

**DRAFT POLICY ON THE ESTABLISHMENT AND
ADMINISTRATION OF A NATIONAL DNA
DATABASE IN SOUTH AFRICA**

Contents

GLOSSARY OF TERMS	4
BACKGROUND	6
POLICY STATEMENT	7
PURPOSE OF THIS POLICY	8
SCOPE AND OBJECTIVES OF THE POLICY	9
LEGISLATIVE AND POLICY FRAMEWORK	9
The Constitution of Republic of South Africa	9
Criminal Procedure Act 51 of 1977	10
Firearms Control Act 60 of 2000	10
Standing Order (General) 016	11
SAPS Policy 2 of 2005 on Crime Scene Management	11
Intergovernmental Relations Act	11
International Human Rights obligations	11
CURRENT OPERATIONAL PRACTICE IN SOUTH AFRICA	12
INTERNATIONAL PERSPECTIVES	13
United Kingdom	14
Canada	15
United State of America	16
GUIDELINES AND RECOMMENDATIONS FOR CONSIDERATION ON ESTABLISHING DNA DATABASE AND LEGISLATION	16
What does South Africa wants to achieve through DNA legislation?	16
Accreditation of labs	17
Accommodation/administration of the DNA database	17
Size of database	18
Number of indices and categories of profiles	18
Secure storage of DNA samples & profiles	19
Who should be authorised to collect reference samples	19
Where should DNA samples be collected	19
Training/scarce skills	20
Retention, destruction and expungement of samples and profiles	21

Timeframes for the retention and destruction of DNA samples and profiles	22
Retrospective sampling	23
Human rights violations	23
IT Solutions	26
Role of other departments	26
Phased in implementation	27
Oversight, independence and reviewing	27
CONCLUSION	28
SOURCES	29

GLOSSARY OF TERMS

DNA (Deoxyribonucleic Acid) is obtained from samples of bodily substances such as blood, semen, or perspiration. DNA can also be obtained from epithelial cells from the skin or even hair follicles. DNA samples are generally collected from evidence found at a crime scene or from a person, and analysed by forensic scientists at labs to produce evidence for court purposes as well as DNA profiles.

Evidence Recovery is a process to ascertain whether there is a possibility that DNA may be present in the evidential sample.

A *crime scene* is a location where an illegal act took place, and comprises the area from which most of the physical evidence is retrieved by trained law enforcement personnel, crime scene investigators (CSIs) or in other circumstances, forensic scientists.

Crime scene samples are intimate, biological specimens that may be of evidentiary value such as a single hair or drop of sweat, blood, semen, urine or nail left at a crime scene.

Intimate samples are samples of blood, semen or any other tissue or fluid taken from a person's body, urine or pubic hair; or a swab taken from any part of a person's genitals (including pubic hair) or from a person's body orifice other than the mouth

Reference samples are non intimate samples that can be used to identify the victim or perpetrator through DNA reference to others (either through personal items, including hairbrushes, or biological samples, including blood stain cards, pathology samples). Reference samples may be collected using a buccal swab from a person's buccal cells/ saliva from the inner lining of a cheek. An individual's hair follicle may also provide a reference sample.

A *DNA profile* once analysed, is processed, digitized, and stored. While the physical sample consists of the bodily substance collected from a crime scene or person, the DNA profile is the processed, digitized information that is stored electronically on the database. DNA profiles are encrypted sets of numbers that reflect a person's DNA makeup, which can be used as a person's identifier.

A *DNA database* is an electronic, collection of records, reflecting the DNA profiles of people. It is typically housed by the police as it assists law enforcement agencies to identify suspects of crime.

Crime scene index includes blood, semen and other samples of serious and violent crimes. This index contains the personal details of the offender

Reference index includes profiles of victims and suspects charged for a crime, obtained from non-intimate sampling

Elimination index is for the detection of forensic and detective personnel contamination and may be used for cold case investigations as well

Convicted offender index contains offenders DNA information from date of conviction

BACKGROUND

A review of the criminal justice system undertaken by the Office of the Criminal Justice System Reform established a need to strengthen the forensic investigative powers and capacity of the SAPS. In this regard, functionaries from within the criminal justice system consulted on issues and the Criminal Law (Forensics Procedures) Amendment Bill [B2-2009] (DNA Bill) was drafted. The Bill was aimed at providing a legislative basis for taking of and storage of DNA samples and DNA profiles, and the establishment and regulation of the administration of a National DNA Database. Until such time as the DNA Bill is finalized, the Criminal Procedure Act 51 of 1977 remains the legislative source for the collection and storage of DNA samples and DNA profiles on a database. Section 37 (2) (a) in particular requires that:

“Any medical officer of any prison or any district surgeon or, if requested thereto by any police official, any registered medical practitioner or registered nurse may take such steps, including the taking of a blood sample, as may be deemed necessary in order to ascertain whether the body of any person referred to in paragraph (a) (i) or (ii) of subsection (1) has any mark, characteristic or distinguishing feature or shows any condition or appearance”.

Section 37(2) (a) must be observed in order to ascertain the bodily features of individuals for evidential purposes. This legislation means that police officials may not take blood samples from a suspect in order to obtain a DNA profile. Currently in South Africa DNA samples must be taken from individuals by a medical practitioner or a registered nurse and the sample obtained must be a blood sample. There is no mention of DNA or the utilization of DNA profiles or a DNA database for criminal intelligence. Although Section 37 (2) (a) does not expressly refer to DNA profiles, there have been cases where the prosecution has adduced DNA evidence in courts and the courts have relied on such evidence to, inter alia, convict suspects.

