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BSI Standards Publication

Radio-frequency identification of animals — Code structure ultra high frequency transponders

National foreword

This British Standard is the UK implementation of ISO 6881:2023.

The UK participation in its preparation was entrusted to Technical Committee AGE/6/1, Radio Frequency ID for Animals.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

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Foreword

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This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 19, *Agricultural electronics*.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document does not use EPC coding but ISO coding. To define an ISO 18000-63 transponder as assigned for animal identification only, an Application Family Identifier (AFI) shall be implemented according to ISO 15961. The AFI is used in an ISO 18000-63 transponder to select in the bulk reading process only those transponders programmed for the dedicated application.

This document does not specify the characteristics of the transmission protocols between transponder and transceiver. These characteristics are the subject of ISO 18000-63.

Transponders are in conformance with this document provided they meet the requirements given in Clauses 5 and 6.

INTERNATIONAL STANDARD **ISO 6881:2023(E)**

Radio-frequency identification of animals — Code structure ultra high frequency transponders

1 Scope

This document defines the rules for encoding the animal identification code in a specific memory bank known as MB 01 in the memory of an ISO 18000-63 transponder (UHF RFID technology).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 11784, *Radio frequency identification of animals — Code structure*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
unique item identifier
UII
96-bit pattern which defines a unique number that contains the *DSFID* (3.2), the animal identification header, the animal identification code and the 8-bit CRC

Note 1 to entry: If the ISO 18000-63 transponder has more than 96 bits of UII memory, the additional bits are considered UII Trailer bits and shall be set to 0 as default value.

Note 2 to entry: See *DSFID* (3.2), *animal identification header* (3.3), *animal identification code* (3.4), *8-bit CRC* (3.15) and ISO 18000–63 *transponder* (3.30).

3.2
data storage format identifier
DSFID
8-bit number defined by ISO/IEC 15962 that indicates the application and how the data is structured into the UII memory of the ISO 18000-63 transponder, i.e. the access method and data format

Note 1 to entry: See *UII* (3.1) and ISO 18000-63 *transponder* (3.30).

3.3
animal identification header
16-bit code reserved for future use

Note 1 to entry: The animal identification header shall be set to 0 as default.