears
ITU-TP.58	Head and torso simulator for telephonometry (HATS)
ITU-TP.79-2007	Calculation of loudness ratings for telephone sets
ITU-TP.501-2020	Test signals for use in telephonometry
ITU-TP.502-2000	Objective test methods for speech communication systems using complex test signals
ITU-TP.863-2018	Perceptual objective listening quality assessment
ITU-TP.863.1-2019	Application guide for Recommendation ITU-T P.863
ETSI EG 202 396-3-2018	Speech and multimedia Transmission Quality (STQ); Speech Quality performance in the presence of background noise; Part 3: Background noise transmission -Objective test methods
ETSI TS 103 558-2020	Speech and multimedia Transmission Quality (STQ); Methods for objective assessment of listening effort
ETSI TS 103 802-2023	Speech and multimedia Transmission Quality (STQ); Objective test method for the evaluation of echo impairments

3 TERMS AND DEFINITIONS

For the purpose of this document, the following terms and definitions apply.

3.1 system simulator

a device used to simulate the mobile communication network, which is equipped with a radio interface on one side and the electrical input/output interfaces in both receive and send directions on the other side

3.2 device under test (DUT)

device to be tested

Note: Here it refers to the vehicles of Categories M₁ and N₁ fitted with onboard loudspeaker hands-free communication terminal, onboard emergency call terminal and onboard voice interaction terminal.

3.3 codec