Forensic DNA analysis was introduced in South Africa in 1991. It was performed mainly in criminal and paternity casework due to the technology requiring fairly large DNA stains at that time. In the last fifteen years Forensic DNA analysis was predominantly used as a prosecutorial tool on a case-by case basis; mainly in contact crimes; and only at the request by the State Prosecutor. DNA profiles generated from case work samples were stored in the DNA case work repository. Before 2008, comparative searches on the forensic DNA profiles saved in the DNA repository was performed on an *ad hoc* basis and it was not given priority. The full potential to use forensic DNA as an investigative tool to link different offences and persons was realised and this gave new impetus to a legislative framework to perform forensic DNA comparative searches.

The first phase of the DNA Bill provided for the expansion of the SAPS's powers to obtain DNA samples and retain DNA profiles derived there from. During the first phase, 5 indexes were created for comparative searching amongst different types of DNA profiles on a database. These include:

- convicted offender index
- reference index
- elimination index
- volunteer index
- crime scene index

The first phase also provided for convicted offenders profiles to be collected retrospectively and provided for the establishment, administration and use of a DNA database as a crime intelligence tool with strict safeguards and penalties to ensure that forensic materials are collected, stored and used only for purposes related to the detection of crime, the investigation of an offence or prosecution.

The Ad Hoc portfolio committee reviewing the first phase of the Bill was not able to complete their review due to national elections and other concerns pertaining to the DNA section of the Bill. In September 2009 the DNA Bill was referred to the Parliamentary Portfolio Committee on Police. Following further deliberations in respect of the DNA Bill, a decision was taken to split the Bill into two sections: fingerprints and DNA. The review of the fingerprint section of the Bill commenced in October 2009 and the fingerprint legislation was enacted a year later in October 2010.

The DNA section of the Bill was put on hold until such time as the Committee had completed an international study tour to the United Kingdom (UK) and Canada in order to gather information in respect of the impact and implementation of DNA legislation in these two countries, as well as the forensic services, facilities, procedures and best practices available in respect of DNA and the national DNA databases.

POLICY STATEMENT

Many countries are experiencing the importance of National DNA databases and the value it brings to law enforcement. South Africa is in the process of elevating the status of its national DNA database to an international level of acceptance, which, if achieved, will ensure that DNA profiling and information record storing plays a key role in crime detection and prevention. The issues surrounding the collection, use and storage of DNA samples and DNA profiles remains fundamental to strengthening the forensic

investigative powers and capacity of the SAPS in the fight against crime and in improving service to the public. South Africa's high crime levels, rate of recidivism and considerable DNA case backlogs demonstrates the urgent need to improve the use of DNA profiling and establish a National DNA Database for criminal intelligence purposes.

PURPOSE OF THIS POLICY

The purpose of the policy is to recommend a proposed framework upon which the new DNA Bill may be drafted, taking into consideration:

- Current policy and practices existing in respect of the administration of the repository of DNA profiles held by the FSL;
- The current legislative sources regulating this repository of DNA profiles which legislation is outdated, limited and inappropriate insofar as it does not adequately regulate issues such as the taking of DNA samples and subsequent destruction thereof, the retention and selective expunging of DNA profiles from the database and the use of the database of DNA profiles as a criminal intelligence tool as opposed to a prosecutorial tool.
- The previous round of deliberations held by the Ad Hoc Portfolio Committee initially tasked with reviewing the first draft of the DNA Bill which was adopted by Cabinet in 2008 as well as the oral and written submissions tendered by the public in respect thereof.
- The potential alignment of the fingerprint and DNA legislation which was originally tabled in the same Bill and subsequently split. The fingerprint section of the first Bill has since been passed and many issues extensively discussed by the Ad Hoc Portfolio Committee in that Bill, such as the taking of prints from minors.
- The recommendations and considerations of the current Portfolio Committee of Police following their overseas study tour to Canada and the UK where they looked at both countries' legislative frameworks, the implementation of their respective DNA laws, the constitutional, privacy and ethical issues raised in respect of the DNA laws, how both State and private DNA laboratories share the workload in respect of DNA analysis, collection and storage of DNA as well as current scientific and technological developments in DNA profiling for criminal intelligence.

Given that South Africa needs to address the gaps in current legislation in respect of the administration and regulation of a National DNA Database, policy recommendations need to be given in respect of the following key areas:

- The collection of a DNA sample – who should be allowed to take a DNA sample and how should it be taken.

- From whom the samples must be taken – categories of offences;
- Categories or indices of DNA profiles retained on the DNA database;
- Retention framework in respect of each of the above categories;
- The destruction of samples once a DNA profile has been obtained;
- Who is to be the custodian of the DNA database;
- The expunging of certain categories of DNA profiles from the database;
- Punitive measures in the event of any irregular use of the information contained in the DNA database;
- Definitions, for instance the difference between a DNA sample and a DNA profile needs to be addressed to ensure clarity when referring to all of the above issues.

SCOPE AND OBJECTIVES OF THE POLICY

In order to revive/ revitalize the Criminal Law (Forensic Procedures) Amendment Bill [B2-2009], this policy will provide the following:

- Explore the legislative and policy framework relevant to DNA
- Present an international scan based on the study tour of the Parliamentary Portfolio Committee on Police
- Address some of the issues as highlighted by the study tour of the Parliamentary Portfolio Committee on Police

LEGISLATIVE AND POLICY FRAMEWORK

The following legal instruments are relevant to the Criminal Law (Forensic Procedures) Amendment Bill [B2-2009], particularly in the establishment of a DNA database.

The Constitution of Republic of South Africa

The Constitution of the Republic of South Africa, specifically the Bill of Rights, states that an accused person has a right to a fair trial which includes the right to challenge evidence (s35(3)). The Bill of Rights further states that any evidence obtained in a manner that violates any rights must be excluded if the admission of that evidence results in results in an unfair trial or will otherwise be detrimental to the administration of justice (s35(5)).

