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

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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

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Foreword

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

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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.

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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*

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
voice command
spoken instruction to control ICT system

[SOURCE: ISO/IEC 30122-1:2016, 4.1]

3.2
voice operation
function that allows users to operate a computer with *voice commands* (3.1)

Note 1 to entry: The voice commands usually follow an activation keyword (e.g. “Computer!”) to distinguish them from other speech that is not intended as a voice command.

[SOURCE: ISO/IEC 20071-5:2022, 3.31, modified — Example and Note 2 to entry removed.]

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