

2020



Ministry of National Security
National Forensic DNA Databank Custodian Unit

Annual Report

On the operations of the
National Forensic DNA
Databank Custodian Unit



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Message from the Minister

It gives me great pleasure to present the **2020 Annual Report - National Forensic DNA Databank (NFDD) Custodian Unit Operations**. The National Forensic DNA Databank (NFDD) of Trinidad and Tobago, which was established in January 2017, has proven to be an invaluable resource in our nation’s effort to win the war on crime.

Despite the Unit’s infancy, and the many challenges faced over the past twelve (12) months due to the onslaught of the novel coronavirus (COVID-19), key objectives regarding the operationalisation of DNA legislation were achieved. These include the revision of the NFDD Quality Management System; the publishing of the NFDD Minimum Standards of Operations in the Gazette; the hiring of a Deputy Custodian Manager, populating the databank with DNA profiles from the Trinidad and Tobago Forensic Science Centre (TTFSC); and the training and certification of medical professionals, Customs Officers, Immigration Officers and Fire Officers in buccal swab sample collection.

The software product acquired in 2017 to develop the DNA database, continues to be employed, and is routinely maintained by NFDD Custodian Unit staff. Therefore, with the continuous submission and upload of DNA profiles from offenders and crime scenes, the NFDD is guaranteed to find matches and improve the crime detection rate of Trinidad and Tobago.

Developed countries with existing databanks such as the United Kingdom and the United States of America boast a sixty-percent (60%) ‘match’ rate, and it the goal of the NFDD Custodian Unit to achieve this within the next five (5) years. As the databank grows, the number of probative ‘matches’ will increase and this should instil a sense of security in the law abiding citizens of Trinidad and Tobago. The Custodian Unit remains steadfast in its commitment to enhancing the services of the NFDD and assisting the Trinidad and Tobago Police Service in investigations.

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Minister of National Security

1. Introduction

The DNA Custodian Unit was officially established in January 2017 pursuant to **Cabinet Minute No. 1752-2014/06/18**. This Unit, under the supervision of the Custodian and Deputy Custodian, manages and operates the National Forensic DNA Databank (NFDD) of Trinidad and Tobago.

The NFDD is a repository of electronic DNA profiles obtained from crime scenes and individuals mentioned in the *Administration of Justice Deoxyribonucleic Acid (DNA) Act, Chapter 5:34* hereinafter referred to as the *DNA Act*, which are searched and compared to obtain matches and familial associations. The Custodian Unit aims to provide an uncompromised, secured, private and confidential DNA databank operating at international standards in order to increase convictions, improve the detection rate, solve cold cases, identify missing or unidentified persons and deter criminal activity.

The NFDD Custodian Unit operates according to the DNA legislation of Trinidad and Tobago and a Quality Management System enabling the NFDD to become a critical investigative resource for law enforcement. The use of DNA by the judicial system has become increasingly important in solving crimes and continues to be one of the most relied upon forms of evidence used by the court of justice to support their decisions.

The NFDD is an investigation tool for law enforcement utilized to:

- i. determine potential perpetrators and suspects of unsolved crimes;
- ii. ascertain the source of crime related biological stains/materials; and
- iii. link crime scenes to other crime scenes

These functions are effected once DNA profiles generated from collected crime scene evidence and specific individuals are entered and stored in a secured computerized databank (NFDD) using the **SmallPond™** DNA Profile Matching System database software. **SmallPond™** enables the management and functionality of the NFDD's core functions. Stored DNA profiles are automatically searched, compared and cross-referenced amongst each other in order to find matches, familial associations and contamination. The Custodian Unit is the steward of the NFDD and establishes,

oversees, maintains and manages all operations related to it in accordance with international best practice.

2. Organisational Structure of Custodian Unit

By Minute No. 1752 dated June 18, 2014 a Custodian Unit was established to oversee, manage and maintain the NFDD.

The organisational structure of the Unit comprises one (1) Custodian Manager, one (1) Deputy Custodian Manager, one (1) Database Specialist, one (1) Databank Analyst, one (1) Information and Communication Technology (ICT) Support Officer, four (4) Business Operations Assistants (BOA), one (1) driver and one (1) hospitality attendant.

At present, Information and Communication Technology (ICT) Support is provided on an as-needed basis by the Cyber Security and Incident Response Team and the ICT Unit of the Ministry of National Security. One (1) BOA position has been filled and the incumbent satisfactorily performs administrative duties of the Custodian Unit. A courier/driver and hospitality support is provided from General Administration of the Ministry of National Security on an as-needed basis. Effort continues to be made to fill all vacant posts.

The NFDD Custodian Unit is located at:

**Level 4 - ABMA Investments
55-57 St. Vincent Street
Port of Spain, Trinidad and Tobago**

3. Legislative Parameters

Sections 7 and 8 of the *DNA Act* provides for the establishment of a DNA Bank and the appointment of a Custodian. Section 34 (1) of the *DNA Act*, provides that **DNA Regulations** must be created by the Minister in order to give effect to this Act.

All standards and procedures of the Custodian Unit are therefore in compliance with the DNA Regulations and the *DNA Act*.

