



**International
Standard**

ISO 34505

**Road vehicles — Test scenarios
for automated driving systems —
Scenario evaluation and test case
generation**

*Véhicules routiers — Scénarios d'essai pour les systèmes de
conduite automatisée — Évaluation de scénarios et génération
de cas de test*

**First edition
2025-06**

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ISO 34505:2025

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 33, *Vehicle dynamics, chassis components and driving automation systems testing*.

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Introduction

The rapid development of automated driving technology with the goal of improving safety and comfort has become an important aspect in the development of modern automobile technology. The evaluation of tests of automated driving systems (ADSs) based on test scenarios has become a common method.

A scenario is a sequence of scenes usually including the ADS(s)/subject vehicle(s) and their interactions in the process of performing a dynamic driving task (DDT). A test scenario is a scenario intended for the testing and assessment of ADS(s) or subject vehicle(s) in their operational environment (see ISO 34501). A test case is a set of test inputs (stimulation), steps, test platforms and expected results (pass/fail criteria) developed for a particular test objective (the test case is defined later in this document). In order to execute the test, some additional items are needed to supplement the scenario. Another important topic is how to choose the right test scenarios for a particular automated driving system (ADS) function.

This document is the basis of generating and evaluating scenario-based test cases for ADSs.

This document is intended to be used to harmonize and standardize the evaluation of scenarios and the procedure and methodology of the generation of test cases for ADSs.

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