agriculture,
forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

DRAFT POLICY

FOR INDIVIDUAL ANIMAL IDENTIFICATION AND VALUE CHAIN TRACEABILITY IN SOUTH AFRICA

Animal Production, Health and Food Safety

June 2015

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1. INTRODUCTION AND BACKGROUND INFORMATION

Animal identification, recording and traceability (AIRT) is both a public and private good that delivers benefits to farmers, consumers, and the nation as a whole through control of infectious diseases, animal traceability, promotion of food safety, and improved livestock data quality and analysis thereof. AIRT is regarded as a private good as it contributes to 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 promotes food safety and consumer protection. AIRT can be delivered through public or private sector initiatives.

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.

1.1 Movement control, livestock statistics and information in South Africa

In the past, 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. Unfortunately, the system was costly and not sustainable.

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.

1.1. The current situation in South Africa

1.1.1. Animal owner identification (brand mark)

The Animal Identification Act (AIDA), 2000 (Act No 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 – providing 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 key 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 – Non-registered livestock

A number of farmers, feedlots, and producer organisations in South Africa have voluntary functional individual animal identification and traceability systems. Some make use of an ear-tagging system with a unique number allocated from a voluntary central number allocation system????? to avoid any duplication. 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.

1.1.4. 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.

2. DEFINITIONS/ GLOSSARY OF TERMS/ ACRONYM

Definitions

2.1 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.

2.2 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.

2.3 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.

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

2.5 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.

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

2.7 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

2.8 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

3. Problem statement

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.

Animal identification and animal traceability are tools for analysing and addressing animal performance, 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: the 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, feed and pesticides at farm level.

4. OBJECTIVES

- To establish an integrated and comprehensive AIRT and value chain traceability system in South Africa.
- To review existing legislation and where necessary amend legislation to make provision for these interventions.

- To harmonize and accredit all existing eligible animal identification systems, ensuring coherence, compatibility and further accessibility and relevance to the country needs. Defining all minimum requirements for harmonization of systems.
- To contribute to improved animal and public health through a faster and more accurate system for traceability, and analysis of current data and trends to address identified problems.

5. POLICY TO ADDRESS THE PROBLEM

5.1 Outline of the various policy options available to the department.

In order to implement a functional and efficient AIRT system a phase in approach is highly recommended therefore all the proposed options will be referring exclusively to cattle at this stage. A functional AIRT system aims to identify animals individually and register them on a central database. Such an AIRT system must include:

- Compulsory identification of all animals including Imported livestock.
- Allocation of unique individual animal identification numbers generated from a single authority to avoid duplication (for ear-tags).
- A national livestock property identification system.
- Registration of establishment from a central authority.
- Allocation of herd or flock identification (epidemiological unit) code for branding.
- Owner identification as is required by/ in accordance with the animal identification act
- Registration of common areas where animals are handled, including: Sale yards, show grounds, pounds, race courses and shearing sheds.
- Registration of abattoirs and processing plants.
- Uniform international standards for identification devices (eartags, microchips, rumen transponders, etc.)
- Registration of identification device distributors.
- Replacement of identification devices if previous device is missing or malfunctioning.
- Identification of carcass or meat or offal of slaughtered animal up to the processing plant.
- Identification of country and facility of origin - labelling on meat.
- Application of trade description (name of producer, species identification, mode of manufacturing or production) on products of animal origin along the value chain.
- 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.
- Sufficient resources available to implement and maintain AIRT system.

The following options can be considered to establish an integrated and comprehensive AIRT system in South Africa. Most of the AIRT system components stay the same across all mentioned options. Therefore, the proposed options refer mainly to the software systems required to run a fully operational AIRT system consisting of the above mentioned components:

Option 1: To integrate and build on existing systems to develop an AIRT system

This option involves easier and more rapid implementation of the AIRT as some of the components may already exist and supporting legislation can be used to implement AIRT while amendments are considered.

Currently, there are a number of existing fragmented systems for AIRT in both the private and public domains. Integration must also be able to cater for other private traceability systems available. The currently available AIDA and INTERGIS databases are tried and tested systems with an AIRT capability.

This option is cost-effective as existing limited physical and human resources that are already available could be used as a starting point. This option has the potential of being gradually phased in to a new AIRT system over time.

Referring to databases and system/software programs - Not all components needed for an efficient AIRT may be currently available and therefore missing components may still have to be developed. The existing systems may also be outdated and may attract high maintenance costs. There is a potential problem with intellectual property requirements, conflicts of interest and the security of information. There is a risk that upgrades may not be compatible with old systems existing.

