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REPUBLIC OF SOUTH AFRICA

DRAFT DISCUSSION DOCUMENT

FOR REGISTRATION, APPROVAL, TRACEABILITY AND MOVEMENTS RECORDING OF TERRESTRIAL ANIMALS IN SOUTH AFRICA FOR DISEASE CONTROL

Animal Production, Health and Food Safety

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SUMMARY

According to the National Development Plan (NDP): " *to optimize the impact of expanding exports, it is necessary to stimulate areas where there is a revealed competitive advantage and growing global demand, where the products would contribute to rising terms of trade, and where potential exists to expand domestic linkages*". The Agricultural Policy Action Plan (APAP) and Veterinary Strategy highlight the adverse effects of certain important diseases (e.g. transboundary animal diseases) on trade and the safety of animals and animal products. AIRT is the first step in addressing these concerns to aid in the access of lucrative trade markets.

Animal identification, recording and traceability (AIRT) is both a public and private good that is critical to food security and economic growth in the livestock sector through better control of infectious diseases, animal traceability, promotion of food safety, and improved livestock production data quality and analysis thereof. AIRT is regarded as a private good as it contributes to disaster management, data collection and analysis - leading to improved breeding, animal production and productivity and farm management. It may also reduce stock theft and lead to enhanced market access and competitiveness. AIRT is regarded as a public good due to increased animal and product traceability, which improves animal health, ensure food safety assurance and consumer protection.

1. CURRENT STATUS AND BACKGROUND TO THE SYSTEM

1.1 The current situation in South Africa

1.1.1. Animal owner identification (brand mark)

The Animal Identification Act (AIDA), 2000 (Act 6 of 2000) currently makes provision for a unique one to three character mark that identifies the legal owner of an animal. These marks are allocated by a central registry and this is linked to the residential address and identity details of the owner which provides a limited degree of traceability to an owner/farm of origin. In the communal grazing areas, many livestock owners use either owner or group identification as opposed to individual identification. Some areas are serviced by a network of dip tanks and each dip tank has been allocated a unique mark in terms of the AIDA. This mark identifies the Province and the individual dip tank. The central database managed by Department of Agriculture Forestry and Fisheries (DAFF) plays a role in reducing stock theft, but does not make provision for individual animal identification that is required for traceability.

1.1.2. Individual animal identification - pedigree and performance tested livestock

All pedigree and performance tested livestock in South Africa have individual animal identification by way of a certificate and an identification mark as prescribed by the Animal Improvement Act (AIA) (Act No 62 of 1998). All registered breeders have a unique herd designation mark – similar to an owner Identification mark that is allocated by a central registering authority. These marks are allocated by the Agriculture Research Council (ARC) on behalf of DAFF and are kept in the National Livestock data bank known as the Integrated Registration and Genetic Information System (INTERGIS).

1.1.3. Individual animal identification and traceability for non-pedigree and performance registered livestock

A number of farmers, feedlots, and producer organizations in South Africa have voluntary functional individual animal identification and traceability systems. There are separate voluntary animal type identification modes in for: Ostriches, Livestock (Cattle, Sheep, Goats, Pigs), Wildlife, Companion animals, poultry and Abattoir. provides comprehensive information about the animal, recording of medical history, treatment and procedural records, withdrawal periods, recording of veterinary pharmaceutical products, batch no, expiry dates, manufacture and suppliers details, disease testing and result record, positive and negative status relating to individual animals via electronic medium, pregnancy, dam/sire relationships electronic dispatch and receipt average daily gain (ADG), and other day to day management information.

. Most farmers still make use of individual systems where the owner decides on the identification number that is written on the ear-tag (this is usually based on the year and number of the newborn animal). These owner-generated numbers cannot be incorporated into a National Database due to duplication issues.

For commercial pigs, owners must have a registered identification mark for their animals. The permanent marking of pigs is compulsory. Pigs must be tattooed at one month of age. When pigs are moved from the compartment to the abattoir, a movement permit is obtained from the Provincial State Veterinary office, which accompanies the pigs to the abattoir. The farm must also maintain a register of all movements of pigs off the farm and the destination. The pigs are inspected on arrival at the abattoir and if the pigs are not marked (tattooed) the farmer is reported. While the pigs are off-loaded from the vehicle, the abattoir places an identification number on the back of the pig which is recorded at the offloading bay. This number is electronically recorded on a computer. The pig goes through the slaughter and inspection process of which the last step is weighing and grading. At the grading point it is confirmed that the ear tattoo mark and the newly created batch number correspond. A tag is created with a unique number which is attached to the fore leg of the pig and this number will carry through to all other process like cutting. Information contained on the tag includes: the abattoir identification, date, the farm of origin, grading and weight of the carcass and damage if any. On certification for export the records at the abattoir will be checked by the veterinary official, to ensure that the consignment originates from officially approved compartments, before the veterinary health certificate is issued.

For Ostriches, tamper evident, internationally approved animal ear tags, uniquely numbered from a central database, assist with proof of ownership, electronic transfer of all animal identification and medical history

1.1.4. Veterinary medicine and biologicals database

Identification and traceability of veterinary medicine and biological along the animal value chain will help the veterinary services to protect and improve the safety of food people eat and the control of vaccination. Data will be collected on all prescribed veterinary medicines including vaccines and stock remedies for use in animals. The aim is to provide data for surveillance and control purposes and to serve as an advisory tool for veterinarians and regulators in order to regulate the consumption of antibiotics and the use of vaccines on each farm.

1.1.5. Identification and traceability of animal products

South Africa is a net importer of livestock and livestock products but it also exports some beef, goat, lamb and pork to high valued niche markets. Ideally, food safety requires a traceability system based on a farm-to-fork principle. This means that the food on a consumer's plate should be traceable back to the farm of origin. Independent audits of the traceability systems are viewed as essential and a check on fraudulent branding practices. Though it is difficult for them to trace back the product to the farm of origin due to lack of individual animal identification and movement controls, some abattoirs and processing facilities are able to trace the product forward and back, due to attributes of traceability systems incorporated into their brands. Current brands that are audited and have voluntary traceability systems include Woolworth's "Free Range Meats", Pick n Pay's "Country Reared Beef" and the Kalahari Kid Corporation's "Desert Lamb". Currently, it is not possible to conclude that the entire supply chain can guarantee a product's origin due to limited studies that have included detail pertaining to the downstream tiers; meat processors, packers, wholesalers and retailers.

1.2 Movement control, livestock statistics and information in South Africa

South Africa had a movement permit system that provided a degree of traceability for disease monitoring. This also served as additional proof of purchase and ownership of animals. The system was gradually abandoned as it required extensive administrative and human resource inputs. This included the keeping of stock registers by farmers and stock inspectors, and the inspection of all animals at least twice a year. These inspections were also used to update registers and this also gave livestock owners and keepers the opportunity to access free vaccinations for certain diseases. This practice provided a useful buffer against the spread of certain controlled diseases in the communal grazing areas in particular. At the same time this was an opportunity to count animals to provide the State with accurate livestock statistics. This included information on herd and flock fertility (birthing rate) and livestock mortalities (deaths) that, in turn, could be used to determine trends and reasons for reproductive and health problems and to plan interventions to manage them. At the time, traceability was not a requirement and arrangements were largely voluntary. Recently, traceability of animals and products has become a standard requirement throughout the world. As a result, many countries have established AIRT systems that are being implemented by the State or by individual industries under State supervision.

These actions are providing the necessary assurances to enable countries to trade freely and the World organization for animal health (OIE) has specific general principles for animal identification (Chapter 4.1.). Adopting and implementing these principles would make it far easier to obtain and maintain disease free status for various diseases of such nature.

2. DEFINITIONS/ GLOSSARY OF TERMS/ ACRONYM

Definitions

Animal identification means the combination of the identification and registration of an animal individually, with a unique identifier, or collectively by its epidemiological unit or group, with a unique group identifier.

Animal identification system means the inclusion and linking of components such as identification of establishments/owners, the person(s) responsible for the animal(s), movements and other records with animal identification.

Registration is the action by which information on animals (such as identification, animal health, movement, certification, epidemiology, establishments) is collected, recorded, securely stored and made appropriately accessible and able to be utilised by the Competent Authority.

Animal traceability means the ability to follow an animal or group of animals during all stages of its life.

'**Owner**' means a natural or legal person, having animals and products under their responsibility, including animal keepers and transporters, but excluding pet keepers and veterinarians;

'**Establishment**' means any premises, structure, or any environment, in which animals or germinal products are kept, except for: (a) households keeping pet animals; (b) non-commercial aquaria keeping aquatic animals; (c) veterinary practices or clinics;

Dip tank mark – a mark allocated in terms of section 18 of the Animal Identification Act, 2000 (Act 6 of 2002) that includes an alphabetical or numerical character to identify the Province and one to two alphabetical characters to identify the specific dip tank.

