EU legislation requires identification and registration of bovine, ovine, caprine and porcine animals and equidae. For intra-Community trade bovine animals must be accompanied by a passport in addition to the required health certificate, and be identified by double ear tags. The principles for active identification by ear tag of bovine, ovine and caprine and by eartag or tattoo of porcine animals are harmonized. The possibility of active identification of livestock by electronic device is provided for in Community legislation for ovine and caprine animals, and under consideration for bovine animals.

Identification of animals and registration of the holding on which they are kept has always been a fundamental part of the European Community system for managing various commercial and veterinary aspects of animal husbandry. Different Council Directives on intra-Community trade and imports of animals as well as Directives on disease control measures refer to identification of animals and request, for certification purposes, the indication of their holding of origin.

It is clear that the requirements for identification and registration have been enhanced with the completion of the internal market and the need to carry out relevant animal health tests at the place of dispatch. Additionally, identification and registration of animals has been reinforced in the context of the protection of consumers from Transmissible Spongiform Encephalopathy (TSE).

Nonetheless, the need for further improvements has been demonstrated during the 2001 foot-and-mouth disease epidemic. One element of these improvements is the application of advanced techniques for animal identification which is of particular importance to the identification of...
small ruminants, taking into account the well known limitations of conventional means of identification in such species. In 1997, the European Community therefore initiated and sponsored a research programme, the IDEA Project, on electronic identification of ruminants. The basic objectives to identify farm animals can be summarised as follows:

- the localisation and tracing of animals for veterinary purposes, which is of crucial importance for the control of infectious diseases and
- the traceability of products for public health reasons.

Table 1 gives an overview about the main Community Rules on identification of ruminants and pigs.

The relevant texts can be accessed by internet via the following link: http://ec.europa.eu/comm/food/animal/identification/index_en.htm.

### Bovine animals

The current system for the identification and registration of bovine animals is based on Regulation (EC) No 1760/2000 of the European Parliament and of the Council establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products. The main elements are:

- double eartag with individual code.
- holding register.
- cattle-passport.
- computerised database for individual animals.

Table 1. EU-Legislation on identification.

<table>
<thead>
<tr>
<th>Species</th>
<th>Bovine</th>
<th>Porcine</th>
<th>Ovine/Caprine</th>
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<tr>
<td>General provisions on</td>
<td>Directive 64/432</td>
<td>Dir. 91/68</td>
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<tr>
<td>intra-trade</td>
<td>Reg. 1760/2000</td>
<td>Dir. 92/102</td>
<td>Reg. 21/2004</td>
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<tr>
<td>identification</td>
<td>Reg. 1082/2003</td>
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<tr>
<td>Implementation rules</td>
<td>Reg. 494/98</td>
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<td>Reg. 2680/99</td>
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<td>Dec. 2001/672</td>
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<td>Dec. 2006/26</td>
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<td>Reg. 509/99</td>
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<td>Dec. 2004/764</td>
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<td></td>
<td>Reg. 644/2005</td>
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</table>
Current requirements are laid down in Commission Regulation (EC) No 911/2004 implementing Regulation (EC) No 1760/2000 as regards eartags, passports and holding registers. Eartags shall contain at least the name, the code or the logo of the competent authority or the central competent authority of the Member State which allocated the eartags, the two-letter country code and a numeric code not exceeding 12 digits. An additional bar code may be authorised by the central competent authorities of the Member States. Replacement eartags used in the event of eartag losses may contain a mark with the version number of the replacement eartag expressed in Roman numerals.

Detailed rules for the model of the passport have been laid down in Commission Regulation (EC) No 911/2004. Passports shall be issued for each bovine animal within 14 days of the notification of its birth, or, in the case of animals imported from third countries, within 14 days of the notification of its re-identification by the Member State concerned. Passports may be issued for animals from another Member State under the same conditions. In such cases, the passport accompanying the animal on its arrival shall be surrendered to the competent authority, which shall return it to the issuing Member State.

Whenever a bovine animal is moved, its passport shall accompany it. By way of derogation from this requirement a Member State may determine that animals can move within its territory without being accompanied by a passport provided the Member State has a computerised database which the Commission deems to be fully operational. In the case of the death of an animal, the keeper shall return the passport to the competent authority. When animals are sent to the slaughterhouse, the operator of the slaughterhouse shall return the passport to the competent authority. When animals are exported to third countries, the last keeper shall surrender the passport to the competent authority at the place where the animal is exported.