The above provision is relevant to sample taking only; the other provisions would be those relating to the right to privacy, the right to freedom and security of a person, and the right to human dignity. Section 35(2) (c) further makes provision for a legal practitioner to examine the circumstances in which the DNA sample was taken.

Criminal Procedure Act 51 of 1977

Criminal Procedure Act (51) of 1977 as amended, makes provision for the taking of the necessary steps by police officials to ascertain whether the body of an arrested person has “any mark, characteristic or distinguishing feature or shows any condition or appearance”. The Act further states that “no police official shall take any blood sample of the person concerned nor shall a police official make any examination of the body of the person concerned where that person is a female and the police official concerned is not a female”. While on the other hand, Section 225(2) provides that evidence of fingerprints, palm prints or footprints will not be inadmissible by reason only that they were not taken in accordance with the provisions of this Section. In terms of DNA information collected and sent to court Section 225 of the Act further states that “whenever it is relevant in criminal proceedings to determine whether the accused has any “characteristic or distinguishing feature”, evidence of such characteristic or distinguishing feature, including the result of any blood test, is admissible in a court of law”.

Firearms Control Act 60 of 2000

Firearms Control Act provides reasonable grounds for forensic examination and investigation of cases related to handling and discharging of firearms. Section 113 (1) of the Firearms Control Act (60) of 2000 authorizes any police official without warrant to take the fingerprints, palm prints, footprints and bodily samples of a person or a group of persons. This is done in relation to the handling or discharging of firearms suspected to have been involved in criminal activities and that there are justifiable reasons to determine the identity of the suspected person(s) to have handled the firearm(s). The police may call for any such prints or samples to be taken firstly, if there are reasonable grounds to suspect that that person or more than one person in a group has committed an offence punishable with imprisonment for a period of five years or longer; and secondly, if there are reasonable grounds to believe that the prints or samples or the results of an examination thereof, will be of value in the investigation by excluding or including one or more of the persons as a possible perpetrator of the offence.

The act supports that the person who has control over prints or samples taken in terms of the Firearms Control Act may examine them for purposes of the investigation of the relevant offence or causes them to be so examined and must immediately destroy them when it is clear that they will not be of value as evidence. Section 113(3) of the act further states that bodily samples to be taken from the body of a person may only be taken by a registered medical practitioner or a registered nurse. While section 113(4) points out that a police official may do such tests, or cause such tests to be done, as may be necessary to determine whether a person suspected of having handled or discharged a firearm has indeed handled or discharged a firearm.

Standing Order (General) 016

Standing Order 016 provides that the Forensic Science Laboratory (FSL) of the South African Police Service shall, subject to the provisions of the SAPS Act and regulations, and in compliance with the directions of the Commissioner, be charged with serving the force as an aid in the detection of crime by means of objective scientific analyses, investigations and the comparing of organic and inorganic matter by trained experts, and to make available expert testimony for court purposes.

SAPS Policy 2 of 2005 on Crime Scene Management

Policy 2 provides guidelines for the management of all crimes scenes, to ensure that crimes scenes are properly controlled, managed, documented, and that the integrity of items with potential evidential value is unquestionable.

Intergovernmental Relations Act

The Intergovernmental Relations Framework Act, 2005, enhances integration of government programs and planning in all spheres of government on policy development and implementation.

International Human Rights obligations

International human rights bodies (i.e. convention on the rights of individuals, Article 16 of the Universal Declaration of Human Rights) observe that legislation and policies in any country can only safeguard privacy and rights and prevent miscarriages of justice if there is sufficient scrutiny of whether policies are being properly implemented and the results thereof. This requires independent oversight as well as the regular publication of public information about the size, costs and effectiveness of the database in solving crimes. The impacts of a DNA database on privacy, human rights and justice also depend on the context in which it a country laws operate, i.e. on the integrity of the criminal justice system in the country as a whole.

The United Nation Council on Human Rights indicates that DNA database or databanks should have an all inclusive and independent body with members, as not only officials and forensic scientists, but also representatives of civil liberty associations. This will ensure that human rights concerns are accounted for, as well as to avoid political manipulation or other deviations from the founding principles of the DNA database or databank.

CURRENT OPERATIONAL PRACTICE IN SOUTH AFRICA

The NDCID is at present administered and held by the Biology Unit of the FSL, which is a division of the SAPS. Whilst the FSL have made great strides in the use of DNA profiling for criminal intelligence, various factors continually inhibit functioning.

DNA analysis is presently performed at the Biology Units of the FSL in Pretoria and Cape Town. A further two evidence recovery laboratories are situated in Port Elizabeth and Durban. The Port Elizabeth laboratory operates a ballistic and chemistry unit, and performs only Evidence Recovery on Body fluids. Evidence Recovery is a process to ascertain whether there is a possibility that DNA may be present in the evidential sample. If so, the sample is sent to Pretoria or Cape Town for full DNA analysis where a profile may be obtained.

The expansion programme to include DNA Analysis is presently underway. In the Western Cape the new laboratory in Platteklouf, Cape Town is fully operational. The laboratory in Durban consists of a Ballistic Unit and has recently begun the process of Evidence Recovery of Bodily Fluids. The facility in Amanzimtoti is undergoing revamping for Evidence Recovery of Bodily Fluids. Once Evidence recovery is fully operational, the DNA analysis process will be introduced. The Pinetown lab project is still at infancy stages; an environmental impact is being conducted.

The SAPS **NDCID** has been in operation for various years and is utilised on a case by case basis – not for the purposes of criminal intelligence. Once a sample has been analysed, a genetic profile is identified, and the DNA profile is housed in the NDCID, which consists of two separate indexes, the Crime Scene Index and the Reference Index. The total profiles stored in the **NDDSA** amount to 25 000. 24% profiles are for females and 58% consist of male profiles.

DNA samples are not destroyed at the SAPS FSL but are stored indefinitely as per the applicable Quality Management System.