Option 2: To develop a brand new AIRT system

There is a good chance of resistance from stakeholders who have already invested in some form of AIRT. This will possibly be a more long term plan which can lead to the loss of current potential markets and urgent information needed for livestock development and strategic planning. This option may also be an expensive compared to option 1, where some components already exist. It may take very long to validate a new system. A newly developed AIRT system has greater potential for one stop shop, as it can be specifically customized from the start. It will be a comprehensive system developed according to identified specifications and therefore

should be more efficient than system components that are already in existence (and that need modification). It is easy to address intellectual property issues in this case, especially software problems. While software like this may be able to be developed locally to meet specific needs, expertise which may not be available locally may need to be called upon.

Option 3: To purchase an existing AIRTsystem

This option will require significant financial investments. It is quick all-in-one process, but may fail to meet all the basic requirements if purchased as such, without the option of unique modifications to suit the country's needs. This option may take longer to purchase (similar to option 2) as compared to option 1. It may be a radical approach and may be met with resistance. It is important to note that pre-designed commercial software may sometimes not offer a sufficient degree of customizability to meet all requirements of a new AIRT system.

Option 4: Maintaining currently available fragmented systems

Maintaining status quo without an effective and efficient integrated AIRT system will have negative impact on the following:

- Weak animal and public health and disease control.
- Reliability of statistics for animals in South Africa which impact on planning and livestock development and trade.
- Weak stock theft mitigation.
- Market access, trade and economic growth.
- Genetic improvement and productivity gains.
- Consumer confidence in the food control system.

5.2 **Policy option recommended addressing the problem.**

Option 1 (To integrate and build on existing systems to develop an AIRT system) is the recommended approach as it would be the most feasible alternative in terms of costs and time to effictive implementation.

5.3 Justification of the recommendation in terms of efficiency, effectiveness, social effects, environmental impact and technical feasibility of the option.

- There are existing limited resources currently available (financial, physical and human) than can be used to start building on a flexible and adaptable AIRT system. The expansion of this option will bring about more rapid results in terms of implementation of available AIRT system components. The country will be able to compile and use reliable animal statistics (as it becomes available over time) for strategic planning, decision making, trade and livestock

development. Supporting legislation can be used to implement AIRT while amendments are considered. Thus, there is no lag-period where current working systems have to be abandoned to make way for a whole new concept and method of AIRT, making this option more effective.

- Social benefits include food safety and security, job creation for capacity building, reduction in stock theft, improved productivity of animals, improved animal diseases management, improved consumer protection and economic growth in the livestock sector.

- Rapid environmental impact assessment and redress of identified problems (such as overgrazing) will be possible from improved accurate statistics of animals in various arears throughout the country. Environmental risks will also be reduced due to improved disease investigations and less environmental contamination of infectious and harmful agents.

5.4 The political, institutional, legal, social and economic viability of the different options should also be compared and their differences outlined.

Viability Factors	Option 1	Option 2	Option 3	Option 4
Political	Easier political support	May require lobying	May require lobying	Potential for political descent
Institutional	framework partially exists but fragmented	framework would require additional institutional capacity	framework would require additional institutional capacity	framework partially exists but fragmented
Legal	Exists but not intergrated	May require legislative review	May require legislative review	Exists but not intergrated. Risk of litigation
Social	Some components have already been accepted by users	May not be accepted by the users due to resistance to change	May not be accepted by the users due to resistance to change	High social risk.
Economic	Cost effective and hence more economically viable than all other options	High capital outlay needed and additional capacity	High risk, significant capital outlay needed as well as additional capacity	Least economically viable than all other options due to potential huge financial losses to the industry

5.5 An outline of the anticipated consequences including a cost-benefit analysis, spill-over effects and the certainty of these forecasted consequences, using various quantitative and qualitative analytical.

In term of the national economy, the Veterinary Services cost represents less than 0.1% of the GDP, 3% of agriculture GDP and 7% of livestock GDP, but also 33% of the value of exported animals and animal products. These figures show that it is not appropriate to consider livestock, and moreover livestock exports, as an isolated sector without considering all indirect benefits on environment, employment and added value along the production chain, including service providers and other sectors, from farm to fork.

The estimated unit cost per VLU (VLU=1 cattle=10 small ruminants=3 pigs=100 poultry) is around R54 per year. This is an average quite acceptable for the level of development of the livestock industry in South Africa. Moreover, most of this amount could be cost recovered through levies in the food industry (slaughterhouses, food processing, etc), with a very limited impact on the consumer. Comparison with the national budget (0.3%) and the agriculture budget (25%) should be taken carefully into account, as data provided probably do not incorporate within the national budgets the overall local government taxes and other public related taxes.

