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Transmitting and receiving equipment for radiocommunication – Short-range radar technologies and their performance standard – Part 1: System applications of short-range radars

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TRANSMITTING AND RECEIVING EQUIPMENT FOR RADIOCOMMUNICATION – SHORT-RANGE RADAR TECHNOLOGIES AND THEIR PERFORMANCE STANDARD –

Part 1: System applications of short-range radars

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The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 63385 series, published under the general title *Transmitting and receiving equipment for radiocommunication – Short-range radar technologies and their performance standard*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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INTRODUCTION

Short-range radar systems are widely exploited in civil applications, such as automotive, weather forecast, mobile, aviation, or security inspections applications. The performance of each radar system is guaranteed in the field without any harmful interference but the frequency allocation using theoretical calculations does not consider the latest mitigation technologies. In order to increase the efficiency of the system usage without any degradation of the performance of the radars, this document describes the principles of the radar systems and their performance in applications.

This document summarizes the technological features of short-range radar systems. In addition, some practical applications are also investigated and reported.

TRANSMITTING AND RECEIVING EQUIPMENT FOR RADIOCOMMUNICATION – SHORT-RANGE RADAR TECHNOLOGIES AND THEIR PERFORMANCE STANDARD –

Part 1: System applications of short-range radars

1 Scope

This part of IEC 63385 provides a catalogue of the architecture and principles of measurement of short-range radars that are widely exploited in civil applications. The applications are related to the detection of the target for obstacle avoidance, motion sensing, or identification of devices. The mass civil use of radars sometimes creates compatibility issues among the services. This document provides clarification on the characteristics of the radar systems and additional information on applications in the field.

2 Normative references

There are no normative references in this document.