The passport shall contain information on the animal (identification code, date of birth, sex, breed or colour of coat, identification code of the mother or, in the case of an animal imported from a third country, the identification number given corresponding to the identification number of origin), identification number of holding where born, and identification numbers of all holdings where the animal has been kept and the dates of each change of holding. In addition the passport shall contain the signature of the keeper(s), and the name of the issuing authority (Transporters whose sole responsibility is the movement of animals are not considered to be keepers and hence their signature will not be required).
Holding registers

Detailed rules for the content of the register are laid down in Commission Regulation (EC) No 911/2004. The register shall contain up-to-date information on the livestock that reside, or have resided, on each holding; this should include information on each animal (identification code, date of birth, sex, breed or colour of coat), the date of death of the animal on the holding, in the case of departure the identification code of the holding of destination and the date for departure, and in the case of arrival, identification code of holding of dispatch and the date of arrival. In addition, checks by the competent authority must be clearly identified in the register.

The computerised national databases

The key element of the Community system of bovine identification is the national database in the Member State. The database plays a key role for maintaining a proper control of animal movements and in the past also in the management of subsidies. The database must contain information for each bovine animal (identification code, date of birth, sex, breed or colour of coat, identification code of the mother or, in the case of an animal imported from a third country, the identification number given corresponding to the number of origin, identification number of holding where born, and identification numbers of all holdings where the animal has been kept, the dates of each change of holding and the date of death or slaughter). In addition the database must contain information for each holding (identification number and name and address of the holder). The database must be able to supply at any time a list of identification numbers for all bovine animals present on a holding, and a list of all changes of holding for each bovine animal starting from the holding of birth or holding of importation.

All births, deaths and movements have to be notified to the competent authority within a period determined by the Member State of between three and seven days.

Controls and sanctions

According to Regulation (EC) 1082/2003 the Member States should perform controls on at least 10% of their holdings every year to verify compliance. This percentage can be reduced to 5% if the central database is deemed to be fully operational. The holdings have to be selected on the basis of a risk analysis, the on-the-spot checks have to be carried out unannounced and all animals on the holding have to be controlled. The Member States send every year a report to the Commission on the basis of a standardised model.

In case of irregularities the following sanctions can be imposed according to Regulation (EC) 494/98, depending on the heaviness of the reaches:

- Restriction on movement of individual animals on a holding.
- Restriction on movement of all animals on a holding.
• Destruction of animals (if no prove of the identity of animals within two working days).

The current Community rules on identification and registration of porcine animals were already laid down in Council Directive 92/102/EEC on the identification and registration of animals. The principles are:
• Identification of groups of animals.
• Eartags or tattoos to identify the holding.
• Holding register.
• Computerised national database of holdings.

Pigs must be marked as soon as possible, and in any case before they leave the holding, with an eartag or tattoo. The identification mark must make it possible to determine the holding from which they came and enable reference to any accompanying document which must mention such an eartag or tattoo. Furthermore the mark must enable reference to the national database of pig holdings.

The national systems of the Member States for movements of pigs in their territory’s must enable the holding from which the animals came and the holding on which the animals were born to be identified.

Animals imported from a third country shall be identified by a mark within 30 days, and in any event before they leave the holding of destination. This requirement does not apply if the holding of destination is a slaughterhouse situated on the territory of the Member State in which the veterinary border checks are carried out and the animals are actually slaughtered within the 30-day period. A link shall be established between the identification established by the third country and the identification allocated by the Member State of destination. That link shall be recorded in the holding register.

Pig keepers must keep a register stating the number of animals present on the holding. The register shall include an up-to-date record of movements (number of animals entering and leaving the holding) stating, as appropriate, their origin or destination and the date of such movements and the identification mark.

For animals to be moved to or from a market or collection centre the keeper shall provide a document setting out details of the animals to the operator, on the market or collection centre, who is a keeper of the animals on a temporary basis.
Detailed rules for registration of holdings in national databases for porcine animals are laid down in Commission Decision 2000/678/EC. The national database must contain information for each holding (ID-number, address, person responsible, geographic coordinates, sanitary information). There shall be an entry in the database for each separate movement of pigs. Information on each movement of groups of pigs shall include the number of pigs being moved, the identification number of the holding or herd of departure as well as the date of departure, and the identification number of the holding or herd of arrival as well as the date of arrival.

The current system for the identification and registration of sheep and goats is based on Council Regulation (EC) No 21/2004 establishing a system for the identification and registration of ovine and caprine animals. The main elements are

- Double individual identification.
- Movement document for groups.
- Holding register.
- Computerised database.