'**Products of animal origin**' means: (a) food of animal origin, including honey and blood; (b) live bivalve molluscs, live echinoderms, live tunicates and live marine gastropods intended for human consumption; and (c) animals other than those referred to in (b) destined to be prepared with a view to being supplied live to the final consumer;

'**Transporter**' means an operator transporting animals on its own account, or for a third party;

National mark – a mark allocated in terms of section 18 of the Animal Identification Act depicting a three legged pot to be used as prescribed.

Numerical character – a number between one and nine that forms part of a dip tank mark to identify a specific province in South Africa. Numeral mark will have a corresponding meaning

Traceability – the ability to verify the history, location or application of an item by means of documented recorded identification

Acronyms

AIRT	Animal Identification, Recording and Traceability
AIDA	The Animal Identification Act, 2000 (Act no 6 of 2000)
DAFF	Department of Agriculture Forestry and Fisheries
ICAR	International Committee for Animal Recording
NERPO	National Emergent Red Meat Producers Organisation
OIE	World Organization for Animal Health (translated from the French)
RMRDT	Red Meat Research and Development Trust
RPO	Red Meat Producers Association
SAPS	South African Police service
SAOBC	South African ostrich Business Chamber

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3. PROBLEM STATEMENT FOR THE REGISTRATION, APPROVAL, TRACEABILITY AND MOVEMENTS RECORDING SYSTEM IN SOUTH AFRICA FOR DISEASE CONTROL

Animal identification and animal traceability are tools for analysing and addressing animal health (including zoonoses – diseases transmitted between animals and humans) and food safety issues. These tools may significantly improve the effectiveness of activities such as: animal performance, disaster management, the prevention and management of disease outbreaks and food safety incidents, vaccination programmes, herd/flock husbandry, zoning/compartmentalisation, surveillance, early response and notification systems, animal movement controls, inspection, certification, stock theft, fair practices in trade and the utilisation of veterinary drugs, vaccines, feed and pesticides at farm level.

At the moment, South Africa does not have an integrated and comprehensive Animal identification, recording and traceability (AIRT) system to deliver benefits to farmers, consumers, and the nation as a whole. There are currently inconsistent AIRT standards with regard to products destined for local and export markets. Animal Traceability is also dependent on good movement control and this, along with individual animal identification needs to be addressed. The INTERGIS system (individual animal identification) is not linked to the AIDA database (owner identification). The current legislation (several Acts) referring to AIRT principles are not harmonized. Resources (human, financial and physical) to implement and maintain an effective AIRT system are limited.

PURPOSE OF THE REGISTRATION, APPROVAL, TRACEABILITY AND MOVEMENTS RECORDING SYSTEM IN SOUTH AFRICA

The system is an indispensable tool in safeguarding the national herd through preparedness for disease outbreaks, thus ensuring speedy containment and limiting damages to national and international trade. The aim is to improve the access of livestock farmers to (i) improved sanitary (animal health and product safety) services and to (ii) more stable, predictable income generating market opportunities for the Livestock and agricultural products sector.

Objectives

Main objective:

The main objective is to improve the ability to trace livestock when high impact animal disease, zoonotic (transferable to humans) and economic livestock diseases thereby improving production, increasing the efficiency of production and safeguarding both human health and food security.

Other Objectives:

To help strengthen the internal market and the competitiveness of the livestock and agricultural products businesses in South Africa which led to a more stable, predictable income generating market opportunities.

Align the livestock value chain to market needs to good practice thus improving the efficiency and competitiveness of each of the participating farmers and companies, thereby contributing to strengthening the domestic market.

Create market opportunities for all those farmers, food establishments and companies including SMEs who are willing to compete and meet the requirements and standards of performance required by global markets.

These are achieved through:

- improvement of animal identification and traceability, which will aid in the control of animal health and diseases, disaster management, breeding, production and productivity improvement, safety of agricultural products and better quality of livestock data for trade purposes.

KEY DRIVERS

The main key driver is to protect national herd from animal diseases which in turn improves access to markets, cost savings to firms/livestock producers and the facilitation of investments to stakeholders in the livestock value chain.

Other drivers for a traceability system in South Africa are:

- i) promoting consumer confidence in South African meat and gaining export access to the global meat market.
- ii) to be able to develop, implement and maintain a split quality assurance system that is able to identify establishments and farmers who make use of growth promoters and exclude them from particular local and export markets.
- iii) to be able to link registration, distribution and usage of veterinary medicines with specific establishments.
- v) to protect national herd from transboundary animal diseases and open markets for smallholder farmers especially those in the Foot and Mouth Disease free and protection zone

KEY REQUIREMENTS FOR A FUNCTIONAL AND EFFICIENT AIRT SYSTEM

In order to implement a functional and efficient AIRT system a phase in approach is highly recommended.

A functional AIRT system aims to identify animals individually and register them on a central database. Such an AIRT system must be able to link with laboratory results for animal diseases (e.g. brucellosis) and also link with residue and microbiological testing for antimicrobial resistance and food safety. Such an AIRT system should at minimum include:

- Identification of all animals including Imported livestock.
- A national livestock property identification system.
- Registration of establishment from a central authority.
- Official identification numbers of animals (individual and group)
- Allocation of herd or flock identification (epidemiological unit) code for branding.
- Owner identification
 - Registration of common areas where animals are handled, including: Sale yards, show grounds, stationary veterinary practices and hospitals, pounds, race courses and shearing sheds.
- Registration of abattoirs and processing plants.
 - Uniform international standards for identification devices (eartags, microchips, rumen transponders, etc)
 - Administration of official animal identification methods and devices (Distribution of Official Identification Devices, Replacement of Official Identification Eartags, Issuance of Duplicate Official Identification Eartags, Approved Tagging Sites)
- Registration of identification device distributors.
- Required permit(s) for movement of designated animals, tags and animal products.
- Notification of movement of designated animals, tags animal products.
- Notification of death, theft or stray of individually identified animal.
- Notification of slaughter at abattoirs.
- Duty of officials in relation to notifications received.
- Animal registration and keeping of registers.
- AIRT central data bank and backup.
- Software and servers capable of capturing and processing all the relevant data as needed to run a functional AIRT system.
- Controlled access by stakeholders.
- Compliance with protection of public information.
- Adaptable AIRT system with a point for future expansion.
- Sufficient resources available to implement and maintain AIRT system.

4. GENERAL FUTURE FRAMEWORK FOR THE DEVELOPMENT AND IMPLEMENTATION OF AN ANIMAL AND PRODUCTS REGISTRATION, APPROVAL, TRACEABILITY AND MOVEMENTS RECORDING SYSTEM

TERRESTRIAL ANIMALS AND PRODUCTS FROM TERRESTRIAL ANIMALS

Animal identification requirements for kept terrestrial animals

(1) With effect from a date as determined, a person may not – (a) keep, or cause or permit to be kept, on any registered establishment; (b) move, or cause or permit to be moved, from a registered establishment; (c) receive, or cause or permit to be received onto a registered establishment for any purpose other than to keep; (d) by means of any conveyance or otherwise move, or cause or permit to be moved, along any road or any other place not being on the registered establishment, any prescribed animal, unless that animal is distinctly identified in the prescribed manner by means of a mark, tag, transponder or other indicator approved by the veterinary authority for the purpose of ascertaining the ownership, origin, location, movement history, disease status and fate of the animal.

(2) A person, other than a veterinary official, an authorised person or a veterinarian, may not remove or replace an approved identification tag, mark, transponder or other indicator attached or applied to a live animal.

(3) A person must not alter, obliterate or deface the information on any identification tag, mark, transponder or other indicator attached or applied to an animal.

(4) A person slaughtering an animal, when required by a veterinary authority, cause any meat or offal derived from the carcass of the slaughtered animal to be marked or labelled in a manner approved by the veterinary official so as to ensure a link between the meat or offal and the individual animal or the group of animals from which the individual animal was taken and to facilitate the tracing of the origin of animal or group of animals.

responsibility for establishing a system for the identification and registration of kept terrestrial animals

1. The responsible Authority shall have in place a system for the identification and registration of kept terrestrial animals and, when appropriate, for the recording of their movements, taking into account:

(a) the species or category of kept terrestrial animals;

(b) the risk posed by that species or category.

2. The system provided for shall include the following elements:

(a) the means to identify kept terrestrial animals individually or in groups;

(b) identification documents, movement documents and other documents for identifying and tracing kept terrestrial animals;

(c) up-to-date records in establishments;

(d) a computer database of kept terrestrial animals provided for

3. The system provided for shall be designed in a manner that it:

(a) ensures the efficient application of the disease prevention and control measures provided for in the Regulations;

(b) facilitates the traceability of kept terrestrial animals and their movements within and between province;

- (c) ensures the efficient interoperability, integration and compatibility of the elements of that system;
 - (d) ensures that the system, to the extent appropriate, is adapted to:
 - (i) the computerised information system for national notification and reporting provided for;
 - (ii) computerised information management system provided for by responsible Authority;
 - (e) ensures a coherent approach for the different animal species covered by the system.
4. Province, Food and livestock Industry organisations, organisations in the livestock values chain or other Departments may when appropriate:
- (a) use the whole or part of the system provided for, for purposes;
 - (b) integrate the identification documents, movement documents and other documents with the animal health certificates or self-declaration document provided for ;
 - (c) designate another authority or authorise another body or a person for the practical application of the identification and registration system provided for in paragraph 1.