Training & capacity

Forensics is a scarce skill and a noticeable shortage of specifically trained forensic biologists and crime scene technicians exists in the country. The entry requirement for employment at the FSL is a Bachelors degree in science, engineering, criminology or law. The starting salary of a scientist is between R137 214 per annum at the level of sergeant.

Employment at the laboratory begins with an induction, followed by specialised in-house training which varies according to specialty. Written and oral examinations take place in addition to practical competency testing. Remedial training follows and if successful, the scientist is declared competent. Operational mentorship is provided and on completion

the scientist is authorised to work independently. Biology DNA training costs approximately R450 000 per person, while the training for ballistics amounts to approximately R500 000 per trainee. Chemistry, toxicology and chemistry training costs approximately R330 000 per person. The duration of the training is between two to three years depending on the type of training. Apart from the in-house training for graduates, analysts from the CRFSS provide three-day information workshops for medical doctors, nurses, magistrates and judges, and members from the National Prosecuting Authority (NPA) to update them on current activities. Investigating officers also receive training on these activities.

Tertiary institutions in South Africa provide courses in the sciences that are applicable for employment as a scientist at the FSL. The University of Free State, University of Cape Town and University of Western Cape offer an Honours course in Forensic DNA Analysis. The courses are being supported by the FSL and graduates are more qualified on entry to the FSL.

INTERNATIONAL PERSPECTIVES

Many countries are experiencing the importance of national DNA databases and the value it brings to law enforcement. In this regard, any major initiative should be supplemented by studies of international best practices. A literature study of the DNA database of the United States of America (USA), as well as the considerations of the Portfolio Committee of Police's study tour to the United Kingdom (UK) and Canada were undertaken to explore the potential benefits of a DNA database as a law enforcement tool for South Africa. The above countries were chosen for comparative purposes for some or all of the following reasons:

- Their Constitution & Bill of Rights (Canada)
- Established NDNAD legislation
- Types of DNA reference categories
- Implementation strategies|
- Challenges faced in the implementation of their DNA legislation/strategies

The three main areas of study were:

- The Legislative framework applicable to each countries' DNA Databases
- The implementation of their DNA legislation

- The Issues and challenges regarding the use of DNA in each of the countries visited

The following challenges in South Africa were identified by the Portfolio Committee prior to the study tour, issues which need to be addressed during the review process of the new DNA legislation:

- storage & destruction of samples
- retroactive sample taking of convicted offenders
- expunging DNA profiles from NDNAD
- updating indices
- increase in demand / capacity as a result of the new legislation
- forensic collections at the scene of crime
- DNAD governance & reporting
- accommodation (number/location of state DNA processing labs)
- privacy concerns
- categories of offences for which DNA samples will be collected from suspects
- securing crime scenes
- custodian of the NDNAD

The following observations are relevant in considering the legislative framework for South Africa.

United Kingdom

The UK has eight DNA enabling legislation. Legislation allows for the establishment of a DNA database, for DNA samples to be collected in respect of all recordable offences, retrospective sampling, the retention of DNA samples of acquitted persons, familial searches, the establishment of a Missing Persons Index, redefining buccal swabs as non-intimate samples, and allowing the police to use force to obtain a DNA sample. The national DNA database does not contain demographic data, and searches are only permitted for criminal investigation purposes.

However, in relation to the removal of DNA profiles of acquitted persons from the DNA database, legislation is before Parliament in response to the European Court of Human Rights judgement.

In England and Wales the legislation relating to the National DNA Database (NDNAD) created conditions under which the police can legitimately take, retain and use DNA samples. Although this led to the establishment of the NDNAD in 1995, the existence of the database was never formally established in any legislation. The UK Government provided consistent financial and legislative support to greatly expand the use of DNA profiling for a widening range of offences. Police powers in the UK were extended to allow DNA profiles, fingerprints and other information to be taken without consent from anyone simply arrested on suspicion of any recordable offence. The new legislation allows the police to keep this information indefinitely, even if the person arrested is never charged giving the NDNAD the largest number of profiles per capita (100 000 per population) in the world.

Canada

The mandate of Canada's National DNA Database is to help identify suspects, link suspects to crime scenes where there is no suspect, and determine whether a serial offender might be involved in a crime. It comprises a Convicted Offenders Index (COI) containing DNA profiles of offenders convicted of designated offences, as well as a Crime Scene Index (CSI) containing DNA profiles derived from crime scene evidence. DNA matches are mostly in respect of breaking and entering crimes. Through Interpol, the Royal Canadian Mounted Police (RCMP) has access to 188 international DNA databases. Canada has embarked on the retroactive collection of biological DNA samples from certain offenders.

Biological samples are destroyed and associated DNA profiles are removed (expunged) from the COI when a conviction is quashed on appeal, when a DNA order is quashed, or when the period for the retention of certain samples expires, for instance three years after pardon; one year after unconditional discharge; three years after conditional discharge; and three years after parole. When a minor reaches the age of majority the results of the DNA analysis in respect of that minor must be destroyed. The costs of destroying or removing profiles from the database in Canada are much higher compared to loading profiles onto the database. Three private laboratories (accredited by the national state laboratory) perform forensic analysis of crime scene samples and also upload profiles onto the National DNA Database.

United State of America

The forensic database in the USA referred to as the Combined DNA Index System (CODIS), is modelled on UK's NDNAD and connects all of the 50 different state databases to a national computer network. Although each state has developed its own forensic database laws, they all follow certain federal guidelines. All states add the profiles of people convicted of violent crimes to their database; however some states have passed laws to allow profiles of suspected persons to be added. The USA plans to expand CODIS to include DNA profiles from individuals who are convicted of 'any felony', the punishment of which is more than a year in prison. The USA system also allows all state authorities to enter DNA profiles of people who have been accused of a crime, or individuals who have waived indictment for a crime and where charges have subsequently been dropped. This system was directly in line with that of the UK, but in the UK, this has since changed with the *Marper judgement*.

