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Information technology — User interfaces — Unifying input actions across devices

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Foreword

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Introduction

User interfaces are an essential medium for information transmission between human and machines. It is a basic need to realize natural and efficient input interaction experience on the user interfaces.

With more and more smart devices entering and being distributed in people's daily life, user interfaces are widely used and collaborated between smart phones, tablets, desktop computers, smart watches, televisions, in-vehicle systems, virtual and augmented reality, and other information and communications technology systems.

The main purpose of uniformly converting the input actions across different input devices is to reduce the workload of designers and developers of systems and software applications, and to ensure the consistency of user input experience in cross-device scenarios.

With various smart devices, the industry has been researching and developing user interface technologies that support multiple input methods to improve cross-device input experiences. At present, research and development on the automatic conversion of input actions on the cross-devices has entered the practice and implementation level.

A standardized framework of input action unification module can be used to support the implementation of operations across device user interfaces and promote the development of cross-device software applications technology and industry.

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Information technology — User interfaces — Unifying input actions across devices

1 Scope

This document specifies a unification module for input actions, including its framework, requirements and recommendations, for consistently accessing the operations across multiple types of devices. This document recognizes the input actions as user behaviours that are commonly used to manipulate system or application operations (functions) through user interfaces. It also identifies the need and use cases of unifying input actions across devices.

This document does not specify parameter settings and details of the input actions. This document is applicable to all types of organizations.

2 Normative references

The following documents are 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 13066-1, *Information technology — Interoperability with assistive technology (AT) — Part 1: Requirements and recommendations for interoperability*

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