



**International
Standard**

ISO/IEC 7818

**Information technology — User
interfaces — Framework of voice
user interfaces for personal
mobility services**

*Technologies de l'information — Interfaces utilisateur — Cadre
pour les interfaces utilisateur vocales pour les services dans le
domaine de la mobilité personnelle*

**First edition
2025-09**



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Personal mobility service	2
5 Framework for voice user interface for personal mobility service	3
5.1 General	3
5.2 Procedure of interacting with VUI	3
6 Requirements	4
6.1 Requirements of voice commands for personal mobility service	4
6.2 Requirements of voice user interface for personal mobility service	5
7 Recommendations	5
7.1 Recommendations for voice user interface	5
7.2 Recommendations for personal mobility service	6
Annex A (informative) Examples of VUI for PM service	7
Bibliography	8

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents and <https://patents.iec.ch>. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

Personal mobility (PM) devices such as e-bikes, e-scooters and e-kickboards are becoming popular. A PM device is operated by a single driver at a low speed (i.e. less than 25 km/h). It is mainly used to transport short-distance commuters in cities. It is regarded as a part of environmentally friendly and integrated transportation systems in the cities.

Many PM services such as navigation and guidance are provided to the PM device users in the cities. The PM service can be used to support safety and convenience of the users during their driving PM devices. The PM services can provide information of traffic, parking, environment, tourism, etc.

The users can safely control and interact with the PM services through voice user interfaces (VUI). Since the users drive their PM devices using their hands, the VUI can be used to assure their safe driving. It follows that voice commands are main tools to communicate with the PM services while the users are driving their PM devices.

Information technology — User interfaces — Framework of voice user interfaces for personal mobility services

1 Scope

This document provides a framework of voice user interfaces (VUI) for personal mobility services (PMS).

The users of PMS ride personal mobility devices (PMD), which are empowered by electricity or a human, and interact with the PMS through the VUI (see [Annex A](#)) attached to the PMD.

This document describes the functional requirements, the performance requirements and the procedure of the VUI. This document is applicable to a VUI attached to a PMD, which can be used for interaction between users and the PMD.

2 Normative references

The following document is referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 30122-1, *Information technology — User interfaces — Voice commands — Part 1: Framework and general guidance*