The risks for animal diseases are always present in South Africa. The most recent examples of major outbreaks of important infectious diseases are: Foot and Mouth disease (outbreaks in KwaZulu-Natal (2011), Mpumalanga (2009) and Limpopo (2008/09) and the endemic situation in the Kruger National Park); Newcastle Disease (annual outbreaks in both commercial, small scale and backyard poultry and ostriches); African Swine Fever – sporadic outbreaks in Limpopo, Mpumalanga and Gauteng provinces in 2012; Outbreak of Classical Swine Fever in the Eastern Cape – 2004 -06; Rift Valley Fever in Gauteng, Free State, KZN, Northern Cape, Western and Eastern Cape since 2008 – 2011; Anthrax in the Northern Cape in 2009; Persistence of Cysticercosis and Neuro-cysticercosis in humans in the Eastern Cape as well as persistent endemicity of Tuberculosis and Brucellosis throughout the country.

The estimated costs for AIRT will be R 266 750 000 per annum, however the importance and benefits of an effective and efficient AIRT are:

- Animal Health and Animal disease control:

  The impact on animal health and disease control can be separated into two components: (1) direct losses due to reduced production and changes in herd structure; and (2) indirect losses caused by costs of diseases control, poor access to markets and limited use of improved production technologies. The embargo on exports of both South African beef and game meat to certain countries in 2011 because of the FMD outbreak costed the nation an estimated 4 billion rand ($348 million) which reduced economic growth in the livestock industry. In Zambia, the impacts of weak FMD controls have been quantitatively estimated at over R19.68 billion (US$ 1.6 billion) for losses in income from exports of beef and wildlife and an annual cost of over R33.21 million (US$ 2.7 million) on preventive measures. The outbreak of classical swine fever in the Eastern Cape during the period of 2004 -2006 costed the fiscus R700 Million to eradicate the disease.
- Stock Theft mitigation: Lack of effective stock theft mitigation is estimated to be costing the livestock industry a total annual losses R430m/yr
- Public Health; AIRT will be a dynamic, comprehensive The Public Health Information data system as part of South Africa's effort to collect, consolidate and analyze data in order to improve public health.
- Market access, trade and economic growth;

- Genetic improvement and productivity gains: If calving rate can be improved by 1%,the projected income will increase by R1billion

5.6 Summary of stakeholder inputs as well as responses to expressed suggestions and objections.

While no formal consultation has taken place yet, the entire red meat industry by way of the poultry, wildlife and Red Meat Industry Forum (RMIF) supports the need for individual animal identification and traceability and has made this very clear on a number of occasions. This has also been raised by the RMIF with the Parliamentary portfolio committee on Agriculture. There is also support for a National brand mark for RSA animals. A stock register was identified as a priority by the National Stock Theft Forum and is a long outstanding deliverable.

This will be published in the Government Gazette for comments once approved. Workshops will be conducted with all relevant stakeholders.

5.7 Institutional implications.

In the strategic implementation plan, organizational mapping for AIRT system in South Africa will be done. All the relevant stakeholders will be identified, their roles and functions examined and separated into categories by their importance. This will enable focus on roel-players crucial for the implementation of AIRT system . Identification of stakeholders will be done through discussions with knowledgeable people, and by assessing available documentation and records. In line with tradition and previous engagement in the implementation of veterinary and animal production initiatives, the working group will propose a top- down structure of management of AIRT system in South Africa, with few layers of clear hierarchies, compartmentalized responsibilities/functions and flexibility in operation (easy interdepartmental collaboration and sectoral collaboration across agencies). Issues such as provincial decentralization (shifting of power from the centre to the provinces), devolution (decentralization in regard to law-making and the creation or revitalization of local bodies with legislative powers) will be taken into consideration.

5.8 Financial implications.

Resources		Required Number	Unit Cost ®	Years of amortization	Annual cost
Physical	Buildings ()				4200000
	Transport	150	150000	5	6000000
	Staff office equipment set	700	30000	5	4200000
	Equip. for ear tagging and bar code reading	450	1000	1	450000
Human	Salaries Veterinarians; Other professionals and Support staff	860	600000 250000 125000		131 000 000
	Specialized training and continuing education		450000		4500000
Consumable resources	Administration				
	Travel costs		4.20		18900000
	Eartags	5000000	19.50		97500000
Total					**266 750 000**

The estimated cost per dip tank to provide an allocated mark as well as all the necessary marking equipment is shown in Table 1:

Item	Service provider	Cost
Registration of a unique dip tank mark	DAFF	R120
Branding iron (dip tank)	Private sector	R110
Branding numerals (0-9)	Private sector	R1 000
Immobiliser *	Private sector	R2 950
Gas cylinder	Private sector	R350
Iron heater (6 burners)	Private sector	R1 368
Tattoo pliers	Private sector	R1 100
Dip tank tattoo	Private sector	R216
Tattoo numerals	Private sector	R1 350
Tattoo paste	Private sector	R55
Cost per dip tank		R8 619