The current DNA Regulations authorized under **Legal Notice No. 81** detailed in **Legal Supplement Part B - Vol. 57, No. 74, 7th June, 2018** allows for:

- commencement of Custodian Unit operations;
- commencement of buccal swab DNA sampling of specific persons mentioned in the ***DNA Act*** by Police Officers and Medical Practitioners; and
- the adherence to internationally accepted Storage and Transportation Guidelines for physical evidence collection by authorised persons

4. Functions of the Custodian Unit

The Custodian Unit is a stand-alone facility and is independent of the Trinidad and Tobago Police Service (TTPS) and the Trinidad and Tobago Forensic Science Centre (TTFSC). The Custodian Unit performs (but is not limited to) the following comparisons to assist in criminal investigations:

- DNA profiles developed from crime scene material (forensic unknowns or stains) are compared against DNA profiles from other crime scenes to identify potential links between different investigations. "**Forensic-to-Forensic Match** (or stain-to-stain)" is the term used to indicate a DNA match between these profiles.
- DNA profiles developed from crime scene material (forensic unknowns or stains) are compared against DNA profiles from accused, suspects, arrestees, detainees, convicted offenders, identified deceased victims, suspected missing persons, unidentified human remains and individuals mentioned in the Third (3rd) Schedule (of ***DNA Act***) to link a subject with a particular crime. "**Forensic-to-Person Match** (or stain-to-person)" is the term used to indicate a DNA match between these profiles.
- DNA profiles developed from unidentified human remains are compared against DNA profiles from family members of suspected missing persons to determine whether there is a **familial association** between these DNA profiles.

The DNA profiles obtained and generated for NFDD inclusion are provided by **Forensic Service Providers** (FSPs) such as NFDD Participating Laboratories. These laboratories are:

- i. The Trinidad and Tobago Forensic Science Centre
- ii. ISO 17025 accredited Forensic Laboratories approved by the Minister of National Security
- iii. ISO 17025 accredited Forensic Laboratories contracted by the Ministry of National Security to perform forensic DNA analysis services under the repealed ***Deoxyribonucleic Acid Act*** of **2007**

DNA profiles contain sensitive, confidential information and must be retained indefinitely on the NFDD except when profiles qualify for; (i) expunction in accordance with Section 26 of ***DNA Act***; and (ii) data deletion as stipulated by Section 9.2 of the **NFDD Custodian Unit Minimum Standards of Operations**. Each DNA profile entered into the NFDD includes a Unique Identifier (i.e. Specimen ID#) and is securely submitted to the Custodian Unit by or on behalf of NFDD Participating Laboratories using data transfer methods such as, but not limited to, a secured **File Transfer Protocol (FTP)** on an ICT network.

DNA Profiles:

- i. in relation to the investigation or prosecution of offenses committed before, on or after the coming into operation of the ***DNA Act***;
- ii. generated from NFDD Participating Laboratories; and
- iii. obtained from the individuals (itemised under separate database indices) and sources outlined in Table 1;

are eligible for NFDD inclusion.

NFDD Database Index	Autosomal DNA Profiles	Y-STR DNA Profiles
Crime Scene Material – Forensic Unknown/ Stain	Scene of Crime Evidence (i.e. blood, semen, etc.)	Scene of Crime Evidence (i.e. blood, semen, etc.)
Offender – Person Under Suspicion	<ul style="list-style-type: none"> - Accused/Defendant - Suspects - Detainees/ Arrestees - Convicted Offenders - Prisoners 	

	<ul style="list-style-type: none"> - Deportees - Juveniles - Foreign Nationals who breach <i>Immigration Act</i> 	
Victims	<ul style="list-style-type: none"> - Identified deceased - Direct Comparative Evidence allegedly taken from missing persons (e.g. toothbrush etc.) 	<ul style="list-style-type: none"> - Identified deceased - Direct Comparative Evidence allegedly taken from missing persons (e.g. toothbrush etc.)
Family Members	<ul style="list-style-type: none"> - Biological Mother/Father - Biological Offspring - Sibling/ Half-Sibling - Maternal and Paternal Relative 	<ul style="list-style-type: none"> - Biological Father - Biological Offspring - Sibling/ Half-Sibling - Paternal Relative
Unidentified Human Remains	<ul style="list-style-type: none"> - Unidentified Deceased 	<ul style="list-style-type: none"> - Unidentified Deceased
Elimination	<ul style="list-style-type: none"> - Officers of the Protective Services (<i>DNA Act</i> Third Schedule) - Members of the Municipal Police Service - Members of the Special Reserve Police - Members of the Defence Force - Customs Officers - Immigration Officers - TTFSC DNA and Serology Laboratory Staff - Supporting Agency Members (i.e. person who attend crime scenes such as District Medical Officers, Undertakers) 	

Table 1: Sources and individuals whose DNA profiles are eligible for NFDD inclusion

The NFDD can only be used for law enforcement purposes and profiles must be used for the purpose for which they were collected for. The NFDD does not prove guilt or innocence and all DNA profile matches and associations must be confirmed by NFDD Participating Laboratories before a final match report is engendered and submitted to authorised personnel.