Responsible Authority obligation for establishing a computer database of kept terrestrial animals

1. The responsible Authority shall establish and maintain a computer database, for the recording of:
- (a) the following information related to kept animals of the bovine, ovine, ostriches, farmed game, caprine species: (i) their individual identification; (ii) the establishments keeping them; (iii) their movements into and from establishments;
 - (b) information related to kept animals of the porcine species and the establishments keeping them;
 - (c) the following information related to kept animals of the equine species:
 - (i) Depending on species, their unique life number as provided for; (ii) the means of identification linking that animal with the identification document referred to in (iii), where relevant; (iii) the identification document provided for; (iv) the establishments where those animals are habitually kept;
 - (d) information related to kept terrestrial animals of species other than those referred to in (a), (b) and (c), when this is provided for.

The responsible authority shall be empowered to adopt regulations and veterinary procedural notices concerning the recording of information related to animal species other than those referred to in paragraph 1(a),(b) and (c) in the computer database provided for in that paragraph where necessary, taking into account the risks posed by those species, to:

- (a) ensure the efficient application of the disease prevention and control measures provided for in the regulations;
- (b) facilitate the traceability of kept terrestrial animals, their movements within and between provinces and their entry into South Africa.

APPROVAL OF CERTAIN TYPES OF ESTABLISHMENTS

Obligation to register place on which animals are kept as a registered establishment

- (1) Any person who holds, keeps or handles any terrestrial animal on any place which under the procedures is required to be registered as a registered establishment for the purposes of this part, must apply to the veterinary

authority in the prescribed manner for the registration of that place as a registered establishment as specified in the veterinary procedure notice.

(2) An application for registration of a place as a registered establishment must be made to the veterinary authority in the manner, and be accompanied by the documents, as the veterinary authority may determine.

Scope of the approval of establishments

The responsible authority shall expressly specify in the approval of an establishment granted following an application made: (a) for which of the types of establishments the approval applies; (b) for which categories and species of kept terrestrial animals or products of those species the approval applies.

1. Owners of the following types of establishments shall apply to the responsible authority for approval:

(a) establishments for assembly operations of ungulates and poultry, from which those animals are moved to another Province; (b) hatcheries, from which hatching eggs or poultry are moved to another Province; (c) establishments keeping poultry, from which poultry intended for purposes other than slaughter or hatching eggs are moved to another Province; (d) any other type of establishment for kept terrestrial animals which poses a risk and is required to be approved in accordance with laid down procedures.

2. Owners shall cease activity at an establishment referred to where: (a) the responsible authority withdraws or suspends its approval; or (b) in the event of conditional approval, granted, the establishment fails to comply with the outstanding requirements referred to and does not obtain a final approval.

3. The responsible authority shall be empowered to adopt delegated acts concerning supplementing and amending the rules for the approval of establishments provided for.

Approval of status of confined establishments

Owners of establishments, who want to obtain the status of confined establishment shall: (a) apply to the responsible authority for approval; (b) not move kept animals to a confined establishment in accordance with the requirements provided for until their establishment obtains an approval of that status by the responsible authority

Information obligation of operators in view to obtaining approval

1. Owners shall for the purposes of their application for the approval of their establishment provided for, provide the responsible authority with information on: (a) the name and address of the operator; (b) the location of the establishment and a description of the facilities; (c) the categories, species and numbers of kept terrestrial animals or animal products on the establishment; (d) the type of establishment; (e) other aspects of the establishment, related to its specificity, which are relevant in determining the risk posed by it.

2. Owners of establishments referred to in paragraph 1 shall inform the responsible authority of any: (a) significant changes in the establishments concerning the matters referred to in paragraph 1(a), (b) and (c); (b) the cessation of activity in the establishment.

3. The responsible authority may, lay down rules in the veterinary procedure notice concerning the information to be provided by the owners in their application for the approval of their establishment in accordance with paragraph 1.

Granting of and conditions for approval of establishments

1. The responsible authority shall only grant approval of establishments where such establishments:
 - (a) comply with the following requirements, where appropriate, on: (i) quarantine, isolation and other biosecurity measures taking into account the requirements provided for; (ii) surveillance requirements provided for, and where relevant for the type of establishment and the risk involved and the procedures adopted; (iii) record keeping provided for and the requirements adopted;
 - (b) have facilities and equipment that are: (i) adequate to reduce the risk of the introduction and spread of diseases to an acceptable level, taking into account the type of establishment; (ii) of adequate capacity for the number of kept terrestrial animals;
 - (c) do not pose an unacceptable risk regarding the spread of diseases, taking into account the risk mitigation measures in place;
 - (d) have a sufficient number of adequately trained personnel for the activity of the establishment;
 - (e) have a system in place which enables the operator to demonstrate compliance with points (a) to (d) to the veterinary authority.

The responsible authority must register a place specified in an application for registration unless the veterinary authority is satisfied that the application is not a bona fide application, any requirement prescribed under subsection (3) is not complied with, or the place is not required to be registered as a registered establishment under the established requirements.

Procedures for granting the approval by the responsible authority

1. The responsible authority shall establish procedures for operators to follow when applying for approval of their establishments.
 2. Upon receipt of an application for approval from an operator, the responsible authority shall make an on-site visit.
 3. The responsible authority may grant conditional approval of an establishment where it appears, based on the application of the operator and the subsequent on-site visit of the establishment, that it meets all the main requirements that provide sufficient guarantees that such an establishment does not represent a significant risk, with a view to ensuring compliance with all the requirements for approval provided for.
 4. Where conditional approval has been granted by the veterinary authority shall grant full approval only where it appears from another on-site visit of the establishment, carried out within three months of the date of granting conditional approval, that the establishment meets all the requirements for approval provided for.
- Where that on-site visit shows that clear progress has been made but the establishment still does not meet all of those requirements, the responsible authority may prolong the conditional approval. However, conditional approval shall not exceed a total period of six months.

REGISTRATION OF ESTABLISHMENTS AND TRANSPORTERS

Registration obligations of transporters of kept ungulates

1. Transporters of kept ungulates, transporting those animals shall in order to be registered before they commence such activities:

(a) inform the responsible authority of their activity;(b) provide the veterinary authority with information on: (i) the name and address of the transporter; (ii) the categories, species and numbers of kept terrestrial animals transported; (iii) the type of transport; (iv) the means of transport.

2. Transporters shall inform the responsible authority of any: (a) significant changes concerning the matters referred to in paragraph 1(b); (b) cessation of the transport activity.

responsible authority may exempt certain categories of transporters from the registration requirement, taking into account the following criteria: (a) the distances over which they transport those kept terrestrial animals; (b) the categories, species and number of kept terrestrial animals, which they transport.

Obligation of the responsible authority concerning the registration of establishments and transporters

The responsible authority shall register: (a) establishments in the register of establishments and transporters where the operator has provided the information required; (b) transporters in that register of establishments and transporters, where the transporter has provided the information required.

Review, suspension and withdrawal of approvals by the responsible authority

1. The responsible authority shall keep the approvals of establishments granted under review.

2. Where the responsible authority identifies serious deficiencies in the establishment as regards compliance with the requirements and the operator is not able to provide adequate guarantees that those deficiencies will be resolved, the competent authority shall initiate procedures to withdraw the establishment's approval.

The responsible authority may suspend an establishment's approval where the operator can guarantee that it will resolve those deficiencies within a reasonable period of time.

3. Approval shall only be restored after withdrawal or suspension when the responsible authority is satisfied that the establishment fully complies with all the requirements appropriate for that type of establishment.

REGISTER OF THE VETERINARY AUTHORITY OF ESTABLISHMENTS AND TRANSPORTERS

Establishment and transporter register

1. The responsible authority shall establish a register, make that register available to the public and keep up-to-date a register of: (a) all establishments and transporters registered; (b) all establishments approved.

2. Where appropriate and relevant, the responsible authority may combine the registration referred to in paragraph 1(a) and approval referred to in paragraph 1(b) with registration for other purposes.

RECORD KEEPING

Record keeping obligations of operators of establishments

1. Owners of establishments subject to registration or approval shall keep and maintain records containing at least the following information:

(a) the species, categories, numbers and identification of kept terrestrial animals on their establishment;

- (b) the movements of kept terrestrial animals into and out of their establishment, stating as appropriate: (i) their place of origin or destination; (ii) the date of such movements;
 - (c) the documents in paper or electronic form required to accompany kept terrestrial animals arriving at or leaving their establishment;
 - (d) any animal health problems concerning kept animals on their establishment;
 - (e) biosecurity measures, surveillance, treatments, test results and other relevant information as appropriate for:
 - (i) the category and species of kept terrestrial animals on the establishment; (ii) the type of production; (iii) the type and size of the establishment;
 - (f) the results of any animal health visits required.
2. Establishments which are exempted from the registration requirement may be exempted from the requirement to keep records of the information listed.
3. Owners of establishments shall keep the records provided for in paragraph 1 on the establishment and:
- (a) make them available to the responsible authority on request;
 - (b) retain them for a minimum period to be determined by the responsible authority, but which may not be less than a period of three years.

