NORTHERN IRELAND DNA DATABASE GOVERNANCE BOARD

REPORT

2012-14

Introduction

- The Northern Ireland DNA Database Governance Board (Governance Board) was established in November 2011. The Governance Board's main purpose is to provide assurance to the Minister of Justice on the use and retention of DNA samples and the information derived from them held as a DNA profile, and to ensure compliance with relevant legislative provisions. The Terms of Reference for the Governance Board are attached at Annex A.
- 2. The Governance Board is a non-statutory, advisory body and is jointly chaired by the Director of Safer Communities in the Department of Justice (DOJ) and the ACC Service Improvement Department, Police Service of Northern Ireland (PSNI). It includes representatives from Forensic Science Northern Ireland (FSNI), PSNI, Northern Ireland Policing Board, University of Ulster, Queen's University Belfast, Information Commissioner's Office, the Public Prosecution Service (PPS) and the National DNA Database Delivery Unit.
- 3. This report provides a summary of the issues considered by the Governance Board since it was established up to 31 March 2014. During that time, the Governance Board met on six occasions and developed its terms of reference as well as overseeing implementation of the Criminal Justice Act (Northern Ireland) 2013. As this is the first report of the Governance Board, some background is provided on DNA.

What is DNA?

- 4. Deoxyribonucleic acid (DNA) is a complex molecule found in all living cells in the body with the exception of red blood cells. DNA carries the genetic code or blueprint which determines our inherited characteristics. Half of our DNA is inherited from each of our parents; our DNA is unique, with the exception of identical siblings.
- 5. Database profiling targets areas of DNA which are known to have much variation between individuals. With the exception of one test indicating the gender of the sample donor, none of the DNA profiling systems in use indicate anything of the physical make-up or appearance of the person tested. Nor are they diagnostic

for any genetic pre-disposition for disease or character.

- 6. The science of DNA profiling is based around the targeted "multiplication" of a number of areas within an individual's DNA. Each region is known as a "locus" (plural "loci") or "marker". Many of these loci can be analysed at the same time, in what is referred to as a "multiplex" chemical test. By increasing the number of loci that are targeted for multiplication, the discriminating power (i.e. the ability to differentiate one individual from another) is proportionally increased. It is this ability to identify individuals that is fundamental to the use of multiplex DNA tests within forensic sciences. The DNA profile produced from these tests is stored as a set of numbers.
- 7. The first such test deployed in the early 1990s used four loci and was known as the "Quad". This was superseded in 1994 by a seven-loci test, known as the Second Generation Multiplex, or SGM. A further development in 2001, adding four additional loci to the seven-loci system was called the SGM Plus. This system (with a discriminating power of over one in one billion) is still in use today. In December 2013, DNA 17 was deployed which includes a further six tests looking at 17 loci in total.
- 8. FSNI manages the throughput of all criminal justice samples (taken from everyone arrested for a recordable offence by the police), samples recovered from crime scenes and samples recovered from exhibits submitted to FSNI. FSNI maintains the Northern Ireland DNA Database (DNAD) on behalf of the PSNI. The PSNI own the records on the database and receive notification of any matches. As with other UK police forces, it does not have direct access to the database.
- 9. DNA profiles were first loaded on the Northern Ireland DNAD in 1996. Unidentified DNA profiles from samples taken in connection with crimes are stored on computer. These are compared with samples taken from all persons who have been arrested by the police for a recordable offence.
- 10. From the DNA profiles obtained from the very first batch of crime scene samples (cases where there is no suspect apparent at the time of the incident), 'hits' were

obtained, identifying possible suspects for further investigation by the police. The majority of these cases have been burglaries and auto crime, but 'hits' have been obtained in cases of murder, rape, assault, arson, robbery, and criminal damage amongst other offences.

- 11. The Northern Ireland DNAD is linked with a similar database for the UK, the National DNA Database. This means that unmatched crime scene profiles from local cases are searched nationally, as are subject profiles arising from Northern Ireland arrests.
- 12. Scotland also maintains a Scottish DNA Database. It is linked to the National DNAD in the same way as the NIDNAD.
- 13. In June 2014, the Republic of Ireland (ROI) introduced the Criminal Justice (Forensic evidence and DNA Database System) Act 2014. The new legislation provides for a DNA database system to be established and to be operated by the Forensic Science Laboratory of the Department of Justice and Equality.