5. Privacy of Information

The NFDD does not store personal identifiable information on individuals such as name, age, address or date of birth and all uploaded DNA profiles are anonymous. This anonymity protects the privacy of individuals allowing for the impartial analysis of matches and associations. Additionally, a balance between privacy rights (i.e. enforcement of the *Data Protection Act, 2011*) and the need for law enforcement (i.e. enforcement of the *DNA Act*) must be made. This balance speaks to the state's ability to identify suspects and retain 'personal information' on individuals for a specific length of time. According to Section 2 of the *Data Protection Act, 2011*, "personal information" means information about an identifiable individual that is recorded in any form including deoxyribonucleic acid (DNA). Therefore this balance, among other things, will allow:

- i. individuals, whose data is stored on the NFDD, access to their information via an official disclosure request;
- ii. the expunction of DNA data after a given period of time or under specific circumstances;
- iii. DNA profiles to be used strictly for the purpose they were generated for.

Stringent operational procedures governing the submission, storage, access, security and use of DNA profiles will ensure that the privacy rights of individuals are protected. The NFDD can only be used for law enforcement purposes. The Custodian Unit does not share the NFDD data with anyone other than authorised agencies and persons listed in Section **29 (1)** of the *DNA Act*; and Regulations **15(2)** and **28** of the *DNA Regulations*.

6. Data Security and Quality Management System

The Custodian Unit is responsible for databank security, availability and integrity. Data security is enabled through the implementation and maintenance of a framework that includes 24-hr armed security, Biometric Door Access Control, data servers, firewalls, encrypted storage devices and the **SmallPond™** DNA Profile Matching System. Additional security and preventive measures such as Data Centers with Netbotz monitoring, CCTV monitoring and a Fire Suppression System shall be implemented. Data Security is also enabled due to the isolated nature of the Custodian Unit. The NFDD operates on its own ICT network and incoming electronic data is transferred using an

encrypted process. Continuous operability of the Information Systems (IS) is monitored by the Database Specialist and compiled in quarterly and annual IS reports.

Additionally, data security, availability and integrity is regulated by the **NFDD Quality Management System** (QMS) which includes but not limited to the Quality Assurance Manual, the Health and Safety Manual, Standard Operating Procedures, the Risk Management program, Information Systems (IS) Control Policy and the Minimum Standards of NFDD Operations. According to **DNA Regulation 4(1)**, the Custodian shall, from time to time, set the Minimum Standards, in accordance with international best practices, for entry onto and removal of data from the Databank, which shall be published in the Gazette. These Minimum Standards of NFDD Operations were approved by the **Trinidad and Tobago Bureau of Standards (TTBS)** in **September 2019** and published in **Gazette No. 93 of 2020 (June)**.

Strict adherence to the QMS ensures compliance with DNA Legislation and international best practice resulting in secured, confidential and accurately loaded data. Data integrity is also maintained as Forensic Service Providers that submit DNA profiles for databank loading are subject to quality assurance assessments.

Direct access to DNA profiles stored on the NFDD is limited to Custodian Management and authorised members of staff. The Trinidad and Tobago Police Service, the Commissioner of Police, personnel from the Ministry of Attorney General and Legal Affairs (AGLA) and the Judiciary may submit to Custodian Management, a request for an official Search or Disclosure of NFDD information. Correspondence detailing instructions on how these agencies may make an official request was submitted to the Commissioner of Police, the Permanent Secretary of the Ministry of the AGLA and the Administrative Secretary to the Chief Justice in 2019.

7. Populating the Databank

The success of a Forensic DNA Databank is measured in terms of matches, familial associations and investigations aided. The NFDD began receiving profiles in **May 2019** and as of **December 2020**, six hundred and six (**606**) eligible profiles have been uploaded to the NFDD from submissions made by the Trinidad and Tobago Forensic Science Centre.

Of the **606** DNA profiles uploaded, thirty (**30**) true matches have been observed, however, only one (1) of these matches were found to be **probative**. Therefore, one (1) investigation shall be aided.

The rate of submission from the TTFSC to the NFDD for the year 2020 was forty-six (46) DNA profiles per month. While this is an acceptable rate of submission, it is important to note that the DNA Unit of the Trinidad and Tobago Forensic Science Centre had experienced some challenges over the last three (3) years and as such, recent DNA profiles have not been submitted to the NFDD. The Custodian Unit will continue receiving DNA profiles from the TTFSC when DNA analysis at the Centre has resumed.

In January 2021, the accredited local forensic laboratory, Caribbean Forensic Services (CFS) was given approval for the purpose of providing forensic DNA services. Discussions are in train toward the engagement of the services of this laboratory and the development of Standard Operating Procedures.

8. NFDD Performance and Statistics

Performance of the NFDD is measured in terms of matches, associations and investigations aided. The NFDD Custodian Unit defines:

Match	A match occurs when database software links two or more DNA profiles and a confirmation process is started by laboratory personnel.
Association	A search result that matches DNA profiles based on shared alleles and kinship algorithms; it does not reflect a direct identity match between profiles but shows possible familial relation.

As of **December 2020**, 606 DNA profiles have been uploaded to the NFDD.

The following table details the size of each database index:

NFDD Database Index	Autosomal size	Y-STR size
Crime Scene Material – Forensic Unknown/ Stain	106	-
Offender – Person Under Suspicion	187	
Victims	281	-
Family Members (including Volunteers)	18	-
Unidentified Human Remains	14	-
Elimination	-	
TOTAL	606	-

Table 2: Number of database entries per database index

The following table details the number of ‘**rejected**’ profiles from FSPs and general reasons.

