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## **Information technology — Radio frequency identification device conformance test methods —**

### **Part 7: Test methods for active air interface communications at 433 MHz**

*Technologies de l'information — Méthodes d'essai de conformité du  
dispositif d'identification de radiofréquence —*

*Partie 7: Méthodes d'essai pour des communications d'interface d'air  
active à 433 MHz*

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## 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. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TR 18047-7, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

This second edition cancels and replaces the first edition (ISO/IEC TR 18047-7:2005), which has been technically revised.

ISO/IEC TR 18047 consists of the following parts, under the general title *Information technology — Radio frequency identification device conformance test methods*:

- *Part 2: Test methods for air interface communications below 135 kHz*
- *Part 3: Test methods for air interface communications at 13,56 MHz*
- *Part 4: Test methods for air interface communications at 2,45 GHz*
- *Part 6: Test methods for air interface communications at 860 MHz to 960 MHz*
- *Part 7: Test methods for active air interface communications at 433 MHz*

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## Introduction

ISO/IEC 18000 defines the air interfaces for radio frequency identification (RFID) devices used in item management applications. ISO/IEC 18000-7:2009 defines the active air interface for these devices operating in the 433,92 MHz Industrial, Scientific, and Medical (ISM) band.

ISO/IEC TR 18047 provides test methods for conformance with the various parts of ISO/IEC 18000. This part of ISO/IEC TR 18047 contains the compliance measurements required to be fulfilled by a product in order to be compliant to ISO/IEC 18000-7:2009.