GUIDELINES AND RECOMMENDATIONS FOR CONSIDERATION ON ESTABLISHING DNA DATABASE AND LEGISLATION

The study tour of the Portfolio Committee on Police to Canada and the UK in 2011 served to produce clear and concise guidelines and recommendations for the legislation of a national DNA database. Each recommendation needs to be considered in the context of how they can be incorporated into the draft bill, whether these are relevant, and how best it can be implemented in South Africa. The considerations are summarized into different categories and are as follows:

What does South Africa wants to achieve through DNA legislation?

The potential benefits of a national DNA database can be phenomenal. These include: determining crime scene linkages, undertaking quick investigations, enabling successful prosecutions, as well as improving convictions. Other benefits include utilising police resources effectively, reducing crime, and improving service delivery to the public.

Policy consideration: Regulation of a system which is currently not informed by any specific legislation, and as such is open to abuse. Regulation of the existing DNA database held by the FSL, as well as the prospective DNA database with particular reference to the administration, expansion and utilization of the database as a criminal intelligence tool to fight crime.

Accreditation of labs

Legislation needs to be supported by certified and authorised systems and processes of state forensic science laboratories. This ensures documented procedures to maintain coordinated records relating to cases and ease of evaluation and interpretation of data. It also ensures safety checks, calibration and performance checks, as well as cleaning of equipment are done. Without the above, evidence may hold no weight in court.

Policy consideration: Accreditation of the SAPS FSL will provide assurance of technical competence to the court which will be far less likely to be contested or questioned in court.

Accommodation/administration of the DNA database

A suitable location for the national DNA database is challenging given the difficulties of forensics in South Africa. The Canadian and the UK DNA databases are both national competencies, even though *housed separately* from the lab, and the Department of Justice, the police and the FSL in the UK continue to maintain a good relationship, despite the independence. The UK recommends that database be independent of the SAPS and prosecutors in order to maintain faith in the criminal justice system.

Three options exist wherein to house the database: privatization, a Section 21 Company, or within the SAPS FSL.

Privatisation of the database is likely to result in the following challenges:

- High cost implication for SAPS which the public would ultimately have to fund
- Privatization will open up a market that will encourage competition from the private sector, with different fee structures, which the existing SAPS FSL already provides
- Shortcutting of the forensic processes
- Public contestations regarding security, ownership and authorized access to the database, necessitating constant State assurances
- Ethical reservations of privacy of sensitive data on the database
- A focus on profit as opposed to public interest

The benefits of privatisation include:

- Independence from possible State interference
- Well paying jobs for highly skilled people and scarce skills

The Section 21 Company option provides total independence of any State interference, but questions on sustainable funding arise as Section 21 companies are non-profit driven.

Policy consideration: the national DNA databases of Canada, the UK as well as the USA are national competencies. The location of the already existing repository, as well as existing administrative structures including skilled and trained staff, and in the interest of fast-tracking the DNA database establishment in the interest of fighting crime, justifies locating the database within the State, particularly the SAPS FSL. The capacity of the lab as well as other resources should be strengthened to support this.

Size of database

The fingerprint database is not limited in size and remains an important crime intelligence tool.

Policy consideration: The DNA database should be accorded the same expansion opportunity as the fingerprint database, with necessary privacy safeguards. This will ensure the chances of a comparative hit for crime intelligence purposes remains greater. However, effective police investigations and crime scene analysis guarantees better chances of crime solving than a larger database.

Number of indices and categories of profiles

The existing SAPS FSL DNA repository currently utilizes two indices, the crime scene index and the reference index. The DNA data bank of Canada manages two principal indices, the Convicted Offender Index (limited to those convicted of designated offences) and the Crime Scene Index containing DNA profiles obtained from crime scenes.

- Crime scene index: includes blood, semen and other samples of serious and violent crimes (intimate samples). This index contains the personal details of the offender
- Reference index: includes profiles of victims and suspects charged for a crime (obtained from non-intimate samples)
- Elimination index: is for the detection of forensic and detective personnel contamination and may be used for cold case investigations as well
- Convicted offender index: contains an offenders DNA information from date of conviction

Policy consideration: the recommendation of the Portfolio Committee on Police is that three indices be established, i.e. the crime scene index, the convicted offender index and the elimination index. These indices are necessary to spread the level of investigations and the possibility of quick arrests, and elimination of possible suspects. However, it is recommended that to further spread the level of investigation and convictions, and

generate intelligence leads, the reference index be included. This is in line with the UK model as well.

Secure storage of DNA samples & profiles

The FSL retains portions of all crime scene samples indefinitely, as these are regarded as evidence, for e.g. semen and clothing. The samples are stored as per the applicable Quality Management System and identities remain within the DNA repository and in the interests of crime solving the identities are provided to the police.

Policy consideration: Crime scene samples and profiles are securely stored at the FSL and remain confidential. To prevent abuse, punitive provisions should be written into the legislation.

Who should be authorised to collect reference samples

Current practice allows for medical personnel to collect blood or semen samples from individuals. The police are authorised to perform breathalyzer tests in cases of drunk driving. The recommendation provided by human rights activists that registered medical personnel remain the authorized personnel to collect reference samples given historical abuse by police is unpractical as medical personnel cannot immediately be available at crime scenes. In Canada and the UK, reference samples are collected by trained police officers dedicated and authorised for this purpose.

Policy consideration: Medical practitioners as well as authorized members of the police involved in a particular case should be allowed to collect reference samples. Specialized training in DNA sample taking should be a pre-requisite to authorized members. This provision will serve to increase police capacity, reduce time spent at court, as well as avoid further violations of victims.