Forensic Service Provider	Rejected	General Reasons
Trinidad and Tobago Forensic Science Centre	1	NFDD does not accept mixed autosomal DNA profiles of more than two (2) contributors
	1	NFDD does not accept mixed Y-STR profiles
TOTAL	2	

Table 3: Number of rejected DNA profiles

The following table details the number of ‘**modifications**’ made to NFDD entries to date:

Modification	Count	Comments
Suspended	0	
Amended	284	Any edits/updates to a profile’s matches, alleles, status, type or comments in the database software interface is recorded as a modification .
Deleted	18	Seven (7) duplicated profiles and seven (7) profiles that did not meet NFDD inclusion standards but were inadvertently uploaded, were removed. Additionally, the database software does not allow the Specimen ID# to be modified. Therefore any erroneously entered

		Specimen ID# must be deleted and re-entered with correct Specimen ID#. Two (2) profiles were deleted due to this. Two (2) profiles were also submitted by TTFSC in error.
Reinstated	0	
Transferred	0	
Expunged	0	

Table 4: Number of profile modifications

DNA profile ‘**duplications**’ occur within the database if DNA profiles from at least two (2) different reference samples match within the same database index. Duplications usually indicate (i) an error in profile submission i.e. double submission of two (2) reference sample from the same individual; (ii) an error during evidence collection or DNA analysis; or (iii) if DNA profiles from monozygotic or identical twins are entered into same database index. To date, **seven (7) duplications** have been detected and confirmed by the TTFSC.

Of the **606** DNA profiles uploaded into the National Forensic DNA Databank, there has been:

- thirteen (**13**) forensic-to-forensic matches (i.e. scene of crime to **scene of crime**)
- seven (**7**) forensic-to-victim matches (i.e. scene of crime to identified deceased **victims**)
- ten (**10**) forensic-to-offender matches (i.e. scene of crime to suspects or accused **offenders**)
- one (**1**) investigation to be aided resulting from one (**1**) **probative match**

Based on the number of observed matches, the efficiency of the NFDD can be calculated. It must be noted that matches are based on many factors not constrained to the NFDD and its capabilities. These factors include investigation techniques of law enforcement, quality of evidence submitted to testing laboratories, analytical methods of testing laboratories and quality of data originating from testing laboratories. Notwithstanding these factors, **NFDD Efficiency** is assessed on the following parameters:

- Number of ‘stain-to-person’ matches relative to number of persons in a database index
- Number of ‘stain-to-stain’ matches relative to number of forensic unknowns (stains)
- Number of ‘stain-to-person’ matches relative to number of forensic unknowns (stains)

Therefore for the seven (7) **forensic-to-victim matches**, NFDD efficiency relative to the number of **victims** is calculated as:

$$7/281 \times 100 = 2.49\%$$

For the ten (10) **forensic-to-offender matches**, NFDD efficiency relative to the number of **offenders** is calculated as:

$$10/187 \times 100 = 5.35\%$$

For the thirteen (13) **forensic-to-forensic matches**, NFDD efficiency relative to the number of **forensic unknown** samples or scene of crime samples is calculated as:

$$13/106 \times 100 = 12.26\%$$

For the seven (7) **forensic-to-victim matches**, NFDD efficiency relative to the number of **forensic unknown** samples or scene of crime samples is calculated as:

$$7/106 \times 100 = 6.60\%$$

For the ten (10) **forensic-to-offender matches**, NFDD efficiency relative to the number of **forensic unknown** samples or scene of crime samples is calculated as:

$$10/106 \times 100 = 9.43\%$$

These parameters express the chance that a **crime scene material** or **forensic unknown** DNA profile included in the database will match a reference sample profile from a **Victim** (2.49%) and or **Offender** (5.35%); as well as whether the right people have been sampled for inclusion in the

database. These parameters illustrate the crime-solving capacity of the NFDD after nineteen (19) months of operations.

For comparison, Belgium, Spain and the Netherlands has populations of 11,400,000, 46,660,00 and 17,180,000 respectively and their National Forensic DNA Databases have a **forensic-to-offender** parameter of efficiency (relative to the number of offenders) of **11%**, **12.67%** and **23.27%** respectively¹ (December 2015). Trinidad and Tobago's National Forensic DNA Databank's comparable parameter of efficiency is **5.35%** which is lower than those European territories; however Trinidad and Tobago's national population and DNA databank is considerably smaller; and Belgium, Spain and the Netherlands have had their databases operational since 1999², 2007³ and 2001⁴ respectively. It is evident and historical statistics suggest that more forensic unknowns will be matched to an individual as more 'offenders' are included in a DNA database.

Additionally, Belgium, Spain and the Netherlands' National Forensic DNA Database has a **forensic-to-offender** parameter of efficiency (relative to the number of forensic unknowns) of **9.21%**, **44.867%** and **78.53%** respectively¹ (December 2015). Trinidad and Tobago's NFDD's comparable parameter of efficiency is **9.43%**. Again, these European databases are currently more efficient due to their large size, law enforcement policies and methods, international support from Interpol etc. and access to resources. While Trinidad and Tobago's NFDD is in its embryonic stage, there has been an increase in its efficiency over the last year and it is projected to continue along this path as the database is further populated.