The estimated costs for AIRT system will be R 266 750 000 per annum. Cost sharing for AIRT system implementation will be through PPP where the industries will fund the partial costs through a levy system. All levies are currently coordinated by the NAMC on behalf of DAFF and the industry. However, there currently no levies are being collected for AIRT system. Possible points of levy collection could be through imposition of a levy in respect of designated poulty, wildlife, animals, meat and animal products, hides, skins and processed meat as stipulated in the regulations to be determined under the Marketing of Agriculture Products Act (Act No 47 of 1996). It is estimated that an amount of about R65m could be raise per annum if the statutory levies are calculated at 0.68% for pigs, 0.1% for cattle and 0.16% for sheep/goats based on a guideline price calculated as the average price at the first point of sale over a period not exceeding three years. In addition an amount of R2m per annum is already paid by farmers as cost of owner brand mark.

5.9 Communication implications.

Internally: The draft document will be submitted to EXCO, MinMec and Minister for approval to publish.
External: The draft document will be published in the Government Gazette and workshops will be conducted with relevant stakeholders.
After the workshop, the final document will be published in the Government Gazzette after consideration of all inputs and approval of the policy by the Minister.

5.10 Legislative and regulatory implications.

Review of the existing legislation will be done to make provisions for an AIRT system. This will include at minimum the following: Animal Improvement Act; Animal Diseases Act; Meat safety Act; Agricultural Products Standards Act; Consumer Protection Act; Farm Feeds Act.

6. Indicators of performance

- Approval of the policy on AIRT
- Report on the confirmation of the linkage of the AIDA and INTERGIS.
- Gazetted Revised Act and regulations for AIRT
- Report on the Functional AIRT system

7. Timetable and implementation

7.1 Timetable

Action	Time frame	Key role players
Publication of the AIRT policy	December 2015	
Linkage of the AIDA and INTERGIS	January-February 2016	DAFF/ ARC
Legislative Review (Act(s) and Regulations)	July-Dec 2015	DAFF
Gazetting of the Revised Legislation for AIRT	Jan 2016-Jan 2018	DAFF, Provinces
Report on the fully integrated and functional AIRT system	Dec 2018	Industry, DAFF, Provinces, Livestock owners

7.2 The key actors.

The roles of key stakeholders pertaining to AIRT system will be presented in detail after the stakeholder as presented in Table 3.

Table 3. Actual possible roles of the key stakeholders in the implementation of AIRT system

Stakeholder	Role in AIRT
Chief Directorate Animal Health and Production	- Cross-border policy harmonisation, dialogue and information exchange - Audit of the AIRT system - Validation and verification of market data; - Legislation/Policy development and review; - Provision of required human resource; - Explore opportunities to expand AIRT; - Sensitisation and awareness to the community;
Veterinary Services at Provincial and District level	- Provision of access to market infrastructure - Provision of required human resource; - Recruitment and registration of traders and establishments; - Compliance with market related veterinary procedures; - Movement permit. - Hot iron branding. - Assist with the Application of ear tags and RFID devices to animals; and - Collection, entry, validation and verification of AIRT data; - Uploading of file and transferring of the information to the local database - and subsequently to the central data base. Enforcement of AIRT
Directorate of Animal Production	- Provision of livestock IDs (registrar of brands) - Control/custodian of the central data base - Development and Review of AIRT policy/legislation; - Sensitisation and awareness
Industry Stakeholders	- Ensuring compliance with veterinary procedures; - Implementation of AIRT - Audit of the traceability system - Participate in Review of the AIRT policy/legislation

8. The AIRT system provides a broad framework for the fulfilment of veterinary services to the constitutional imperative where every citizen is guaranteed "the right to have access to sufficient food and water" and that "the State must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights." (Constitution, 1996: 12). The AIRT system aligns itself with the New Growth Path (NGP), the National Development Plan (NDP) and Industrial Policy Action Plan (IPAP) through the Agriculture Policy Action Plan (APAP) supported by the Veterinary Strategy of South Africa. The APAP seeks to assist in the achievement of Outcome 4, Decent Employment through Inclusive Growth, and that of Outcome 7, Comprehensive Rural Development and Food Security as detailed in the Veterinary Strategy of South Africa.

9. Reference documents

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4. An enhanced Animal Identification and traceability information in Namibia – IST OIE conference on animal ID and traceability. Buenos Aires 2009.
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10. Policy owner

Chief Directorate: Animal Health and Production

11. Document Information

Document number: AIRT1/15
Revision number: 0
Issue date:
Document status: draft