

Questions and answers on Electronic Identification in sheep and goats

- Why do we need individual traceability for sheep and goats?

Past experience with a number of different diseases, and in particular following the foot-and-mouth disease crisis in 2001, has shown that systems based on group (batch) identification do not permit an adequate tracing of sheep movements. As soon as animals move through different holdings, farms, or markets, the composition of the group changes and it is very difficult to track where each animal is going without individual identification and recording. In the case of a disease outbreak, uncontrolled movements of animals could cause the further spread of disease. The localisation and tracing of each individual animal is therefore important to control infectious diseases.

- Why do we need electronic identification?

Sheep and goats are normally kept and handled in herds and not on an individual basis. They are often traded via markets or assembly centres where animals from different farms are re-grouped and further moved to different destinations. If we want to ensure individual traceability by conventional means, we would need to read the individual eartags or tattoos of a large number of animals in a short space of time, which is quite difficult – if not impossible.

The use of electronic transponders allows the automatic reading of individual animal codes directly into a database. With the use of electronic identification, the individual identification of an animal can easily be recorded whenever the animal moves from one holding to another.

- What are the current EU rules with regard to the identification of sheep and goats?

Following the 2001 foot-and-mouth disease outbreaks, EU rules on the identification of sheep and goats were reinforced. The current Regulation (EC) No 21/2004 foresees that already from 2005 small ruminants are individually identified with two identifiers. These can be two eartags, or an eartag and an electronic identifier. From 2010, all newborn animals will need to be identified electronically (with a few clearly defined exceptions explained below). The individual identity of each animal needs to be recorded in a holding register (on farm) and when animals are moved (transported), it should be recorded on a movement document accompanying the animal. This individual recording (reading) will become compulsory from 2011 for animals born after 31 December 2009. From 2012, individual recording will be mandatory for all animal movements. The only exceptions are animals born before 2010; these animals can move to slaughter without individual recording. This step-by-step approach will allow sufficient time for farmers, markets,

slaughterhouses authorities and other operators to adjust to the new requirement and install the necessary equipment.

- When will electronic identification become compulsory?

Electronic tagging will be compulsory for lambs born after 31 December 2009. Compulsory tagging of older animals is not foreseen. However, Member States can decide to tag older animals with electronic identifiers as well instead of conventional eartags in order to take full advantage of the benefits of electronic identification (e.g. on farm management purposes). Individual recording of movements (reading of tags) is foreseen from 2011 for all animals born after 31 December 2009 and from 2012 for all animals. The only exceptions are animals born before 2010 that can move to slaughter without individual recording.

- Which are the exemptions from compulsory electronic tagging?

Member States with populations of less than 600,000 sheep and goats or less than 160,000 goats can make electronic tagging voluntary for animals not entering intra-Community trade. However, this does not exempt them from individual traceability. Indeed, sheep and goats still need two conventional eartags and their individual identification will be recorded whenever they move. Animals that will be slaughtered within twelve months after their birth and not entering intra-Community trade may be exempted from the requirement for electronic identification and be identified through a batch identification system only.

- How does electronic animal identification work?

Electronic animal identification is based on the use of an electronic transponder (computer chip) that can be embedded in an eartag or a bolus in the digestive tract. Other possibilities are injectable transponders or even transponders in a pastern tag (leg band). The identification code can then be read using either a portable or a fixed electronic reader. The transponder reacts to the reader by emitting the identification code of the animal. After transmission, the transponder reverts to a completely passive state until the next activation.

- What kind of electronic identifiers exist for sheep and goats?

The two most common types of electronic identifiers are electronic eartags and ruminal boluses. Electronic eartags can be applied early in the life of an animal (principally to newborn lambs). Eartags are easily visible from outside but have a certain loss rate. The bolus is swallowed by the sheep or goat and is finally deposited in the *reticulum*. This is a

specific part of the digestive tract of the sheep or goat, which develops as part of the stomach after birth. It takes a few weeks until this part of the stomach is developed, therefore it is best to insert the bolus later. If the right type of bolus is applied to the right type of animal, loss rates are extremely low. There are also other types of identifiers (injectable transponder, electronic mark on the pastern = leg band), but they can only be used with certain limitations for intra-Community trade.

- What are the benefits of electronic tagging?

Electronic tagging allows individual animal codes to be read directly into a database. It is less error-prone and much faster than data recording by hand. The sheep industry in particular, requires big groups of animals to be read in a very short space of time (e.g. at markets). Electronic tagging is therefore an essential tool for automatic reading of individual identities and recording of movements. This means that in the case of an animal disease outbreak, electronic identification provides a clear link to the history of each individual animal and therefore a quicker and more effective action can be taken to eradicate or prevent the spread of infectious diseases. Apart from the traceability aspect, electronic tagging can be a very useful tool for on-farm management. Farmers have the possibility to record individually management data like weights or lambing results and could even retrieve data of their animals from the slaughterhouse.

- What will the costs of electronic tagging be?

Electronic identifiers cost around one Euro more than conventional eartags. Simple hand-held readers are available from a few hundred euros, and static readers cost some thousand euros. Costs for the installation at farms, markets and slaughterhouses can vary considerably depending on the local conditions. However, prices depend to a large extent on the number of devices bought. Collective buying via cooperatives, farmers unions or breeding associations can considerably reduce unit prices. Several Member States give financial incentives to support farmers buying the equipment. If Member States decide to support the introduction of electronic identification within their rural development policy, they can obtain co-financing from European funds (Regulation (EC) No 1698/2005).

The EU Commission has carried out a study on the costs of electronic identification that is available from the website of the Joint Research Centre http://eid.jrc.ec.europa.eu/EIDpages/documents/tg/costanalysis_final_web.pdf.

- Will everybody need to buy a reader?

No. As every animal will keep at least one conventional identifier, individual tag numbers can always be read manually. This might be sufficient for smaller holdings. Bigger farms or markets will certainly choose to buy readers.

- Have any Member States already used electronic tagging?

A number of Member States already use electronic tagging, as part of particular disease control measures (e.g. Brucellosis, scrapie). In addition, several Member States have carried out successful pilot projects with electronic tagging. Many sheep farmers in the EU already use electronic identification for their daily farm management. Electronic identification is also used outside the EU.

- Why is electronic tagging only being introduced for sheep and goats, and not for cattle?

Strict rules to ensure the individual traceability of bovine animals (cattle and buffaloes) were already laid down in 1997 (Regulation (EC) No 1760/2000), linked to protection measures against BSE (Mad-Cow-Disease). The current rules on bovine identification do not exclude the use of electronic identification. In some Member States electronic identifiers for cattle are in use on a voluntarily basis to facilitate the reading of individual numbers.