Where should DNA samples be collected

In Canada samples are taken at courts in designated rooms by a designated police officer, as well as at police stations on the authority of a DNA order issued by the clerk of the court. The system is well organized and ensures proper quality control for sample collection.

Policy consideration: authorized police officers must be allocated special rooms at courts and police stations in which to take samples. In this way the right to an individual's privacy is guaranteed. Designated police stations should be selected by the independent oversight body together with SAPS FSL officials. While a DNA order or warrant as a pre-requisite to collecting DNA samples may be beneficial in order to minimize violations of

human rights, it may be impractical in terms of the time it will take to obtain one. This may compromise investigations and potential convictions. Furthermore, Section 113 (1) of the Firearms Control Act (60) of 2000 authorizes any police official without warrant to take the fingerprints, palm prints, footprints and bodily samples of a person or a group of persons. The Criminal Procedure Act as well does not stipulate the need for a warrant or a court order in order for medical personnel to collect DNA samples.

Training/scarce skills

In order for the DNA database to be effective, the quality and quantity of DNA samples delivered to the FSL for analysis must be of an optimal standard. Thus rigorous training program needs to be implemented amongst key sectors of the SAPS (i.e. non scientists, first responders, emergency services and security services). Training should emphasise the importance of crime scene safeguarding and its impact on evidence collection and preservation. All of these sectors need to be able to assist in containing as opposed to contaminating a crime scene, thereby enabling trained forensic personnel to collect and retain usable forensic evidence for analysis and subsequent prosecution. Current international research supports continuous training of police in forensic DNA analysis. Training must be designed to reflect current international standards and should include the following for all police personnel at all levels:

- a review and reinforcement of applicable laws, state statutes and department policies on forensics
- a review of civil rights issues
- criminal investigation and profiling
- post training skills development
- a uniform understanding of forensic DNA database management and operations
- clear instruction on crime scene management and DNA handling
- exposure to environmental factors and compliance criteria, and the impact of their actions and or omissions on the serving of justice with regards to a criminal case. This may impact both on conviction of the guilty and exoneration of the innocent. and a strong statement that any officer who fails to comply could result not only in failed evidence gathering from crime scene but also failed prosecution of a potential suspect, thus lead to employee discipline.

FSL analysts as well as LCRC analysts have already received the requisite training in crime scene collection. SAPS division training, however, indicates that more needs to be done in relation to the expansion of the detectives training as the level of experience and skills impacts on decisions made at a crime scene.

There is a noticeable scarcity of specifically trained forensic biologists in the country. The field is a scarce skill and can assist the courts of law to ensure crime resolution.

Policy consideration: authorized police officials should be permitted to collect reference samples, and if legislated, specialized training in reference sample taking must be a requisite. Similarly, the FSL must re-examine the salary structure as well as working conditions of analysts in order to retain skilled personnel. In relation to the scarcity of specifically trained forensic biologists in the country, the CJS has to intervene and focus on establishing capacity in SAPS Division Forensic Services and retaining it without the privatisation route. It is also essential to re-skill and allows enhanced training for people with specific skills in forensic DNA analysis and DNA database operation and management. Qualified learners specialised in forensic DNA analysis will be equipped with the underpinning knowledge and skills of DNA Isolation, DNA Quantification, DNA Amplification, DNA Fragment separation and Analysis and DNA data comparisons and casework results interpretation and reporting, load the DNA information on the database, manage it and provide expert witness testimony in a court of law. There must also be a concerted effort made to encourage the development and participation of NGOs in Forensic Awareness campaigns that span the general public, schools and rural communities.

Retention, destruction and expungement of samples and profiles

Currently, the FSL retains portions of all crime scene samples taken from offenders and/or victims, for an indefinite period, for evidentiary purposes, for e.g. semen and blood samples and clothing. The samples are stored as per the applicable Quality Management System.

Currently no data exists that suggests that crime detection will be improved with the inclusion of DNA profiles of people arrested and not charged, of those whose charges are later withdrawn, or those who are found to be innocent. Therefore when considering on the issue of retention of DNA profiles, it must be borne in mind that retaining profiles of innocent people on the database is an abuse of their rights and undermines the principle of 'innocent until proven guilty'. The Marper case is an example of such and suggests that if the sample is held, it is indiscriminate retention, is perceived as profiling, and is a violation of the human rights of the person.

In Canada biological samples are destroyed and associated DNA profiles are removed

(expunged) from the Convicted Offender Index when a conviction is quashed on appeal, when a DNA order is quashed, or when the period for the retention of certain samples expires, for instance three years after pardon, one year after unconditional discharge, and three years after conviction.

The destruction of samples is an anticipated labour-intensive challenge, and given the volumes of samples, is likely to become a lengthy process.

Policy consideration: Crime scene samples cannot be destroyed and must be retained indefinitely. Reference samples should not be retained once an investigation is complete, but DNA profiles are required on the database for potential investigative leads. This provides for control over concerns that samples could be used for purposes other than identification without the individual's agreeing to it. A suspect's sample therefore needs to be retained for a certain length of time for it to be analysed and to be checked beyond the closure of the case. In addition destroying the sample once an investigation is complete does not in any way restrict future searches for a match, as all the information that would be required would be stored as a DNA profile on the database.

Timeframes for the retention and destruction of DNA samples and profiles

Each index will require its own timeframe policy for retention and expungement. The timeframe should take into account that should a particular profile be on the database for other offences, a reasonable time period should be given before expungement unless a person has been acquitted. Possible suggestions regarding the expungement timeframe include the following:

- Suspect samples: once a person is acquitted, the profile should be expunged. If a person is found guilty, the profile should remain on the database
- Crime scene index: samples remains indefinitely as crime scene samples may never be destroyed.
- Reference index: should be determined by the Committee on behalf of society
- Eliminations index should remain indefinitely as this is for the detection of personnel contamination and implies to all cold case investigations as well.
- Offender index should be expunged one year after release if no other hits are recorded as the offender may have redeemed him/herself. If the person wants to reoffend, then this is done soon after release from prison.