The animals shall be identified by an eartag and a second means of identification (2nd eartag or tattoo or electronic transponder). Eartags and the other means of identification shall contain at least the ISO-country code followed by an individual code for the animals of no more than 13 digits. It is scheduled that electronic identifiers should be compulsory from 2008. Animals born after 9 July 2005 shall be identified within 6 months after birth and in any case before they leave the holding of birth. Derogations are possible for extensive farming conditions until 9 months. However for animals intended for slaughter before the age of 12 months and intended neither for intra-Community trade nor for export to third countries Member States may authorise an alternative identification system with only one eartag bearing the code of the holding of birth.

Animals imported from a third country shall be identified at the farm of destination within a period determined by the Member State of no more than 14 days. This procedure is not necessary when animals go directly from the border inspection post to a slaughterhouse in that Member State and are slaughtered within five working days.

Whenever animals are moved between holdings, each group has to be accompanied by a movement document containing detailed information on the holdings of departure, holding of destination, keeper, number of animals moved, means of transport and date. The holding of destination
shall keep the movement document for a period determined by the Member State, but which must be at least 3 years. From the date electronic identification will become compulsory, the movement document must contain the individual ID-code for each animal.

By way of derogation from this requirement the movement document shall be optional in any Member State where a centralised computer database is operational and contains all the information required.

Each keeper, with the exception of the transporter, shall keep an up-to-date holding register. The register shall contain at least information on the holding (ID-code, address, type of production, keeper), the number of animals according to the latest inventory, information on movements to and from the holding (transporter, corresponding holdings of departure/destination), information on replacement of identifiers and checks carried out by the competent authority. From the date electronic identification will become compulsory the holding register shall also contain individual information on each animal (identification code, date of birth, date of identification, month and year of death on the holding, breed, if known genotype).

By way of derogation from these requirements the holding register shall be optional in any Member State where a centralised computer database is operational and contains all the information required.

Since July 2005 each Member State has set up a computer database containing at least information on each holding (ID-code, address, keeper, species, type of production, results and dates of inventories, animal health information).

As from 1st January 2008, the database shall contain information for each separate movement of animals. The respective entry must comprise at least the number of animals being moved, the date of departure/arrival and the ID-code of corresponding holding. Each keeper, with the exception of the transporter, shall provide the competent authority with the information relating to the movement of animals within seven days.

The introduction of electronic identification for sheep and goats is scheduled for 2008. A derogation exists for Member States with populations of less than 600 000 sheep and goats or 160 000 goats and only for animals not involved in intra-community trade. Albeit the animals will be identified by one ear tag and one electronic identifier, which complies with the following technical characteristics:

- Read-only passive transponder applying HDX- or FDX-B technology, complying with ISO 11784 and ISO 11785.
Requirements for I&R in the EU

- Readable by reading devices complying with ISO 11785, capable of reading HDX and FDX-B transponders.
- Reading distance for portable readers 12 cm for eartags and 20 cm for boluses; for stationary readers 50 cm.

The Joint Research Centre (JRC) of the European Commission is currently preparing guidelines and procedures for the implementation of electronic identification.

In 2005 the “Report from the Commission to the Council and the European Parliament on the possibility of introduction of electronic identification for bovine animals” (COM 2005/9) which was based on the outcomes of the IDEA-project was presented. In light of the conclusions, the Commission is currently investigating options for possible amendments in Community legislation to authorise electronic identifiers within the official system of bovine identification and registration.

References to Community legislation


Commission Regulation (EC) No 509/1999 of 8 March 1999 concerning an extension of the maximum period laid down for the application of ear-tags to bison (Official Journal L 60, 09/03/1999, p. 53)


Commission Decision 2001/672/EC of 20 August 2001 laying down special rules applicable to movements of bovine animals when put out to summer grazing in mountain areas (Official Journal L 235, 04/09/2001, p. 23)

Commission Regulation (EC) No 1082/2003 of 23 June 2003 laying down detailed rules for the implementation of Regulation (EC) no. 1760/2000 of the European Parliament and of the Council as regards the minimum level of controls to be carried out in the
framework of the system for the identification and registration of bovine animals (Official Journal L 156, 25/06/2003, p. 9)


Commission Decision 2006/28/EC of 18 January 2006 on extension of the maximum period for applying eartags to certain bovine animals (Official Journal L 019, 24/01/2006, p. 32)


Requirements for I&R in the EU