Despite the number of database entries, **no familial associations** have been detected; and no searches or disclosure requests have been made to date. Therefore **no statistics are available** to indicate the number of:

- search and disclosure requests
- familial associations
- familial searches
- elimination database matches
- 'forensic-human remains' matches (i.e. scene of crime to unidentified deceased victims)

¹DNA Database Management Review and Recommendations, ENFSI DNA Working Group April 2017

²<http://dnapolicyinitiative.org/wiki/index.php?title=Belgium>

³<http://dnapolicyinitiative.org/wiki/index.php?title=Spain>

⁴Dutch DNA-Law and DNA-Database, Dr. Ir. C.P. (Kees) van der Beek MBA Netherlands Forensic Institute, Rijswijk

9. Accomplishments and Challenges

Below are activities, achievements, outcomes, challenges and remarks related to NFDD operations:

▪ **Organizational Structure of NFDD Custodian Unit**

Task/ Activity	Achievements and Outcomes	Risks or Comments
Hiring of a : - Deputy Custodian Manager - Business Operations Assistant I - Courier/Driver	<ul style="list-style-type: none"> ▪ Interviews for the Deputy Custodian Manager position were held in January 2020. The successful candidate assumed duties in May 2020 ▪ BOA I assumed duties in July 2020 	<ul style="list-style-type: none"> - Custodian Manager’s contract ended in July 2020. - Courier/Driver to be provided on an “as needed” basis upon request.

▪ **NFDD Budget and Finance Management**

Task/ Activity	Achievements and Outcomes			Risks or Comments
	Fiscal Year	Allocation/Releases (TTD)	Expenditure (TTD)	
Budget and Expenditure	2018/2019	\$366,350.00	\$ 325 650.65	<ul style="list-style-type: none"> ▪ Completed purchases for 2020 included: <ul style="list-style-type: none"> <input type="checkbox"/> ICT equipment <input type="checkbox"/> SmallPond™ annual license fee <input type="checkbox"/> Lenovo HX Nutanix Two (2) Year Extended Warranty
	2019/2020	\$420 000.00	\$400 534.74	

▪ **NFDD Custodian Unit Establishment**

Task/ Activity	Achievements and Outcomes	Risks or Comments
<p>Establishment of NFDD Custodian Unit</p>	<ul style="list-style-type: none"> ▪ Custodian Unit relocated from Level 19, Tower C, International Waterfront Complex to Level 4, ABMA Investments, 55-57 St. Vincent Street, Port of Spain in February 2019 ▪ Approval granted for Project Management Unit (PMU) to purchase equipment necessary for database security and operations according to Cabinet Minute 285-2019/02/14 and Cabinet Note NS(19)36 at a cost of approximately 2.16 million TTD ▪ PMU (under PSIP) and Custodian Unit purchased: <ul style="list-style-type: none"> <input type="checkbox"/> Server Management Software <input type="checkbox"/> Hyper-Converge Server <input type="checkbox"/> Network Switches <input type="checkbox"/> Biometric Door Access Control System <input type="checkbox"/> Steel cage enclosure for Server room <input type="checkbox"/> Standby Generator <input type="checkbox"/> Firewalls <input type="checkbox"/> Network Time Protocol <input type="checkbox"/> Laptops <input type="checkbox"/> Encrypted Flash Drives <input type="checkbox"/> Network Attached Storage <input type="checkbox"/> KVM 	<ul style="list-style-type: none"> - ABMA building is a private building with lower level floors occupied by non-Ministry of National Security (MNS) staff, the general public as well as appliances and equipment that are not monitored by the MNS - Additional items to be purchased under Public Sector Investment Program (PSIP) include: <ul style="list-style-type: none"> <input type="checkbox"/> Servers <input type="checkbox"/> Multifunctional Printer <input type="checkbox"/> Data Center with in-row cooling, Netbotz Monitoring and built in Fire Suppression System <input type="checkbox"/> Closed Circuit TV Monitoring System <input type="checkbox"/> Desktop computers <input type="checkbox"/> Main Server UPS

▪ **NFDD Quality Management System**

Task/ Activity	Achievements and Outcomes	Risks or Comments
NFDD Quality Management System	<ul style="list-style-type: none"> ▪ NFDD Quality Management System was completed in December 2019 and is ISO 9001 compliant. The NFDD QMS includes: <ul style="list-style-type: none"> ❑ Quality Assurance Manual ❑ Minimum Standards of Operations ❑ Information Systems Control Policy ❑ Risk Assessment Program ▪ NFDD Minimum Standards of Operations were : <ul style="list-style-type: none"> ❑ approved by the Trinidad and Tobago Bureau of Standards (TTBS) in September 2019 ❑ published in Gazette No. 93 of 2020 (June) according to DNA Regulation 4(1) 	<ul style="list-style-type: none"> - NFDD Quality Management System is dynamic and revised annually therefore amendments are expected as new equipment and software are acquired - Custodian Unit intends to contract the TTBS in Q4 2021 to ensure the NFDD is ISO 9001 certified and ISO 27001 compliant by 2023.

▪ **NFDD Access to information**

Task/ Activity	Achievements and Outcomes	Risks or Comments
Accessing information on NFDD	<ul style="list-style-type: none"> ▪ Correspondence detailing the procedure to request a <u>search</u> or <u>disclosure</u> of DNA data stored on NFDD was submitted to the Commissioner of Police, the Permanent Secretary of the Ministry of the AGLA and the Judiciary of Trinidad and Tobago who are the persons/agencies authorized to access NFDD information. 	<ul style="list-style-type: none"> - Procedure for requesting search and disclosure requires additional documentation such as written, official endorsement from Commissioner of Police, Ministry of the AGLA or the Judiciary of Trinidad and Tobago to ensure that request is authentic.