Registers and returns in relation to terrestrial animals

- (1) A person who holds, keeps or handles prescribed animals on a registered establishment must - (a) keep registers, and record information; and (b) provide the responsible authority with returns, giving information, in respect of the birth, death, loss and movement of prescribed animals on or from the registered establishment as may be prescribed.
- (2) A person may not enter in a register or provide in a return referred to in subsection (1) any information which the person knows to be false or does not know to be true, or recklessly enter or provide information which is false or which the person does not know to be true.

Traceability requirements for kept terrestrial animals

Permit required for movement of animals from registered establishment

- (1) A person may not remove any prescribed animal from a registered and unregistered establishment to any other place within South Africa, unless -
- (a) the person holds a movement permit granted under subsection (3) which authorises the movement of the prescribed animal from the registered establishment to that other place and (b) the movement is carried out in accordance with the conditions as prescribed and as specified in the movement permit.
- (2) Despite that a movement permit authorises the movement of a prescribed animal specified in the permit, a person may not move that animal from its registered and unregistered establishment if (a) the person knows or has reason to believe that the animal is infected and (b) the permit does not specifically authorise the movement of the animal so infected.
- (3) An application for a movement permit must (a) be made to a responsible official in a form approved by the responsible authority; and (b) be accompanied by the prescribed fee where applicable.

- (4) The responsible official may require an applicant for a movement permit to provide further information or documents that the veterinary official considers relevant for determining whether to issue the permit.
- (5) A movement permit authorises the movement of any specified animal only within the period specified in the permit.
- (6) In addition to any permit conditions as may be prescribed in respect of a movement permit, the veterinary official may specify any conditions with which the holder of the movement permit must comply in moving any animal.
- (7) Conditions specified under subsection (6) may include conditions relating to (a) the identification, inspection, testing or treatment of the prescribed animal at any time before, during or after the movement; (b) the isolation of the prescribed animal at any time before, during or after the movement; (c) the quarantine of the prescribed animal before or after the movement; (d) the certification of any aspect of the identity, health status, origin or history of the prescribed animal to be moved.
- (8) Any animal in respect of which a movement permit has been issued (a) may not be moved through any area infected or suspected of being infected with any disease which can affect the animal being moved; (b) must when required be made available to a responsible official at the place of destination for the purpose of inspection or carrying out any function or the requirement of a condition to which the permit is subject.

Obligation of the responsible authority for identification documents, movement documents and other documents for identifying and tracing kept terrestrial animals

The responsible authority shall issue: (a) identification documents for kept terrestrial animals when required; (b) movement documents and other documents for identifying and tracing kept terrestrial animals, when required.

Public availability of information on means of identification

The responsible authority shall make publicly available information on: (a) contact points for the computer databases established; (b) the authorities or bodies responsible for issuing identification documents, movement documents and other documents; (c) the means of identification that are to be used for each category and species of kept terrestrial animals; (d) the format for the issuing of the identification documents.

Owners obligations for the identification of kept animals of the bovine species

Owners keeping animals of the bovine species shall: (a) ensure that those kept animals are identified individually by a physical means of identification; (b) ensure that those kept animals are issued with an identification document from the responsible authority or designated authority or authorised body, which is a single lifetime document and that document: (i) is kept, correctly completed and updated by the operator; (ii) accompanies those kept terrestrial animals at the time of movement;

(c) transmit the information on movements of those kept animals from and into the establishment to the computer database provided for.

Owners obligations for the identification of kept animals of the ovine and caprine species

Owners keeping kept animals of the ovine and caprine species shall: (a) ensure that those kept animals are identified individually by a physical means of identification; (b) ensure that those kept animals are accompanied by a correctly completed movement document issued by the responsible authority when moved from the establishment keeping those animals; (c) transmit the information on movements from and into the establishment of those kept animals to the computer database provided for.

Exemptions concerning identification documents and movement documents for kept animals of the bovine, ovine and caprine species

Responsible authority may exempt operators from the requirement to ensure that kept animals of the bovine, ovine and caprine species are accompanied by identification documents or movement documents during movements within the province, provided that: (a) the information contained in the movement document or identification document is included in the computer database provided for; (b) the system for the identification and registration of kept animals of the bovine, ovine and caprine species provides an equivalent level of traceability as that provided by identification documents and movements documents.

Owners obligations for the identification and registration of kept animals of the equine species

1. Owners keeping kept animals of the equine species shall ensure that those animals are individually identified by: (a) an unique life number, which is recorded in the computer database provided for; (b) a method which unequivocally links the kept animal and with the identification document provided for in point (c) of this paragraph and issued by the veterinary authority; (c) a correctly completed single identification document.
2. Owners of kept animals of the equine species shall transmit the information on those animals to the computer database provided for.

Owners obligations for the identification and registration of kept animals of the porcine species

Owners keeping kept animals of the porcine species shall: (a) ensure that those kept animals are identified by a means of physical identification; (b) ensure that those kept animals are accompanied by a correctly completed movement document issued by the responsible authority when moved from the establishment keeping those animals; (c) transmit the information related to the establishment keeping those animals to the computer database provided.

Exemptions concerning movements of kept animals of the porcine species

Responsible Authority may exempt operators from the requirement to ensure that kept animals of the porcine species are accompanied by correctly completed movement documents issued by the responsible authority for movements within the province, provided that: (a) the information on such movement documents is included in the computer database established; (b) the system for the identification and registration of kept terrestrial animals of the porcine species provides an equivalent level of traceability as that provided by such movement documents.

Pet keepers' obligation for the identification and registration of terrestrial pet animals

1. Pet keepers shall ensure that terrestrial pet animals which are moved from one country to South Africa by a physical means of identification; (b) are accompanied by a correctly completed and updated identification document issued by the responsible authority.
2. Pet keepers shall ensure that terrestrial pet animals when moved from one province to another province, and when required by procedures are: (a) identified, either individually or in groups; (b) accompanied by correctly completed and updated identification documents, movement documents or other documents for identifying and tracing animals, as appropriate for the animal species concerned.

Owners obligation for the identification of kept terrestrial animals other than animals of the bovine, ovine, caprine, porcine and equine species and pet animals

Owners shall ensure that kept terrestrial animals of species other than those of the bovine, ovine, caprine, porcine and equine species and other than pet animals, comply with the following requirements: (a) they are identified, either individually or in groups; (b) they are accompanied by correctly completed and updated identification documents, movement documents or other documents for identifying and tracing animals, as appropriate for the animal species concerned.

The responsible authority shall be empowered to make regulations and veterinary procedural notices concerning:

- (a) the designation of other authorities, the authorisation of bodies or persons;
- (b) detailed requirements for:
 - (i) the means of identification of kept terrestrial animals;
 - (ii) the application and use of that means of identification;
- (c) the information to be included in:
 - (i) the computer databases;
 - (ii) the identification document for kept animals of the bovine species;
 - (iii) the movement document for kept animals of the caprine and ovine species;
 - (iv) the identification document for kept animals of the equine species;
 - (v) the movement document for kept animals of the porcine species;
 - (vi) identification documents for terrestrial pet animals or identification documents, movement documents or other documents for kept terrestrial pet animals;
 - (vii) identification documents or movement documents for kept terrestrial animals other than animals of the bovine, ovine, caprine, porcine, equine species and pet animals
- (d) detailed requirements for different species and categories of kept terrestrial animals to ensure the efficient operation of the identification and registration system;
- (e) detailed requirements for kept terrestrial animals entering the South Africa from other countries;
- (f) identification and registration requirements for kept terrestrial pet animals and kept terrestrial animals of species other than the bovine, ovine, caprine, porcine and equine species where necessary, taking into account the risks posed by that species, to:
 - (i) ensure the efficient application of the disease prevention and control measures provided for in the regulations;

(ii) facilitate the traceability of kept terrestrial animals, and their movements within and between province and their entry into South Africa.

Implementing powers concerning traceability of kept terrestrial animals

The responsible authority shall by means of regulations and procedural notices lay down requirements for the implementation the requirements provided for concerning:

(a) technical specifications, formats and operational rules of: (i) means, methods and the use of identification; (ii) the identification document or movement document for kept animals of the bovine, ovine, caprine species; (iii) identification document for kept animals of the equine species; (iv) identification, movement and other documents for kept terrestrial animals of species; other than of the bovine, ovine, caprine and equine species; (v) computer databases.

(b) the deadlines for: (i) the transmission of information by operators into the computer database; (ii) the registration of kept terrestrial animals; (iii) the identification of kept terrestrial animals and the replacement of identification marks;

(c) practical application of exemptions from the identification and registration provided for in the rules adopted.

