



**ISO 18646-2**

**Robotics — Performance criteria  
and related test methods for service  
robots —**

**Part 2:  
Navigation**

*Robotique — Critères de performance et méthodes d'essai  
correspondantes pour robots de service —*

*Partie 2: Navigation*

**Second edition  
2024-01**

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This document was prepared by Technical Committee ISO/TC 299, *Robotics*.

This second edition cancels and replaces the first edition (ISO 18646-2:2019), which has been technically revised.

The main changes are as follows:

- [Clauses 8](#) to [10](#) have been added for path deviation, narrow passage and mapping accuracy.

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This document is intended to specify performance criteria and test methods for navigation of mobile service robots. It defines performance characteristics, describes how they are specified and recommends how to test them.

The characteristics for which test methods are given in this document are those considered to affect robot performance significantly. It is intended that the reader of this document selects which performance characteristics are to be tested, in accordance with the specific requirements.

The performance criteria specified in this document are not intended to be interpreted as the verification or validation of safety requirements.