Task/ Activity	Achievements and Outcomes	Risks or Comments
	<ul style="list-style-type: none"> Searches and disclosures of the NFDD is initiated using Forms 1 and 2 of Schedule 1 of the DNA Regulations, 2018. 	<ul style="list-style-type: none"> To date, there have been no search and disclosure requests.

- DNA Databank Software – SmallPond™**

Task/ Activity	Achievements and Outcomes	Risks or Comments
SmallPond™ software operations	<ul style="list-style-type: none"> SmallPond™ Software License was renewed for another year in January 2021. License is valid until January 2022. 	None

- Databank Population and Forensic Service Providers participation in the DNA Databank**

Task/ Activity	Achievements and Outcomes	Risks or Comments
Receipt of DNA profiles from the Trinidad and Tobago Forensic Science Centre (TTFSC) and external Forensic Service Providers (FSPs)	<ul style="list-style-type: none"> The TTFSC began submitting DNA profiles to the Custodian Unit on May 23, 2019 using the secured File Transfer Protocol (FTP) As of December 2020 six hundred and six (606) DNA profiles have been uploaded to the NFDD from TTFSC submissions Discussions are in train with Caribbean Forensic Services. 	<ul style="list-style-type: none"> International best practice stipulates that all DNA data uploaded to a Forensic DNA Database must originate from ISO 17025 accredited agencies. As such, the TTFSC is currently updating its accreditation compliance.

- Buccal Swab Sample Collection Training for *DNA Act* Stakeholders**

Task/ Activity	Achievements and Outcomes	Risks or Comments
Buccal Swab Sample Collection “train-the-trainer” training sessions for Stakeholders/ agencies mentioned in the <i>DNA Act</i> .	<ul style="list-style-type: none"> Training of stakeholders began in June 2018 and is currently ongoing. See Appendix 1 for breakdown of ongoing training program. As of December 2020, the following agencies <u>completed Buccal Swab Sample Collection</u> ‘train-the-trainer’ training and five hundred and eighty- 	<ul style="list-style-type: none"> Training for the following stakeholders and agencies is <u>incomplete</u> and must be completed as soon as practicable. <ul style="list-style-type: none"> <input type="checkbox"/> Trinidad and Tobago Fire Services <input type="checkbox"/> Trinidad and Tobago Defence Force

Task/ Activity	Achievements and Outcomes	Risks or Comments
	<p>five (585) persons are now certified as trainers, collectors and or non-collectors:</p> <ul style="list-style-type: none"> <input type="checkbox"/> TTPS <input type="checkbox"/> Prison Services <input type="checkbox"/> TTFSC <input type="checkbox"/> Municipal Police <input type="checkbox"/> Ministry of Health (MOH) <input type="checkbox"/> Tobago Regional Health Authority (TRHA) <input type="checkbox"/> South-West Health Authority (SWRHA) <input type="checkbox"/> North-Central Regional Health Authority (NCRHA) <input type="checkbox"/> Customs and Excise Division <input type="checkbox"/> Immigration Division <ul style="list-style-type: none"> ▪ Heads of agencies that completed training received an Outcome and Expectation Report detailing training assessment and steps to be taken to operationalise the DNA Act. ▪ The following Agencies received an allotment of Buccal Swab Kits for training and sample collection: <ul style="list-style-type: none"> <input type="checkbox"/> TTPS <i>received 5,150</i> <input type="checkbox"/> Prison Services <i>received 4000</i> <input type="checkbox"/> TTFSC <i>received 50</i> <input type="checkbox"/> Municipal Police <i>received 400</i> <input type="checkbox"/> Ministry of Health <i>received 150</i> <input type="checkbox"/> Tobago RHA <i>received 500</i> <input type="checkbox"/> North-Central RHA <i>received 250</i> <input type="checkbox"/> North-West RHA <i>received 300</i> <input type="checkbox"/> Customs and Excise <i>received 300</i> <input type="checkbox"/> Immigration Division <i>received 300</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> North West Regional Health Authority (NWRHA) <input type="checkbox"/> Eastern Regional Health Authority (ERHA) <ul style="list-style-type: none"> - Completion of training is contingent upon the availability of personnel from agencies, including the Trinidad and Tobago Fire Service and the Trinidad and Tobago Defence Force - The commencement of sampling of Immigration Officers and Customs Officers for databank entry, is contingent upon the availability of the Chief Immigration Officer and Comptroller of Customs. - Buccal Swab Kits are to be donated to the remaining agencies following the completion of training. - Additional Buccal Swab Kits are to be donated to the Ministry of Health and Regional Health Authorities

▪ **Forms of the *DNA Act* and *DNA Regulations***

Task/ Activity	Achievements and Outcomes	Risks or Comments
<p>Availability of <i>DNA Act</i> and <i>DNA Regulations</i> forms for use by Police Officers, Qualified Persons and authorised personnel.</p>	<ul style="list-style-type: none"> ▪ <i>DNA Act</i> and <i>DNA Regulation</i> Forms are available at the Government Printery ▪ Correspondence regarding Form availability and instructions for usage was submitted to authorised users of these forms such as TTPS, Municipal Police, Ministry of AGLA, Judiciary, Ministry of Health and Prison Services. ▪ The following Agencies received an allotment of the <i>DNA Act</i> and <i>DNA Regulation Forms</i> in 2018 and 2019: <ul style="list-style-type: none"> ❑ TTPS received approximately 500 copies total ❑ Municipal Police received 701 copies total ❑ Ministry of Health received 3300 copies total ❑ Tobago RHA received 307 copies total ❑ Prison Services received approximately 400 copies total 	