Movements within the Country of kept terrestrial animals other than terrestrial pet animals

GENERAL REQUIREMENTS FOR MOVEMENTS

General requirements for movements of kept terrestrial animals

1. Owners shall take appropriate preventive measures to ensure that the movement of kept terrestrial animals does not jeopardise the health status at the place of destination with regard to: (a) the controlled and notifiable diseases; (b) emerging diseases.

2. Owners shall only move kept terrestrial animals from establishments and receive such animals, if they comply with the following conditions: (a) they come from establishments that have been: (i) entered in the register of establishments by the competent authority; (ii) approved by the competent authority in accordance; (b) they comply with the identification and registration requirements.

Preventive measures in relation to transport

1. Owners shall take the appropriate and necessary preventive measures to ensure that: (a) the health status of kept terrestrial animals is not jeopardised during transport; (b) transport operations of kept terrestrial animals do not cause the potential spread of controlled and notifiable diseases to humans and animals at places of assembly, resting and destination; (c) cleaning, disinfection, disinfestations of equipment and means of transport and other adequate biosecurity measures are taken, as appropriate to the risks involved with the transport.

2. The responsible authority shall adopt requirements concerning: (a) the cleaning, disinfection and disinfestations of equipment and means of transport and the use of biocidal products for those purposes; (b) other adequate biosecurity measures.

Exemptions concerning recreational use, sporting and cultural events, grazing and work near borders

1. The responsible authority may grant derogations from the requirements for movements of kept terrestrial animals where such movements are for: (a) recreational use near borders; (b) exhibitions, and for sporting, cultural and similar events organised near borders; (c) grazing of kept terrestrial animals in grazing areas shared between provinces; (d) work of kept terrestrial animals near borders of provinces.
2. Exemptions by the responsible authority of the place of destination for movements of kept terrestrial animals for the purposes provided for in paragraph 1 shall be agreed on between the provinces of origin and destination and appropriate risk mitigating measures taken to ensure that such movements do not pose a significant risk.

Exemptions for circuses, exhibitions, sporting events and recreational use, zoos, pet shops, and wholesalers

The responsible authority shall be empowered to adopt regulations and veterinary procedure notices concerning: (a) for the movements of kept terrestrial animals for the following purposes: (i) circuses, zoos, pet shops, animal shelters and wholesalers; (ii) exhibitions and for sporting, cultural and similar events.

DRAFT

STANDARD OPERATIONAL PROCEDURES – NON FMD-FREE ZONE

This section is to set procedures for the implementation, maintenance and management of an identification system in the Foot and mouth disease (FMD) protection zones in the Limpopo, Mpumalanga and KwaZulu-Natal (KZN) provinces and in the high surveillance area with movement control in KwaZulu-Natal province (KZN) of South Africa.

SUPPLY AND DISTRIBUTION OF OFFICIAL EAR TAGS

Proper administration of official identification devices is critical to support animal disease traceability. Responsible authority will provide certain official identification devices to producers to apply to their animals and to accredited officials to apply to animals. Responsible authority, through an application and approval process, approves eartags and devices that meet established standards. Approved eartag manufacturers/distributors are allocated the numbers and are authorized to imprint or encode the animal identification number only on their approved devices. Eartag and device coordinators and resellers distribute tags and devices with the a prefix to producers.

Eartag and device manufacturers/distributors distribute the tags and devices through coordinators, or may act as an coordinators themselves. All distribution records of tags administered by coordinators and approved officials must be reported to the database by the person who has possession of the device when distributing the device to the next individual, whether it is a producer or another reseller.

All recipients of tags and devices must first be registered in the database and provide their identification number to the person that they are obtaining the devices from. The person responsible for the distribution of the tags is responsible for the entry of the distribution record into database.

Issuance of Duplicate Official Identification Eartags

Duplicate official identification eartags may be obtained from approved eartag manufacturers/distributors when an official eartag is lost and the owner or person responsible for the animal needs to retag the animal with the official identification number of the lost eartag.

The manufacturer/distributor will submit a record to the database with the information on the reissuance and distribution of the duplicate eartag. The eartag manufacturer will also imprint the designated symbol on the eartag to reflect that the tag is a duplicate of a previously issued tag.

When the duplicate eartag contains radio frequency identification technology, the manufacturer will encode the number in accordance with ISO 11784 for administering transponders.

SYSTEM PROCEDURES

Preparation

This section applies to the area of South Africa that is not part of the free zone, including the infected zones, protection zones with vaccination and protection zones without vaccination. It also applies to the high surveillance area with movement control that is part of the free zone in KZN.

Official Identification Numbers - Animals

Official identification numbering systems are fundamental to animal disease programs. Official identification numbers are unique numbers permanently associated with individual animals or groups of animals. Official

identification numbers are associated with individual animals or groups of animals through official identification devices or methods. Official identification numbers must adhere to the following numbering systems:

- National Uniform Eartagging System (NUES)
- Animal identification number (AIN)
- Location-based number system
- Flock-based number system
- Any other numbering system approved by the responsible authority for the official identification of animals

The animal identification number (AIN) to be used maybe a unique, 15-digit RFID number, where the first two numbers (27) are the UN/ISO 2-digit country code for South Africa, followed by 12 digits that are available for the animal's unique identifying number.

The system will utilize these digits to create a unique AIN within South Africa as follows: two digits representing the province followed by three digits representing the district followed by zero (0) and a six-digit serial number, 123 456. A combination of the five digits representing the province and district indication symbols and a six-digit serial number forms the unique AIN. The ZA code (embossed in the tag) in the logo on the visual ear tags is the ISO 2-alpha country code for South Africa. Since the area of animal identification is evolving, details on current specifications of the official ear tags to be used is subject to further discussion.

The eartags for the protection zones with and without vaccination will be marked with an “F” after the “ZA” in order to show that the animals do not have FMD free zone status.

The specifications of the tags are as follows:

- ICAR approval
- Tamper proof, single use polyurethane tags from an ISO 9001 manufacturer
- Numbering has to be laser print quality
- Visual number and barcode on tags
- Unique 2D bar code must be issued from a central, internationally compliant, database (FACTT) for verification and authentication and may not be The unique 12 digit number must be embedded in the barcode for security purposes and be verifiable against a central repository/ database.
- Male and female tags must be embossed above the bar code and number with the country specific logo (ZA) in order to differentiate them from blank tags in the commercial market to prevent fraudulent duplication.
- The pink and green eartags that are used for animals outside the free zone will also be embossed with a capital F above the barcode and unique number to indicate the non-free zone status of the animals.

APPLICATION

1. Before ear-tagging commences cattle owners are informed of the intention to and reasons for application of eartags.
2. Eartags are applied to the right ear of all cattle with recording of each application event. The following information must be recorded in full for each application event: date, owner information, age, sex, colour, breed and species etc.
3. Calves are to be ear tagged before three months of age, with recording of each application event.

4. Newly introduced cattle are to be ear tagged before they are moved in the areas with recording of each application event and accompanying departure and arrival registers.
5. Cattle which lost ear tags for whatever reason are to be re-ear tagged as soon as possible, with recording of each replacement event
6. Cattle of which ear tags have become unreadable or un-scannable are to be re-ear tagged with recording of each replacement event.
7. Cattle of which the FMD zonal status has changed for whatever reason (permitted movement, change in vaccination area), are to be re-ear tagged as soon as possible, with recording of each replacement event and reference to the veterinary movement permit number, if applicable.
8. If cattle die or are slaughtered the event should be recorded.
9. If cattle change ownership and/or location for whatever reason and with or without movement involved, every such event is to be recorded (see change of owner report).
10. All records of distribution and application of ear tags and of change of owner and/or location of cattle are to be submitted on the relevant report form to the provincial FMD coordinator/data capturer every 14 days.
11. The data capturer captures all reports electronically within 21 days of receiving such reports.

ALLOCATION OF EARTAGS

Eartags are to be applied as follows:

Province	FMD infected zone		FMD free zone	
	FMD protection zone with vaccination	FMD protection zone without vaccination	FMD high surveillance area	Rest/whole of the free zone
Limpopo	green	pink	yellow	(yellow)
Mpumalanga	green	pink	yellow	(yellow)
KwaZulu-Natal	green	pink	yellow	(yellow)

Consecutively numbered eartags should as far as possible be applied to cattle of one herd or owner.

Existing F-branding of all FMD vaccinated cattle on the right side of the neck must continue. No untagged cattle must be applied for to move or must be permitted to move.

STANDARD OPERATIONAL PROCEDURES – FMD-FREE ZONE

The key requirements of the traceability system are that all livestock movements must only be carried on the strength of the veterinary authority's approval through a livestock movement permit authorising the removal of animals from one holding to another. Furthermore, all livestock must bear ownership identification marks and individual animal identification in the case of bovine, caprine, ovine, porcine and equine. In order to stagger costs for producers, only bovine, caprine, ovine, porcine and equine leaving their herd of origin will be required to be tagged with the official identification tag.

