Understanding the operational, strategic and political implications of the National Genetic Database

Prof. Dr. Bertrand Renard
Prof. Dr. Tom Vander Beken & Dr. Stijn Van Daele
Prof. Dr. Paul De Hert en Tom Decaigny

PIES 2014
25th of June 2014
Use of DNA to help criminal investigations

Law of 1999:
- Regulate the use of DNA
- Management by the National Institute for Criminalistics and Criminology (NICC) of National Genetic Database (NGDB)

Law of 2011:
- Augmentation of the range of applications of forensic DNA
- Comparison of genetic profiles with other member states of the European Union under Prüm Council Decision
Be-Gen ("Belgian Genetic Database")

- Study the implications of forensic DNA and the National Genetic Database
  1) Operational implications (NICC)
  2) Strategic implications (University of Ghent)
  3) Political implications (Vrije Universiteit Brussel)

- Support the PIES project

- Funded by the Belgium Federal Science Policy Office (Belspo) for 4 years (2014-2018)
Part 1: Operational implications

Pr. Dr. Bertrand Renard
Chef de travaux – DO Criminologie
Operational implications

- The theory of forensic DNA
  - State-of-the-art picture of the use of DNA

- The empirical contribution of forensic DNA
  - The use of DNA to solve judicial cases

- The relation between DNA and offenders
  - The consequences of having one’s profile in the NGDB

- DNA in a society in mutation/transition
  - The impact of the DNA law of 2011 and the Prüm Treaty
Methodology

- The theory of forensic DNA
  - Critical reading of the literature (legal, forensic, criminological)

- The empirical contribution of forensic DNA
  - Study legal procedures about the use of DNA in Belgium
  - Examination of judiciary cases
    - Qualitative analyses: factors that influence the use or non-use of DNA
    - Statistical analyses
    - Interviews with a sample of magistrates and lawyers
Methodology

- The relation between DNA and offenders
  - Comparison between two groups of offenders
    - Genetic profile has been stored in the NGDB
    - Genetic profile hasn’t been stored in the NGDB

- Impact of the Prüm Council
  - Same method as for the empirical contribution
  - Interviewing magistrates one year after data exchange between Belgium and other member states
Part 2: Strategic implications

Prof. Dr. Tom Vander Beken

Dr. Stijn Van Daele
New DNA law of 2011 and the Prüm Council Decisions

- Augmentation of the amount and the range of applications of forensic DNA profiles stored in the National Genetic Database (NGSB)

Be-Gen research project (“Belgian Genetic Database”)

- Understanding the operational, **strategic** and political implications of the National Genetic Database
- Strategic implications = level of criminal phenomena (beyond case level)
Objectives

To study the value of forensic sciences, in particular the NGDB and forensic DNA:

- From a “pure reactive law enforcement to more pro-active policing” (Ribaux et al. 2010)
- From information to (forensic) intelligence
- In supporting decision making and policy making with a safer and more just society as a goal

The evaluation of the efficiency and effectiveness of the new DNA law and the Prüm Treaty

To support the PIES project (forensic DNA in a European Union Context)
Objectives

4 concrete strategic objectives:

- Theory of forensic intelligence:
  - “The Five Ws of forensic intelligence”

- Statistical modeling of forensic DNA:
  - The image of crime and Belgian society that DNA depicts

- DNA versus non-DNA based criminal intelligence (e.g., police reports):
  - The (dis)advantages of, and potential differences between different types of representation

- DNA in a society in mutation:
  - The impact of the new DNA law of 2011 and the Prüm Treaty
Methods

Theory of forensic intelligence:
- Critical review of the available data sources (policy documents, literature on DNA/NGDB, police statistics, ...)

Statistical modeling of forensic DNA:
- Comparison/complement of a dataset from the NGDB with 50,000 samples recorded over 10 years with other data (TPI/REA system, GIS software, DGSEI database and other contextual data like political and technological events)

DNA versus non-DNA based criminal intelligence:
- Comparison of the DNA based strategic analysis with public information of the federal police

DNA in a society in mutation:
- Analysis of statistics and interviews with people in the field to measure the impact of the new 2011 law
Part 3: Political implications

Prof. Dr. Paul De Hert and Tom Decaigny
The current legal situation

Law of 22 March 1999 on the identification procedure through DNA-analyses in criminal cases
--> entered into force 30 March 2002

Law of 7 November 2011 amending the Criminal Procedure Code and the law of 22 March 1999
--> entered into force 1 January 2014

Law of 21 December 2013 amending the Criminal Procedure Code and the law of 22 March 1999, in view of the establishment of a DNA-database 'missing persons'
--> will enter into force 1 July 2015

Law of 10 April 2014 amending the Criminal procedure Code and the law of 22 March 1999, enhancing the international exchange of DNA-data
--> entered into force 10 May 2014
Policy Questions

Has the use of DNA had an impact on the justice philosophy itself?

What is the impact of (the use of) forensic DNA on fundamental rights of individuals?

Are the resources allocated for forensic DNA and the NGDB appropriate?

What are the implications of the new international exchange rules? How can the exchange improve?
Be-Gen: the objective(s)

Use various scientific products regarding forensic DNA, developed at the operational (1) and strategic (2) level to (3) inform public policies on how to adequately address offending in its various dimensions.
Objective 3: issues and methodology

*The theory of security policies*

- research on information used by policy makers
- research on forensic DNA in policies
- research on impact of security policies (DNA) on fundamental rights
efficiency  
(*crime control*)

- use of all technically possible methods
- minimal procedural rules
- large and easy accessible databases

fundamental rights protection  
(*due process*)

- less intrusive methods only
- procedural safeguards (collection, retention, use, removal)
Recommendations for security policies

Synthetize the outcome of Objective 1 and 2 and identify the proper agents and entities to organize focus group discussions with.

Formulate recommendations regarding

- indicators of efficiency of public policies,
- prioritization of means for the investigations
- decision criteria to carry out investigations by magistrates,
- strategies to optimize communication between the concerned actors
- ...
DNA in foreign legal systems
DNA in a society in mutation
NICC/ INCC:
bertrand.renard@just.fgov.be
Tel. +32 243 27 02

IRCP- UGent:
www.ircp.org
Tom.VanderBeken@UGent.be
Tel. +32 9 264 69 39

VUB:
paul.de.hert@vub.ac.be
Tel. +32 2 629 24 60