▪ **DNA Reference Sample Collection from Protective Service Agency Members listed in Third Schedule of *DNA Act*; and Persons detained in institutions to which the *Prison Act* applies**

Task/ Activity	Achievements and Outcomes	Risks or Comments
<p>DNA Sample Collection from members of Protective Services and Prisoners for databank entry</p>	<ul style="list-style-type: none"> ▪ Sample Collection ‘train-the-trainer’ training completed for TTPS, Municipal Police and Prison Services. Training detailed the legislative requirement for Protective Service Members and Prisoners to be sampled for DNA analysis and databank entry 	<ul style="list-style-type: none"> - The work plan for the mandatory sampling of Police Officers at the Police Hospital by the Police Doctor is not yet endorsed. - Sampling of Police Officers should commence post COVID-19 vaccination.

Task/ Activity	Achievements and Outcomes	Risks or Comments
	<ul style="list-style-type: none"> ▪ In October 2019, a work-plan detailing the process to sample Police Officers at the Police Hospital was agreed upon between Custodian, Police Doctor and representatives from the TIPS, the Police Training Academy and the Ministry of Health. ▪ In March 2020, a work-plan detailing the process to sample Prison Officers, Prisoners and Juveniles at their respective institutions was agreed upon between Custodian, Prison Doctors, Prison Services and the Ministry of Health. In July 2020 a new plan involving the use of short-term contract doctors to sample convicted prisoners was devised. It was recommended that police officers sample those remanded into custody, while doctors attached to the Children’s Authority will sample juvenile offenders. 	<ul style="list-style-type: none"> - Sampling of Prison Officers should commence post COVID-19 vaccination. - Sampling of prison population to commence based on directive issued by the Ministry of Health.

▪ **Oath of Secrecy Form of the *DNA Act***

Task/ Activity	Achievements and Outcomes	Risks or Comments
<p>Amendment of <i>DNA Act</i> Form 5 – Oath of Secrecy</p>	<ul style="list-style-type: none"> - Form 5 of the <i>DNA Act</i> (Oath of Secrecy needed to be amended to include the Custodian and Deputy Custodian. The revised Oath of Secrecy was published as Legal Notice No. 50, Volume 59, No. 26 3rd March, 2020 - As required by the <i>DNA Act</i>, the revised Oath of Secrecy was signed by the Custodian Manager and the Deputy Custodian Manager in the presence of a Justice of the Peace in July 2020. 	

End of Report

Appendix I

NFDD Custodian Unit - Buccal Swab ‘train-the-trainer’ training

Completed Training: Trinidad and Tobago Police Services (TTPS), Municipal Police, Prison Services, Trinidad and Tobago Forensic Science Centre (TTFSC), Ministry of Health (MOH), Tobago Regional Health Authority (TRHA), North-Central Regional Health Authority (NCRHA), South-West Regional Health Authority (SWRHA), Customs and Excise Division and Immigration Division.

Persons who completed training are now Buccal Swab Sample Collection ‘Trainers’ familiar with DNA Legislation and are certified as:

1. **Collectors** i.e. persons authorised to perform collection procedure and certify other persons in sample collection policies so that these persons may become ‘trainers’, ‘collectors’ or both; or
2. **Non-Collectors** i.e. persons not authorised to perform collection procedure but may certify other persons in sample collection policies so that these persons may become ‘trainers’.

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
TTPS	June 25, July 25 , 2018	Police Academy	35	20
TTPS	July 26, August 07, 2018	Police Academy	48	22
TTPS	August 09 and 10 , 2018	Police Academy	37	31
TTPS	August 22, 2018	Police Academy	3	3
TTPS	August 27 and 30, 2018	Police Academy	26	20
TTPS - Tobago	October 25 and December 06, 2018	Tobago – Scarborough Police Station	14	9
TTPS - SERU	November 16 , 2018	SERU	18	18
TTPS - SERU	November 23, 2018	Tower C , level 19	26	24
TOTAL			207	147

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Prison Services	July 30 and August 15 , 2018	Tower C , level 20	33	15
Prison Services + Doctors	September 17 and 18, 2018	Tower C , level 20	21 + 3 Doctors	13 (Doctors did not return)
Prison Services -	October 29 and 30, 2018	Tower C , level 20	31 + 3	29
TOTAL			91	57

Stakeholder	Training Date	Training Location	# persons invited	# persons completed
Ministry of Health	November 14, 2018	Insect Vector Control	30	29
Ministry of Health	November 30 , 2018	Tower C , level 19	5	5
TOTAL			35	34

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
TTFSC	August 17 and 24 , 2018	Forensic Science Centre	10	10
TTFSC	October 23, 2018	Tower C , level 19	1	1
TOTAL			11	11

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Municipal Police	July 23 and August 13, 2018	Tower C , level 20	37	14
Municipal Police	March 13, 2019	Ministry of Rural Development, Kent House	20	20
Municipal Police	March 15, 2019	Ministry of Rural Development, Kent House	24	24
Municipal Police	June 06, 2019	Ministry of Rural Development, Kent House	9	8
TOTAL			90	66