Farm and Communal Holdings

All farms and related holdings such as feedlots, villages and communal areas where livestock are kept are registered in the database. Approval must be sought for recognition of consolidation or partitioning of holdings where livestock are kept.

Identification Requirements

- i) All cattle on a farm or related holding are to be individually identified by means of an approved ear tag bearing a serial number and a herd of origin code.
- ii) All cattle leaving a farm will be required to be individually identified by means of an approved ear tag.
- iii) All cattle on a farm older than six months must bear brand marks of the owner's registered stock brand. If calves younger than six months are moved they also have to be branded with the owner's registered brand mark.
- iv) All small stock on a farm older than three months will be required to be clearly identified by means of a tattoo or metal ear tag bearing the owner's registered stock brand. Small stock younger than three months leaving the flock of origin have to be tattooed or bear ear tags with the owner's registered stock brand.

Movement Control Documentation

- i) All animals leaving a farm are to be accompanied by a valid livestock movement permit obtained from a veterinary authority office or from any authorised official
- ii) The registered stock brands on the animals and the number of animals leaving a farm are to be clearly and correctly recorded in the space provided in the livestock movement permit
- iii) The permit is strictly valid for a period of 21 days from the date of issue. No animals may be moved or received if accompanied by an expired permit.
- iv) All cattle leaving a farm must be accompanied by a declaration on which the ear tag numbers of all the cattle being moved are correctly recorded by the producer.
- v) Upon arrival at a farm or place of gathering, ear tag numbers of all the cattle arriving on this consignment are to be correctly recorded in an arrival register by the producer.

Inventory Records

- i) All cattle leaving the herd of origin must be recorded in the register before removal.
- ii) All cattle arriving at a farm must be recorded in a register within two days of arrival on the farm.
- iii) Once animals are tagged using the approved tags, the ear tag numbers must be recorded in a herd inventory register.

- iv) Loss of officially tagged cattle must be recorded in a register.
- v) Any changes to the number of animals in the herd or flock must be recorded in the respective stock cards for cattle, sheep and goats, equine.

Database Notification

- i) Following movement of small stock, the livestock movement permit must be submitted to the destination approved office within 30 days from the date of issue.
- ii) Upon receiving cattle, the livestock movement permit, along with the departure and arrival registers must be submitted to the destination office within 30 days from the date of issue.
- iii) An unused livestock movement permit should be marked unused and must be submitted to the issuing office or official within 30 days from the date of issue.
- iv) once cattle are tagged using the approved tags, the producer is required to notify the central database within 30 days after tagging, using the Herd Inventory Register.
- v) Loss or on-farm slaughter of officially tagged cattle must be recorded in a termination register which must be submitted to the approved office within two months of confirming the loss or date of slaughter.

LIVESTOCK SALES

All auction pens and other livestock sales facilities must be registered with the veterinary authority. Any person who intends to hold at least two or more public livestock sales/auctions must submit an annual calendar to the district or provincial veterinary authority on or before the end of the preceding year, indicating the date, time and location. Any person who intends to hold an *ad hoc* public livestock sale/auction must apply in writing to the district veterinary authority office at least 21 days before the intended auction date.

Identification Requirements

- i) Cattle presented for public sale must be identified by means of an approved ear tag bearing a serial number and a herd of origin code.
- ii) Imported cattle must be identified by means of the imported cattle tag bearing a unique serial number.
- iii) In addition, all cattle presented for public sale must bear clear brand marks of the owner's registered stock brand.
- iv) Sheep and goats presented for public sale must be clearly identified by means of a tattoo or metal ear tag bearing the owner's registered stock brand.

Movement Controls and Documentation

- i) All animals arriving at auction pens must be accompanied by a valid livestock movement permit obtained from an approved office or from any authorised official.
- ii) The registered stock brands on the animals and the number of animals arriving at the auction pens must be recorded in the space provided in the livestock movement permit.
- iii) No animals may be moved or received if accompanied by an expired livestock movement permit. The livestock movement permit is strictly valid for a period of 21 days from the date of issue.
- iv) All cattle arriving or departing from an auction pen must be accompanied by a declaration on which the ear tag numbers of all the cattle being moved are correctly recorded.

- v) Upon arrival at an auction pen, ear tag numbers of all the cattle arriving on this consignment must be correctly recorded in an Arrival Register by the auction operator.
- vi) All animals dead on arrival or that die at an auction or are confirmed missing from an auction pen must be recorded in a Livestock Termination Register by the auction operator.

Database Notification

- i) Following receipt of cattle, sheep and goats at an auction, the livestock movement permit must be submitted to the attending veterinary official before animals are presented for public sale. These permits are then forwarded to the approved office for capturing them onto the database within 48 hours of completion of the sale.
- ii) Upon receiving cattle at an auction, the livestock movement permit, along with the Departure and Arrival Registers must be submitted to the attending veterinary official before animals are presented for public sale. These documents are then forwarded to the approved office for capturing them in the database within 5 days of completion of the sale.
- iii) The auction operator may submit electronically to the database the Arrival Registers for cattle received and the Departure Registers for cattle leaving the auction facility.
- iv) The Livestock Termination Register must be submitted to the attending approved official by the auction operator following completion of the auction.

Shows and Other Exhibitions

All livestock show grounds or other exhibition facilities must be registered. Any person who intends to hold at least two or more livestock exhibitions where animals come from different holdings must submit an annual calendar to veterinary authority on or before the end of the preceding year, indicating the date, time and location. Any person who intends to hold an *ad hoc* livestock exhibition where animals come from different holdings must notify the district veterinary authority office of the area at least 21 days before the intended exhibition date.

Identification Requirements

- i) Cattle presented for public exhibition must be identified by means of an approved ear tag bearing a serial number and a herd of origin code.
- ii) Imported cattle must be identified by means of the Imported Cattle tag bearing a unique serial number.
- iii) In addition, all cattle presented for public exhibition must bear clear brand marks of the owner's registered stock brand.
- iv) Ovine, caprine and porcine presented for public exhibition must be clearly identified by means of a tag, tattoo or metal ear tag bearing the owner's registered stock brand.

Movement Controls and Documentation

- i) All animals arriving at an exhibition facility must be accompanied by a valid livestock movement permit obtained from an approved office or from any authorised official.
- ii) The registered stock brands on the animals and the number of animals arriving at an exhibition facility must be clearly and correctly recorded in the space provided at the bottom of the livestock movement permit.
- iii) No animals may be moved or received if accompanied by an expired livestock movement permit. The livestock movement permit is strictly valid for a period of 21 days from the date of issue.

- iv) All cattle arriving or departing from an exhibition facility must be accompanied by a Departure Register, a declaration on which the ear tag numbers of all the cattle being moved are correctly recorded.
- v) Upon arrival at an exhibition facility, ear tag numbers of all the cattle arriving on this consignment must be correctly recorded in an Arrival Register by the exhibition organiser.
- vi) All animals dead on arrival or that die at an auction or are confirmed missing from an exhibition facility must be recorded in a Livestock Termination Register by the exhibition organiser.

Database Notification

- i) Following receipt of sheep and goats at an exhibition facility, the livestock movement permit must be submitted to the attending approved official before animals are presented for exhibition. These permits are then forwarded to the approved office for capturing them onto the database within five days of completion of the exhibition.
- ii) Upon receiving cattle at an exhibition facility, the livestock movement permit, along with the Departure and Arrival Registers must be submitted to the attending official before animals are presented for exhibition. These documents are then forwarded to the approved office for capturing them onto the database within 5 days of completion of the exhibition.
- iii) The Livestock Termination Register must be submitted to the attending official by the exhibition organiser following completion of the exhibition.

Export abattoirs

All export abattoirs must be registered.

Identification Requirements

- i) Cattle presented at an export abattoir must be identified by means of an approved ear tag bearing a serial number and a herd of origin code.
- ii) In addition, all cattle presented at an export abattoir must bear clear brand marks of the owner's registered stock brand.
- iii) Ovine, caprine and porcine presented at an export abattoir must be clearly identified by means of a tattoo or metal ear tag bearing the owner's registered stock brand.

Movement Controls and Documentation

- i) All animals arriving at an export abattoir must be accompanied by a valid livestock movement permit obtained from an approved office or from any authorised official.
- ii) The registered stock brands on the animals and the number of animals arriving at an export abattoir must be clearly and correctly recorded in the space provided at the bottom of the livestock movement permit.
- iii) No animals may be received for slaughter if accompanied by an expired livestock movement permit. The livestock movement permit is strictly valid for a period of 21 days from the date of issue.
- iv) All cattle arriving at or departing from an export abattoir must be accompanied by a Departure Register, a declaration on which the ear tag numbers of all the cattle being moved are correctly recorded.
- v) Upon arrival at an export abattoir, ear tag numbers of all the cattle arriving on this consignment must be correctly recorded.
- vi) All animals dead on arrival or that die before scheduled slaughter or confirmed missing from an export abattoir must be recorded in a Livestock Termination Register by the export abattoir operator.

