

Information about the use of country code, manufacturer code and product code**ISO TC23\SC19\WG3 'Animal Identification'
ICAR Subcommittee on Animal Identification****September 2008****Databases**

For animal identification two types of databases are relevant.

1. A database for animals:

For tracking and tracing of animals databases are used. In these databases individual animal identification is linked to owner information and possibly other information. The owner of the database can be a government or private oriented organization. A country may use several databases e.g. one for companion animals, one for pigs, one for sheep, one for goat, another for cattle etc. Different organizations can be responsible for the different databases.

2. A database for RFID tags compliant with ISO 11784 and ISO 11785:

The allocation of ID-codes being produced must be registered to eliminate the risk of identical identification codes for different animals. When the manufacturer code is used the manufacturer must install and maintain such a database, when the country code is used the legal authority must ensure uniqueness of animal identification codes.

The above is why the ISO 11784 standard stipulates nations take the responsibility to ensure the uniqueness of the animal ID when a country code is used.

When a country permits the use of the country code for any group of animals, several manufacturers may supply this market and therefore coordination of RFID numbers cannot be left to the manufacturer and the country must designate the allocation of animal ID codes to a government-controlled competent authority. If a country does not have such an authority this country should only prescribe the use of manufacturer codes.

In the case where the manufacturer code is used, each manufacturer is responsible to ensure the uniqueness of their codes. ICAR (International Committee for Animal Recording) registers the manufacturers that are allowed to use a (shared) manufacturer code.

Legal authorities shall in case of using the country code make sure that the national numbering system provides equal opportunities for unshared and shared manufacturer codes.

The two databases have a different function and are independent from each other.

Country code versus manufacturer code

It is possible that in a country a competent authority is e.g. only responsible for the allocation of codes in combination with country code for livestock animal organizations. In this case it is impossible to use country-coded transponders for companion animals. The companion animals must then be identified with manufacturer code coded transponders. A country not having a competent authority allocating identification codes is only allowed to use manufacturing codes.

If there is no approval from a legal authority, manufacturers are not allowed to use the country code and the manufacturers are restricted to using the unshared manufacturer code or the shared

manufacturer code in combination with the number sequence allocated to the specific product they are providing.

Manufacturers with a manufacturing code

Manufacturers that have received a manufacturer code or manufacturers that are allowed to use the shared manufacturing code can be found on the ICAR animal identification web page:

http://www.service-icar.com/manufacturer_codes/Manufacturers_DB/manufacturer_codes_main.asp

Information about competent authorities

Competent authorities are asked to make themselves and their responsibilities known to ICAR so information can be made available on the ICAR animal identification web page:

http://www.service-icar.com/manufacturer_codes/Manufacturers_DB/manufacturer_codes_main.asp

ISO11784 and ISO 11785 compliant transponders

The ICAR animal identification web site lists all transponders that have been approved and have received a product code. If a manufacturer is requested to demonstrate the ISO compliance of a transponder, the ICAR letter granting the manufacturer code and the ICAR test report of the transponder can be presented. Alternatively the ICAR web site can be consulted. Manufacturers can rightfully claim that transponders mentioned on the ICAR site which have received a product code are ISO 11784 and ISO 11785 compliant.

Code of conduct

Manufacturers that have signed 'The Code of Conduct' have promised to abide the following rules:

To maintain and enhance user confidence in the usability and functioning of ISO 11784 and ISO 11785 compliant RFID technology, the manufacturer/supplier ensures that their products offered to the market for use in animal identification (i.e. animal bit = '1') and claimed to be compliant to the ISO standards ISO 11784 and ISO 11785:

- Are in full conformance to both ISO standards noted above. Test certificates issued by approved certification bodies and the signed letter from ICAR for use of the granted manufacturer code.
- That the conditions set forth by ICAR for the right to use such granted codes as described in this document are respected.
- The use of the Country code "999" is restricted to test applications only, and such coded devices will not be sold commercially.
- The initial purchaser of the ISO compliant ID device, including the origin of the silicon chip in the device, can be traced.
- For transponders applied to animals, in countries where no national authority regulating transponders, the manufacturer shall recommend to its distributor and purchaser network to maintain traceability up to and including the applier of the transponder.

The manufacturers/suppliers of RFID technology agree to the responsibility to communicate accurate information concerning ISO 11784 and ISO 11785 based RFID technology, products and performances. They also agree to the responsibility to support and promote the standards in a positive way. This includes provable performance information verified by approved certification bodies.

Traceability of devices

All manufacturers of ISO 11784 and ISO 11785 compliant animal ID devices keep track of the units they have produced, including the origin of the silicon chip in the device. In case of fraud this information can be used to track fraudulent operations.

Re-use of Identification code

Transponders that are recovered (e.g. after slaughter) shall not be re-used and ID-codes shall not be re-used within a period of thirty years. Re-use of transponders or ID-codes can lead to serious problems within databases. Note 2 (page 2) of ISO 11784 mentions: "The length of the national identification code was chosen to have enough combinations available for all animals in a large country. Moreover, the uniqueness of a code is expected to be maintained over thirty years."

User information field

Country-coded transponders can contain information in the user information field. The country as coded in the country code field must define the codification of the user information field. If a country has not coded the content of this field or if a manufacturing code is used the content of this field should be set to '0'.

Retag counter

Country-coded transponders can contain retag counter information. Normally the value of the retag counter must be set to '0', but the retag code can be used in a country as coded in the country code field where it is allowed or prescribed to retag an animal that has lost its original tag with a tag with the same identification code. Every retagging shall be noted in the new tag by incrementing the retag counter. The retag counter allows seven times retagging with the same identification code (3-bit retag counter). Should an animal lose a tag for the eighth time then the animal must be tagged with a new identification code. If a manufacturing code is used then the content of the retag counter field should always be set to '0' and retagging with the same identification code is not allowed.

Trailer bits

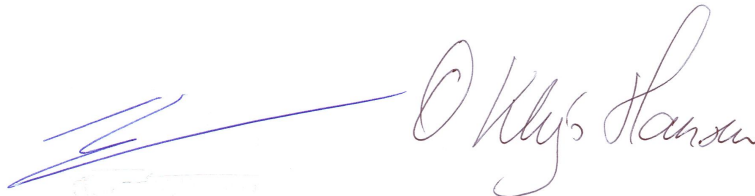
The first 8 trailer bits are in case of a so-called HDX transponder in ISO 11785 specified to be 01111110, the other 16 bits and in case of a so-called FDX-B transponder all the 24 trailer bits are unspecified if the flag indicating the existence of a data block (1) or no data block (0) is set to '0'. The ISO 11784 and ISO 11785 standards allow manufacturers to use the undesignated trailer (flag indicating the existences of no data block) for their own purposes.

Additional requirements

On national level competent authorities can have requirements in addition to those mentioned in this document. The impact and preservation of such additional requirements is a national responsibility.



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