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Ergonomics of human-system interaction — Electronic paper display — Indoor use

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National foreword

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Foreword

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The committee responsible for this document is ISO/TC 159, *Ergonomics*, Subcommittee SC4, *Ergonomics of human–system interaction*.

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Introduction

The publication of the ISO 9241-300 series of International Standards addressed a wide range of visual display tasks and environments and provided the means for evaluating them. Not covered by those standards was the more recently developed electronic paper display (EPD) technology.

Owing to its unique optical characteristics, the current existing measuring methods may not be suitable for evaluating EPD.

Until measuring methods and compliance routes for EPD can be developed in the ISO 9241-300 series, this Technical Specification provides intermediate instruction and guidance. Using this Technical Specification together with ISO 9241-303 and ISO 9241-305 gives a good understanding of how to analyse an environment for which a specific analysis and compliance method does not yet exist.

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Ergonomics of human-system interaction — Electronic paper display — Indoor use

1 Scope

This Technical Specification establishes test methods for evaluating electronic paper display (EPD) when used in indoor tasks and environments. It is intended to be applied together with the measurement procedures of ISO 9241-305 and the generic requirements of ISO 9241-303 to define compliance routes suitable for EPD.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9241-302, *Ergonomics of human-system interaction — Part 302: Terminology for electronic visual displays*

ISO 9241-303, *Ergonomics of human-system interaction — Part 303: Requirements for electronic visual displays*

ISO 9241-305, *Ergonomics of human-system interaction — Part 305: Optical laboratory test methods for electronic visual displays*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9241-302 and the following apply.

3.1
electronic paper display
EPD
electronic display that shows information by diffuse reflection and holds the image with low power consumption

3.2
electronic reader
e-reader
electronic device which shows information using EPD

4 Electronic paper display for indoor use — Display laboratory method

4.1 Intended context of use

The attributes of the user, environment, tasks and the use of electronic readers based on electronic paper display (EPD) are summarized in Table 1. Attributes are derived from analysis of the intended context of use and are an essential prerequisite for the compliance assessment. Therefore, context elements different from those described in this method could influence the Pass/Fail criteria.

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