Post-slaughter Handling of Identification Devices

- i) All official identification devices removed from slaughtered cattle must be cut in half from the bottom end towards the neck area to ensure that they cannot be re-used.
- ii) All these official identification devices removed from slaughtered cattle must be stored by the abattoir operator for a period of five working days before they are destroyed or sent to an approved recycling facility.
- iii) The cattle identification devices must be stored in batches based on the livestock movement permit used to move the cattle to the abattoir. This is done to facilitate any further check-ups or audits by veterinary authority.
- iv) Ovine, caprine and porcine batch identification devices removed at slaughter may be re-used by the producer whose registered stock brand is on the devices.

Database Notification

- i) Following receipt of sheep and goats at an export abattoir, the livestock movement permit must be submitted to the attending official before animals are slaughtered. These permits are then forwarded to the abattoir approved office for capturing them in the database within 48 hours from slaughter date.
- ii) Upon receiving cattle at an export abattoir, the livestock movement permit, along with the Departure Register must be submitted to the attending official before animals are slaughtered. These documents are then forwarded to the abattoir approved office for capturing them in the database and screening the cattle before slaughtering commences.
- iii) Within 48 hours of slaughtering cattle, the abattoir operator must electronically submit the slaughter data to the database. Hard copies of the slaughter data must be submitted to the abattoir approved office within 48 hours of slaughtering cattle.
- iv) The Livestock Termination Register must be submitted to the abattoir approved office by the abattoir operator within 48 hours after confirmation of death or other loss.

Local Abattoirs

Local abattoirs refer to all abattoirs and other slaughtering facilities licensed by local authorities. All local abattoirs must be registered with veterinary authority.

Identification Requirements

- i) Cattle presented at a local abattoir must be identified by means of an approved ear tag bearing a serial number and a herd of origin code.
- ii) Imported cattle must be identified by means of the imported cattle tag bearing a unique serial number.
- iii) In addition, all cattle presented at a local abattoir must bear clear brand marks of the owner's registered stock brand.
- iv) Sheep and goats presented at a local abattoir must be clearly identified by means of tattoo or metal ear tag bearing the owner's registered stock brand.

Movement Controls and Documentation

- i) All animals arriving at a local abattoir must be accompanied by a valid livestock movement permit obtained from an approved office or from any authorised official.
- ii) The registered stock brands on the animals and the number of animals arriving at a local abattoir must be clearly and correctly recorded in the space provided at the bottom of the livestock movement permit.
- iii) No animals may be received for slaughter if accompanied by an expired livestock movement permit. The livestock movement permit is strictly valid for a period of 21 days from the date of issue.
- iv) All cattle arriving at or departing from a local abattoir must be accompanied by a Departure Register, a declaration on which the ear tag numbers of all the cattle being moved are correctly recorded.
- v) Upon arrival at a local abattoir, ear tag numbers of all the cattle arriving on this consignment must be correctly recorded.
- vi) All animals dead on arrival or that die before scheduled slaughter or confirmed missing from a local abattoir must be recorded in a Livestock Termination Register by the local abattoir operator.

Post-slaughter Handling of Identification Devices

- i) All official identification devices removed from slaughtered cattle must be cut in half from the bottom end towards the neck area to ensure that they cannot be re-used.

All these official identification devices removed from slaughtered cattle must be stored by the abattoir operator for a period of fourteen working days before they are destroyed or sent to an officially approved recycling facility.

- iii) The cattle identification devices must be stored in batches based on the livestock movement permit used to move the cattle to the abattoir. This is done to facilitate any further check-ups or audits by veterinary authority.
- iv) Sheep and goats batch identification devices removed at slaughter may be re-used by the producer whose registered stock brand is on the devices.

Database Notification

- i) Following receipt of sheep and goats at a local abattoir, the livestock movement permit must be submitted to the approved office within five days of slaughter. These records are captured in the database within 48 hours of receiving them.
- ii) After slaughtering cattle at a local abattoir, the livestock movement permits, along with Departure Registers and completed slaughter data summary forms must be submitted to the approved office within five working days from the slaughter date.
- iii) These documents are captured at the approved office within three days.
- iv) The Livestock Termination Register must be submitted to the approved office by the abattoir operator within 48 hours after confirmation of death or other loss.

Farm Isolation Camps and Quarantine Camps

All farm isolation camps and quarantine camps in the surveillance zone are registered in the holdings database. Approval must also be sought from veterinary authority for recognition of an on-farm isolation camp. Find below details of identification and producers' record-keeping obligations.

Identification Requirements

- i) All cattle moved from a surveillance farm to an on-farm isolation camp or quarantine camp, apart from identification provisions of the Animal Identification Act must be individually identified by means of an approved ear tag.
- ii) All small stock on a farm older than three months must be clearly identified by means of a tattoo or metal ear tag bearing the owner's registered stock brand. Small stock younger than three months leaving the flock of origin have to be tattooed or bear ear tags with the owner's registered stock brand.

Movement Controls and Documentation

- i) A livestock movement permit is issued against every entry into an on-farm isolation camp or quarantine camp.
- ii) All cattle, sheep and goats moved from a surveillance farm to an on-farm isolation camp or quarantine camp must be recorded in an Isolation Camp Entry Register, a declaration on which the ear tag numbers of all the animals being moved into isolation are recorded by the producer or by the head of Quarantine in the case of veterinary authority-run quarantine camps.
- iii) Loss of officially tagged cattle while in isolation must be recorded in a Livestock Termination Register.

Database Notification

- i) Following entry of livestock into an isolation camp, the producer must submit the Isolation Camp Entry Register to the veterinary authority office within 48 hours from the date of entry.
- ii) Loss or on-farm slaughter of tagged cattle must be recorded in a Livestock Termination Register. This must be submitted to the approved office within 48 hours of confirming the loss or date of slaughter.

Official Identification Devices for Cattle Tracing

Ear tags are used as the identification method for tracing individual cattle through the production chain. The underlying principle is that the ear tags must be tamper-resistant and tamper-evident, and must have a high level of retention in cattle under diverse production environments. Find below a summary describing the standard requirements for the official ear tags.

Official Ear Tag Performance Standard

a) Single Use

The ear tag must be of such a design that it can be used only once and is tamper-evident. It should not be possible to remove and re-apply the ear tags without physical evidence showing that this action has taken place.

b) Print Alteration

The print on the ear tags denoting the identity number of the animal, herd of origin, logo and other printed characters important for tracing animals must not be easy to alter without showing visual evidence of alteration.

c) Readability – Visual Component

The print on the ear tag must be easily and readily readable at a minimum distance of 75 cm from the tag. The characters printed on the ear tag should be easy to read in field conditions and be capable of remaining legible during the animal's lifetime.

d) Tag Life Expectancy

The ear tag is expected to stay on the animal in a functional and readable condition for the lifetime of the animal.

e) Ear Tag Retention

If properly placed in the ear in the manner prescribed by the manufacturer, a retention percentage of not less than 99% is expected within a year of applying the ear tags and not less than 95% for the lifetime of the animals under normal Namibian field conditions.

f) Toxicity and Injury

The ear tag may not cause harm to an animal or affect its health or well-being. The ear tag may not have any physical or chemical effect on the meat or other products from this animal.

g) Deterioration

There may be no diffusion of colorant from the ear tag. Other than the shade of colours, there must not be any physical deterioration of the tag as a result of UV light, rain, atmospheric heat up to 45°C or other environmental influences such as chemicals, mud, dust, urine, or manual handling for at least five years on the animal.

h) Plasticity

The ear tag may not crack during normal use under South African field conditions.

i) Tensile Strength

The ear tag coupling/tensile strength must at minimum comply with ISO standards 37 and 527. Coupling/tensile strength evaluation must be based on latest ICAR testing standards.

j) Abrasion Resistance

The ear tag shall not show damage or change due to wear. In this regard the ear tag must comply with ISO standard 9352.

Bovine Individual Identification – Visual Tag

In addition to the performance requirements stated above, the specifications of each set of official bovine visual ear tags are as follows:

a) Description

The ear tag set must be a dual (male and female) tag. The female component must be a leaf-type tag and the male component may be a button or leaf-type tag. The ear tag shall be yellow in colour and made of good quality flexible plastic.

The leaf-type male part shall be the smaller one with the printed section of the tag approximately 55 mm by 17 mm in size. The printing on the male part shall be on the outside (caudal surface) of the ear. The female part shall be the larger tag with the printed section of the tag being approximately 55 mm by 35 mm in size. The printing shall be on the inside (cranial surface) of the ear.

b) Print Description

The print on the ear tags denoting the identity number of the animal, herd of origin, logo and other printed characters important for tracing animals must be black laser or laser-ink print.

The male leaf-type component shall bear the traceability system logo, an alphanumeric code identifying owner's stock brand or herd of origin code with a minimum font size of 10 mm high and the serial code to identify the individual animal with a minimum font size of 8 mm high. All fonts shall be those approved by the from time to time.