Policy consideration: the Portfolio Committee of Police should make a determination on time frames taking into account international experiences The Marper judgment can perhaps form a basis for this determination.

Retrospective sampling

Retrospective or retroactive sampling is the act of repeating the collecting of DNA samples. This means that a sample of a suspect may be taken at the time of arrest (when

taking fingerprints), despite the possibility that the sample may have already been taken previously. In Canada, DNA legislation allows for the retroactive taking of DNA samples from convicted offenders. While not much research studies exist indicating the recidivism rate in South Africa, the assumption is that offenders are most likely to reoffend. This point highlights the importance of retrospective sampling. Furthermore, the police emphasise the significance of the first four hours of an investigation; retrospective sampling can thus fast-track the identification of a particular suspect.

Policy consideration: retrospective sampling is critical for crime intelligence purposes. With convicted offenders, DNA samples should be taken BEFORE the offender leaves prison if the profile is not already in the database. Furthermore, once the DNA legislation has been adopted, DNA samples should be collected from convicts sentenced as at the implementation date of the legislation - despite the major challenges retrospective taking of samples may pose for the FSL given the current capacity.

Human rights violations

One of the recommendations of the Study Tour was consideration of the legislative process which must take into account that South Africa has a *Bill of Rights* that is entrenched in the Constitution. Any proposed legislation for South Africa that will govern the collection, storage and use of DNA of a person will need to fall within the parameters of the Constitution. Issues of human rights which raised many concerns in the previous Bill and which has the potential for gross violations if not addressed below include:

The right to human dignity (Section 10)

Violation of human dignity can occur when DNA samples are collected from a person taken in an inhumane manner, either the method employed is harsh or the police use unnecessary force. Critics are also concerned that the recommended manner of collecting samples, i.e. the use of buccal swabs infringes a person's right to dignity.

Policy consideration: A medical service provider should be invited to parliament to demonstrate the procedure for reference sample collection using the buccal swab. This will demonstrate that the use of buccal swabs do not in any way violate the individual rights of a person. Utilizing buccal swabs for DNA collection is practiced internationally.

The right to privacy (Section 14)

Retention of DNA samples of innocent persons or acquitted persons may be deemed to violate the right to the persons privacy. In the case of *S and Marper versus the United Kingdom*, the issue was raised whether the retention of DNA and fingerprints from innocent people is consistent with human rights law. The applicants had asked for their fingerprints and DNA samples to be expunged after criminal proceedings against them had ended with an acquittal or had been discontinued. In both cases the police refused.

The applicants applied for a judicial review of the police decisions not to destroy the fingerprints and samples. The European Court of Human Rights in Strasbourg ruled in favour of the applicants. The court maintained that keeping innocent people's DNA records on a criminal register breached article eight of the Human Rights Convention, covering the right to respect for private and family life.

The indication herein is that the indiscriminate retention of fingerprints, samples and DNA profiles of persons suspected but not convicted of offences, fails to strike a fair balance between the competing public and private interests in the fight against crime. The government may be perceived as violating individual human rights and interfering with a persons' right to privacy at the expense of keeping DNA samples of acquitted persons. The above case suggests that if the sample is held, it could be perceived as profiling and thus a violation of the human rights of the persons – despite the fact that for the police, it could be another way of short circuiting an investigation by examining all suspects, even those acquitted.

Policy consideration: DNA samples and profiles of innocent persons, or persons acquitted in a court, should be expunged from the DNA database in the interest of the right to privacy.

A persons right may also be violated if the DNA information is used without the necessary authority. Similarly, the use of information on the database for research purposes, for example, to conduct genetic research, has the potential to be misused and ultimately infringes on a person's right to privacy.

Policy consideration: DNA legislation has to ensure that any information stored in the National DNA Database must be safeguarded against any unauthorised access and abuse thereof, and that the genetic information is securely recorded and monitored, particularly by those having access to the information. This will ensure the protection of citizens' rights to privacy as prescribed in international conventions and declarations. Furthermore, the use of the database for research purposes should be restricted to producing 'quality control' statistics on the type of data that has been added and how the data is being used. The policy acknowledges that the right to consent or refuse to take part in research is an important right for individuals and for society. It is not necessary to use samples or profiles to do genetic research.

Right to bodily and psychological integrity (Section 12(2)(b))

DNA collected from the insides of one's cheek by means of buccal swabs is a non intimate, non invasive method of collection and is practiced internationally. Once collected the information is stored as a DNA profile. The profile is displayed as a set of numbers that represent specific pieces of a particular type of DNA of the person and does not reveal any details (name, age, ethnicity, race, appearance or medical conditions) of that

person. This ensures that a forensic DNA profile cannot be linked to an individual's personal details, medical history, nor can it point to a genetic disorders or any other susceptibility. If an individual refuses a non intimate sample test, a doctor can/may then take a sample of blood. In the UK buccal swabs are used to collect saliva samples from persons.

Generally, a police 'mug' shot of a person or an identity number of a person provides more information about the person than a DNA profile. If the digital profile of a person is retained, and if access and use to it is strictly confined, then the intrusion into privacy is not particularly grave. Societal gains in solving and deterring crimes through a criminal intelligence database are of more significance. Furthermore, digitized DNA profiles cannot be 'planted' at a crime scene.

Policy consideration: the country should consider the use of buccal swabs to collect saliva samples as the process is non-invasive and does not infringe a person's right to bodily and psychological integrity.

The right to equality (Section 9)

Profiling an individual of a particular target group has the potential to violating that individuals right to equality. The recommend crime indices in this policy prevents profiling as an individual would have to be charged for a particular crime in order to be compelled to provide a DNA sample.

