INTERNATIONAL STANDARD

ISO

11784

Second edition
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Radio-frequency identification of animals — Code structure

Identification des animaux par radiofréquence — Structure du code

ISO

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 11784 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, subcommittee SC 19, *Agricultural electronics*.

This second edition cancels and replaces the first edition (ISO 11784:1994), which has been technically revised.

Radio-frequency identification of animals — Code structure

1 Scope

This International Standard specifies the structure of the radio-frequency (RF) identification code for animals.

RF identification of animals requires that the bits transmitted by a transponder are interpretable by a transceiver. Usually the bit stream contains data bits, defining the identification code and a number of bits to ensure correct reception of the data bits. This International Standard specifies the structure of the identification code.

This International Standard does not specify the characteristics of the transmission protocols between transponder and transceiver. These characteristics are the subject of ISO 11785.

NOTE — A procedure for the allocation of the manufacturer's code is under study.

2 Conformance

The unique individual identification codes transmitted by a transponder are in conformance with this International Standard provided they meet the requirements of clause 5.

3 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3166:1993, *Codes for the representation of names of countries.*

4 Definitions

For the purposes of this International Standard, the following definitions apply.

4.1 animal code: Bit pattern to identify an animal.

4.2 bit pattern: Sequence of binary digits or bits [0, 1].

4.3 code field: Group of bits in the identification code with a specific meaning.

4.4 country code: Bit pattern to define the country where the transponder was issued.

4.5 data block: Additional group of bits with a specific meaning.

4.6 flag: Single bit with a specific meaning.

4.7 identification code: Part of the code that is used for identification (control codes such as header, trailer and checksum are excluded).

4.8 manufacturer's code: Bit pattern identifying the manufacturer of the transponder.

4.9 national identification code: Code field with a unique number within a country.

4.10 transceiver: Device used to communicate with a transponder.

4.11 transponder: Device which transmits its stored information when activated by a transceiver and may be able to store new information.