The female leaf-type component shall bear the traceability system logo, an alphanumeric code identifying owner's stock brand or herd of origin code with a minimum font size of 10 mm high and the serial code to identify the individual animal must have a minimum font size of 8 mm high.

All fonts shall be those approved by the veterinary authority from time to time. In addition the female component shall bear a bar code to facilitate electronic readability of the tag.

The stock brand identification code or herd of origin code shall not exceed 8 characters and the animal identification code shall not exceed 5 characters. The codes used are not limited to the codes used in the stock brands database.

c) Tagging Device

The locking device on the tags shall be such that it is compatible with the 'Universal Tag Applicators' already in use in South Africa.

Bovine Individual Identification – RFID Tag

The mandatory bovine individual identification tag is the visual type described above. However, with the availability of the RFID tag and its appeal to those inclined to use automated recording systems, an RFID tag will be approved for those who prefer this route. The RFID device shall be coded with a fully write-protected electronic code that cannot be deleted or altered. The code used shall be the approved code according to ISO standard 11784 code structure. The RFID tag must also be certified for conformance with ISO 11785, the technical communication protocols standard. In addition to the performance requirements stated above, find below RFID-specific performance requirements. The specifications of each set of official bovine visual ear tags are as follows:

a) Description

The ear tag set must be a dual (male and female) tag. The male component must be a leaf type tag and the female component must be a button tag. Both tag components shall be yellow in colour and the leaf-type tag must be made of good quality flexible plastic.

The printed section of the leaf-type male part shall be approximately 55 mm by 35 mm in size. The printing on the male part shall be on the outside (caudal surface) of the ear. The female part shall have an ISO-compliant RFID transponder encased in the plastic button tag.

b) Print Description

The print on the ear tags denoting the identity number of the animal, herd of origin, logo and other printed characters important for tracing animals must be black laser or laser-ink print.

The male leaf-type component shall bear the traceability system logo, an alphanumeric code identifying owner's stock brand or herd of origin code with a minimum font size of 10 mm high and the serial code to identify the individual animal with a minimum font size of 8 mm high. All fonts shall be those approved from time to time. In addition the male component shall bear a bar code to facilitate electronic readability of the tag as a back-up to the RFID tag.

The female button-type component shall bear the alphanumeric code the identifying owner's stock brand or herd of origin code and the serial code to identify the individual animal in circular format around the button tag.

The stock brand identification code or herd of origin code shall not exceed 8 characters and the animal identification code shall not exceed 5 characters. The codes used are not limited to the codes used in the stock brands database.

c) Tagging Device

The locking device on the tags shall be such that it is compatible with the 'Universal Tag Applicators' already in use in South Africa.

d) Tag Reader

The RFID tag must be read with any ISO compliant universal reader.

RFID-SPECIFIC TAG REQUIREMENTS

DAFF has set the requirements for RFID tags to be used in this traceability system. In addition to the requirements described below, the tag must also meet the performance requirements stated above.

ISO Compliant – All transponders must be certified by ICAR who administers the testing procedures to determine compliance with ISO 11784 and 11785.

Read Rates – Transponders must have a read rate greater than 95% under field conditions in cattle moving in a cattle race in single file. In stationary animals the read rate must not be less than 99%.

Read Distance – Using a Universal ISO-compliant reader, cattle should be read from a minimum distance of 60 cm from the device.

Lifespan – The transponder is expected to be reliable, functional and machine readable for the expected lifetime of the tagged animal.

Security – The official ear tag number cross-referenced to the RFID number encoded in the tag must not be alterable. The encased transponder must be impossible to remove without physical evidence of tampering.

Official Identification Tags for Small Stock

The majority of Ovine and Caprine in South Africa will be identified by means of a group identification system based on the owner's registered stock brands. Imported and breeding small stock will be required to be individually identified. Individual identification in small stock will be done by means of an ear tattoo and or brass tag bearing a serial number.

Official Identification Tags for Pigs

The majority of porcine in South Africa will be identified by means of a group identification system based on the owner's registered stock brands. Imported and porcine kept for breeding purposes will be required to be individually identified. Individual identification of kept porcine species will be done by means of an ear tattoo and or brass tag bearing a serial number.

Official Identification Tags for Ostriches

The majority of ostriches in South Africa will be identified by means of an individual identification system based on the owner's registered stock brands. Imported and ostriches kept for breeding purposes will be required to be individually identified. Individual identification in ostriches will be done by means of a tag bearing a serial number.

Official Identification Tags for Equine

The majority of Equines in South Africa will be identified by means of an individual identification system based on the owner's registered stock brands. Individual identification in Equines will be done by means of a tattoo, tag or microchip bearing a serial number.

Official Identification Tags for Aquaculture

The majority of fish in South Africa will be identified by means of a group identification system based on the owner's registered property and or stock brands. Group identification will be done.

A national livestock property identification system

For the purposes of AIRT in the communal areas, an establishment will be defined as a describable geographic location where livestock is kept, held or commingle. Livestock farming operations differ somewhat across the provinces in terms of size, degree of animal movement, proximity to other livestock and keepers' residence, the number of livestock within establishments and within shared grazing areas, and the interaction between animals. In general, an establishment is a location or place where livestock is kept, held, or commingle. Such locations include:

Crush pen area; Ranches; Village; Cattle Post; Farms; Grazing Area; Auction point or traditional market; Abattoir or other slaughter facility; Ports of entry; Veterinary clinic/laboratory; Quarantine camp or feedlot; Exhibition ground and; Any other locations where livestock are raised, held, or commingle.

The definition and examples listed above are guidelines for registering establishments. Some of the locations are difficult to categorize. Industry and Veterinary authority will be better able to address variations in livestock production systems and husbandry practices.

Each establishment where livestock is kept or held will be assigned with a unique stock inspection unit identification number (SIU Number) on a GIS-enabled database thus providing officials with the exact origin and location of an animal in the event of a disease investigation. With this information, veterinary authority will have the capability to allocate limited resources more efficiently, establish containment and protection zones around an infected location with greater swiftness, and conduct more accurate epidemiological investigations to hasten disease containment or eradication. The database will contain the following minimum information about each establishment:

Establishment name; SIU number; Physical address; Region; Magisterial district; Inspection office; GPS coordinates; Establishment type; Disease risk management zone.

As officials register holdings, they should consider crush pens (service points), the local authority structures, nature of settlements and the husbandry practices. In some regions, many farmers have several locations where their livestock can be found. Therefore, the number of locations where a keeper may be registered will vary from one area to another. Consultation between livestock keepers and the local veterinary official is needed to decide how many of the locations a keeper should be linked to. This decision should also consider the following epidemiological factors:

Permanence of settlements - locations that have permanent livestock facilities such as pens and corrals and/or human dwellings should be registered as holdings, whereas locations where livestock is held on a temporary basis such as seasonal common grazing areas should be registered with a link to primary holdings of the animals in order to produce a comprehensive picture of where the animals are kept.

Sparse settlements - in sparsely populated areas where livestock herds are served by a single crush pen, it is important to identify enough separate holdings under that crush pen in order to establish the true epidemiologic picture of the area. The risk of exposure of holdings through animal contact differs when the distance from one holding to another increase. The reference point used will be distant from where animals are located or kept.

Animal movements - if there is routine movement of livestock under one management between multiple holdings and posing no additional risk through animal contact, there may be no epidemiologic advantage to consider the locations as separate entities. These holdings could be registered separately but linked as common holdings.

The system will have an extensive database of all holdings such as farms, communal areas and feedlots where livestock can possibly be kept either on a permanent or a temporary basis. Farms partitioned into separate entities or a number of adjoining farms run as consolidated units will also be registered as such on the database. The database also includes transit locations such as market and exhibition grounds, slaughter and export collection centres and border posts. All registered abattoirs, and other slaughtering facilities will be listed.

Basic information about all these holdings will follow the requirements of VPN02(A);VPN02(b); VPN04; VPN05 and VPN07. This will include name, location number, GPS location, unique property code, the veterinary office carrying out routine inspections, state veterinary district, magisterial district and the province. These details ensure that the holding is located within a short time.

Allocation of herd or flock identification (epidemiological unit) code for branding /Animal Identification Numbering System

The animal identification number (AIN) that is going to be used will be a unique, 15-digit RFID number, where the first two numbers (27) are the UN/ISO 2-digit country code for South Africa, followed by 12 digits that are available for the animal's unique identifying number. The system will utilize these digits to create a unique AIN within South Africa as follows: two digits representing the province followed by three digits representing the district followed by zero (0) and a six-digit serial number, 123 456. A combination of the five digits representing the province and district indication symbols and a six-digit

serial number forms the unique AIN. The code ZA in the logo on the visual ear tags is the ISO 2-alpha country code for South Africa. Since the area of animal identification is evolving, details on current specifications of the official ear tags to be used is subject to further discussion.

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