Second edition 2008-07-01

Information technology — Radio frequency identification for item management —

Part 1:

Reference architecture and definition of parameters to be standardized

Technologies de l'information — Identification par radiofréquence (RFID) pour la gestion d'objets —

Partie 1: Architecture de référence et définition des paramètres à normaliser



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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.

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 18000-1 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 18000-1:2004), which has been technically revised.

ISO/IEC 18000 consists of the following parts, under the general title *Information technology — Radio frequency identification for item management*:

- Part 1: Reference architecture and definition of parameters to be standardized
- Part 2: Parameters for air interface communications below 135 kHz
- Part 3: Parameters for air interface communications at 13,56 MHz
- Part 4: Parameters for air interface communications at 2,45 GHz
- Part 6: Parameters for air interface communications at 860 MHz to 960 MHz
- Part 7: Parameters for active air interface communications at 433 MHz

Introduction

ISO/IEC 18000 has been developed by ISO/IEC JTC 1/SC 31/WG 4, radio frequency identification for item identification and management, in order to provide parameter definitions for communications protocols within a common framework for internationally useable frequencies for radio frequency identification (RFID), and, where possible, to determine the use of the same protocols for ALL frequencies such that the problems of migrating from one to another are diminished; to minimise software and implementation costs; and to enable system management and control and information exchange to be common as far as is possible.

Informative Annexes to this part of ISO/IEC 18000 provide contact information in respect of the radio regulations within which such systems have to operate, and some informational views of system architectures within which RFID for item management is likely to be used (Annexes A and C).

There are no specific patents applicable to this part of ISO/IEC 18000. Known patents relating to other parts of ISO/IEC 18000 will be found in the appropriate part of ISO/IEC 18000.