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Tobago RHA	July 29, 2019	Scarborough General Hospital	26	22
TOTAL			26	22

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
North – Central RHA	September 05, 2019	Mount Hope Women’s Hospital	21	19
North – Central RHA	September 06, 2019	Mount Hope Women’s Hospital	23	19
TOTAL			44	38

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
South-West RHA	September 27, 2019	San Fernando General Hospital	19	18
South-West RHA	October 09, 2019	San Fernando General Hospital	14	14
South-West RHA	October 22, 2019	San Fernando General Hospital	20	8
TOTAL			53	40

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Customs and Excise	September 11, 2018	Tower C , level 20	3	3
Customs and Excise	September 26, 2018	Customs House Training Room	7	5
Customs and Excise	August 19, 2019	Customs House Training Room	8	7
Customs and Excise	August 26, 2019	Customs House Training Room	5	5
Customs and Excise	September 02, 2019	Customs House Training Room	10	9
Customs and Excise	September 09, 2019	Customs House Training Room	11	5
Customs and Excise	October 17, 2019	Customs House Training Room	8	2
Customs and Excise	November 25, 2019	Customs House Training Room	13	8
Customs and Excise	February 12, 2020	Customs House Training Room	9	8
TOTAL			74	52

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Immigration Division	September 14 and 21, 2018	Tower C , level 20	40	14
Immigration Division	November 27, 2018	Tower C , level 20	13	14
Immigration Division	November 29, 2018	Tower C , level 20	10	10
Immigration Division	July 15, 2020	Government Campus Plaza	9	9
Immigration Division	July 22, 2020	Government Campus Plaza	12	9
TOTAL			84	56

Incomplete training: Trinidad and Tobago Defence Force (TTDF), Trinidad and Tobago Fire Service (TTFS), North-West RHA and Eastern RHA

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
TTDF	September 10 and 13, 2018	Defence Force Headquarters	21	12
TTDF + Medics	October 01 and 02, 2018	Defence Force Headquarters	12	10
TOTAL			33	22

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Fire Services	July 19 and September 19, 2018	Fire Services Headquarters	34	7
Fire Services	November 30, 2020	Virtual	15	9
Fire Services	December 01, 2020	Virtual	15	9
TOTAL			64	25

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
Eastern RHA	March 09, 2020	Sangre Grande Enhanced Health Centre	21	15
Eastern RHA	August 11, 2020	Sangre Grande Enhanced Health Centre	25	Cancelled due to COVID-19
Eastern RHA	August 20, 2020	Sangre Grande Enhanced Health Centre	25	Cancelled due to COVID-19
TOTAL			71	15

Stakeholder	Training Dates	Training Location	# persons invited	# persons completed
North West RHA	TBD	TBD	50	TBD

Number of Ranks Trained

TTPS	
Rank	Number trained
WPC	62
PC	61
CPL	15
AG/SGT	3
SGT	5
AG INSP	1
Total	147

Immigration	
Rank	Number trained
Immigration Officer I	1
Immigration Officer II	37
Immigration Officer III	5
Woman Detention Officer 1	8
Detention Officer 1	2
EMT	2
Senior EMT	1
Total	56

Prison Services	
Rank	Number trained
Prison Officer I	47
Prison Officer II	10
Total	57

Trinidad and Tobago Forensic Science Centre	
Rank	Number trained
BOA	2
Associate Professional	1
Scientific Officer I	3
Scientific Officer II	1
Forensic Exhibit Clerk	2
Forensic Biologist	2
Total	11

TTDF	
Rank	Number trained
L/CPL	2
SGT	3
CPL	1
Writer	1
Petty Officer	2
Chief Petty Officer	1
Private (PTE)	3
Warrant Officer II	1
Warrant Officer	1
Senior Aircraftman	2
Sub Lieutenant	1
EMT Private (PTE)	1
Leading Seaman	3
Total	22

Customs	
Rank	Number trained
AG/C&EO 1	23
C&EO 2	9
AG/C&EO 3	6
Supervisor C&EO	1
C&E Guard 1	6
C&E Guard 2	6
C&E Guard 3	1
Total	52

Fire Services	
Rank	Number trained
Fire Fighter	22
Fire Sub Officer	2
AG/Fire Sub Officer	1
Total	25

Municipal Police	
Rank	Number trained
PC	19
WPC	27
AG/CPL	3
CPL	4
AG/SGT	4
SGT	2
Inspector/ Ag	3
Inspector	3
Senior Supt.	1
Total	66

Ministry of Health and Regional Health Authorities	
Rank	Number trained
Primary Care Physician II Admin (Ag)	2
District Medical Officer	6
County Medical Officer of Health / (Ag)	5
Primary Care Physician II / (Ag)	38
Medical Officer I	4
Senior Medical Officer	5
Registrar / (Ag)	22
Primary Care Physician I	6
Prison Medical Officer	3
Police Medical Officer	1
Medical Chief of Staff (MCO)	1
Clinical Facilitator	1
House Officer	14
Consultant	3
Nurse Manager	2
Nurse/ RN	23
Nursing Supervisor	3
Head Nurse	2
Nursing Instructor	2
Medical Officer II	1
Head, A&E	1
District Health Visitor	4
Total	149