Limitation of rights (Section 36)

Recommendations in this policy do not compel individuals not charged or detained for a crime to provide DNA.

The rights of children (Section 28)

In the case of minors, specific provisions as with the fingerprint legislation are important considerations.

Policy consideration: the DNA legislation should be aligned with the Child Justice Act as well as the fingerprint legislation. Even in the case of a minors DNA submitted voluntarily (i.e.in missing children cases), provision must be made to avoid the DNA used in criminal investigations.

Balancing the rights of individuals to the safety of communities

While it is the responsibility of government to ensure the protection of the public from crime, government has also recognized that in doing so it also has to maintain certain ethical values such as liberty, autonomy, privacy, informed consent and equality. These statutory obligations may conflict with each other, thus a balance is required between the right to privacy and the right to safety and security.

Policy consideration: It is imperative that the framework provides adequate safeguards such as providing punitive penalties for abuse of the DNA database. The roles and responsibilities of the independent body as recommended in this policy will ensure adherence to statutory obligations. It is ultimately left to the public to decide if any violations have come to pass.

IT Solutions

South Africa is in line with all scientific principles used internationally. Canada, the UK and the US utilise CODIS, open-sourced software developed by the United States Federal Bureau of Investigation (FBI) which was adapted specifically for police enforcement purposes. The software is freely available and specifically developed to administer DNA Databases for the purposes of criminal intelligence. The associated cost implications of this open-sourced computer system are minimal.

Policy consideration: CODIS should be utilized as the database software.

Role of other departments

The involvement of other departments in the success of the DNA database is imperative. The Intergovernmental Relations Framework Act, 2005, enhances integration of government programs and planning in all spheres of government on policy development and implementation.

No current link exists with the Department of Health (DOH) and the FSL, and this may have to be remedied as the FSL may possibly require the services of the scientists of the DOH. If a link is to be established, then the necessary protocols will have to be drawn up. The Department of Correctional Services will be required to assist in collecting DNA samples from convicted offenders. Similar relations will be necessary with the Dept of Home Affairs and INTERPOL, particularly when DNA will be required in relation to human trafficking and sale of body parts. A similarly relationship will have to established with the Dept of Justice.

Policy recommendation: protocols between all of the above departments be finalized once implementation of the legislation is adopted. Consultations have to be doen prior to passing of the legislation.

Phased in implementation

Given the challenges within the SAPS FSL, a phased-in approach will allow for better implementation of the legislation. This will allow the SAPS time to implement the strategies to circumvent all identified implementation challenges.

Policy consideration: implementation must be sustainable, not be prolonged, and must be handled by regulation. A comprehensive assessment of the potential impact and the cost and resources necessary for implementation needs to be considered.

Oversight, independence and reviewing

It is imperative that the fundamental rights of people be protected if Legislation pertaining to DNA is implemented in South Africa. In Canada the Office of the Privacy Commissioner, and in the UK the Information Commissioner, performs these roles. Parliament as well as has a role in reviewing legislation.

Policy consideration: A strong independent Board of officials must be established prior to the DNA database implementation process, comprising various departments such as Human Rights organisations, Justice, Health, SAPS, DCS, the Civilian Secretariat of Police, civil society, as well members of the public. Responsibilities should include oversight of the implementation of the legislation process, as well as overall governance and integrity of the national DNA database. Other responsibilities must include monitoring performance, conduct, ethics and privacy issues. The Board must as well review all future applications to access data and samples for forensic and non-forensic purposes ensure standards are maintained, and ensure public accountability and transparency. The Board must report to Parliament annually.

The DNA legislation must be subject to regular Parliamentary review, every 5 years, as is done in Canada, to allow for the issues such as revisiting of DNA categories, amendments in order to address gaps, technological needs and scientific developments, and human rights transgressions.

CONCLUSION

This policy is aimed at providing a framework and guidelines for the police in the establishment and management of the forensic DNA database and to introduce stringent measures around the use of DNA linked to criminal investigation and profiling. The policy and guidelines must guide the SAPS in developing appropriate and effective operational strategies and systems in the management of the forensic DNA database which should aim to restore trust in the use of successful criminal investigations and enhance public confidence in upholding people's Constitutional rights in the process.

While the police have a responsibility to criminal investigation leading to successful conviction in a court of law, the implementation of the policy is at the same time premised on the observation of privacy protection statutes, regulations and practices relating to access to, use of stored DNA samples or DNA analyses, with a view to ensuring that such

protections are sufficient to ensure accuracy, security and confidentiality of DNA information on the database.

Although SAPS has the powers to collect and retain DNA samples, there has been no legislation that regulates the establishment of the DNA database. This policy is therefore timely because DNA profiling has improved and developed enough to be the forensic tool for use by SAPS, and as evidence it can be collected in many forms. The implementation of this policy is premised to not only address fast track legislation, but to find ways in which to ensure that the size of the national DNA database is increased to maximise its potential as a criminal intelligence tool. In developing this policy, proper standards and policy guidelines are outlined to ensure appropriate collecting, analyzing and loading of DNA samples and profiles on the national database. This policy as well as future legislation to institute the establishment of the DNA Database is a matter of some urgency, particularly in light of the potential value of DNA as a law enforcement tool.

DNA is not the only source of evidence and the policy does not pronounce it as the silver bullet. It is however scientifically sound, and in terms of evidentiary value, is especially beneficial, despite requiring a case to be built around it. The DNA database technology must be seen by the all South African's as one of the key enablers in the fight against crime and SAPS must ensure that the integrity of evidence is not compromised or misused.

SOURCES

1. Vanessa Lynch: DNA Project
2. Jamil Mudjuzi: UWC Law
3. SA Society of Human Genetics
4. Police Portfolio Committee Study Tour Report
5. Peter Walker: www.guardian.co.uk
6. SAPS Forensic Science Lab