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# Radio frequency identification of animals — Standardization of injection sites for different animal species —

## Part 2: Equine (horses, donkeys and zebras)

*Identification des animaux par radiofréquence — Normalisation des sites d'injection pour différentes espèces d'animaux —*

*Partie 2: Équidés (chevaux, ânes et zèbres)*

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# Foreword

ISO (the International Organisation for Standardisation) 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 organisations, 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 standardisation.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organisation (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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

A list of all parts in the ISO 15639 series can be found on the ISO website.

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.


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# Introduction

This document can be used as a basis for legal decisions.

Since 1989 animals around the world started to be identified with implants. At that stage there was no standardised technology and also no standardised method of using these implants.

Since 1996 the ISO standards ISO 11784 and ISO 11785 are in force and many countries around the world are relying on these technical standards. The ISO 11784 and ISO 11785 technologies are used to identify animals with ear tag transponders, bolus transponders, leg tag transponders and injectable transponders. For the identification of Equidae only injectable transponders are relevant. There is no clear guideline where to inject the glass tube transponder. This needs to be standardised for all animal species which are identified with these transponders.

The standardised methods of identifying species allow a quick, reliable and effective reading of animal identification codes and a reliable recovery of the transponder when slaughtering the animals.

This document is relevant for veterinarians, animal owners, and authorities responsible for checking the identification of animals, such as customs offices, veterinary clinics, shelters and slaughterhouses.

The standardisation of the injection sites of animal species is related to different species and several fields of interest.

After decennia of market experience, migration of the transponder is still a problem in most animal species being identified by injectable transponders. Migration is related to several points. The major points are the injection site and the application of the injectable transponder, but the correct injection site can be related to the dimensions (length and diameter) of the injectable transponder. In dogs and cats, this is not a big issue, as the transponders that are commonly used are the smallest readily available. There are several publications that precisely describe the application of injectable transponders in an anatomical way, but there is a demand from the community to have a comprehensive overview of all aspects related to the application and use of injectable transponders for different animal species.

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# Radio frequency identification of animals — Standardization of injection sites for different animal species —

## Part 2: Equine (horses, donkeys and zebras)

## 1 Scope

This document specifies injectable transponders to all animals included in the Equidae family. It describes two (2) injection sites already in use for official identification in different countries. It pictures the anatomically defined injection point as well as the angle and the deepness of the cannula to be inserted into the body.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

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

ISO and IEC maintain terminological 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**
**equine**
all animals included in the Equidae family including horses, donkeys and zebras and their crosses

**3.2**
**transceiver (reader)**
device, according to ISO 11785, used to communicate with both ISO FDX-B and ISO HDX transponders

**3.3**
**transponder**
radio frequency identification (RFID) device that transmits its stored information when activated by a transceiver and that can be able to store new information

Note 1 to entry: As defined in ISO 11784 and ISO 11785.

**3.4**
**ISO 11784 transponder**
RFID device that transmits its transponder code, according to ISO 11784, when activated by a transceiver according to ISO 11785

**3.5**
**advanced transponder**
ISO 14223 transponder, compatible according to ISO 11785, with additional functionality (e.g. anti-collision, sensor measurements) and memory options

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