The National DNA Database

- 14. The National DNA Database (NDNAD) holds electronic DNA records from all UK police forces including England, Wales, Scotland and Northern Ireland. It is managed by the Home Office on behalf of UK police forces. DNA profiles loaded to the Northern Ireland DNAD are also loaded to the National DNAD as there is a possibility of subjects moving between jurisdictions within the UK. The Northern Ireland DNAD forwards to the National DNA a single representative profile for each subject tested, avoiding duplicate profiles where possible. Where a DNA profile originating from a crime scene matches a subject profile on the Northern Ireland DNAD, that profile is not forwarded to the National DNAD, as no further information could be gained.
- 15. The PSNI owns the records on the National DNAD that have been generated from Northern Ireland samples, and is notified of any matches. However, the

PSNI does not have any direct access to the database. A Strategy Board¹ oversees the operation of the National DNAD, ensuring that it provides an effective service for the police, uses the most suitable technology, and operates in an ethical manner and ensuring transparency by providing information to the public. The DOJ and the PSNI are represented on the National DNAD Strategy Board.

16. The National DNAD Ethics Group² provides advice on ethical issues surrounding the operations of the National DNAD to Home Office Ministers and the National DNAD Strategy Board. The Northern Ireland DNA Database Governance Board takes account of the advice and guidance provided by the Home Office DNA Ethics Group from a Northern Ireland perspective.

Case Study

DNA used to solve a murder.

Margaret (Peggy) Telford, a 68 year old pensioner was found strangled to death in her North Belfast home on 4 February 1988. As part of the police serious crime review process a DNA profile was derived from nail scrapings which had been taken from the deceased. The profile was subsequently uploaded to the National DNAD and it 'hit' against the DNA profile of a man living in England who had previously come to the attention of police there. He was arrested and brought back to Northern Ireland where he was convicted, 25 years later, of the murder of Margaret Telford.

Database statistics

17. DNA Intelligence Databases exist to permit the automated comparison of profiles derived from several different types of sample. Essentially, those are categorized as 'subject' samples – taken from persons at arrest or later if they are suspected of involvement in crime, and also 'crime scene' samples. These are sourced from materials directly recovered from scenes of crime, such as a bloodstain from the point of entry at a burglary, or from samples recovered as part of the laboratory examination of case exhibits. Once processed, the DNA profile is added to the database and a search for a matching profile conducted. The following is a summary of information on the Northern Ireland DNAD.

¹ https://www.gov.uk/government/publications/national-dna-database-strategy-board-governance-rules

² https://www.gov.uk/government/organisations/national-dna-database-ethics-group

Criminal Justice Samples

- 18. Criminal justice (CJ) samples are DNA samples taken from subjects on arrest purely for loading to the Northern Ireland DNAD. At 31 March 2014, there were 121,924 profiles stored on the Northern Ireland DNAD.
- 19. On occasions, a profile is obtained but is not suitable for uploading to the Northern Ireland DNAD. This may be because the profile is too partial; or that it is found to be sourced from a mixture of DNA from more than one person. The PSNI is advised with a direction to the Investigating Officer (IO) that potential scientific intelligence has been obtained and is now held on file, which may be of evidential value should a suspect(s) become known.
- 20. If it is not possible to develop a DNA profile, there will be no contribution to the investigative process. That might occur, for example, if the sample has originated from a non-human source, the sample was degraded or contained an insufficient quantity of DNA present for a routine analysis. In such cases, the PSNI is advised that no further action will be taken with the submitted sample unless there is further direction from the Investigating Officer. The following table provides an overview of CJ profiles loaded to the Northern Ireland DNAD during that two year period.

Category	2012/13	2013/14	Commentary
CJ Profiles	7936	7684	The number of profiles loaded to the NI Database
'Terminal' Admin Fails	502	431	Samples rejected due to administrative reasons. There is no power under PACE(NI) to retake such samples
Laboratory Fails	47	97	Samples failing following laboratory analysis (e.g. insufficient DNA present on the swabs). There is power under PACE(NI) to retake such samples
Outstanding queries with PSNI (at 31/03/14)	8	6	Samples submitted with missing or erroneous details. Analysis is withheld for such samples pending resolution.
Total Submissions	8493	8218	The total number of CJ samples submitted to FSNI.

Case Reference Samples

21. Case Reference samples are DNA samples taken from subjects for probative use within a specific case; the profiles from those samples are also loaded on the database. During 2012-13 and 2013-14, 191 and 202 new case reference profiles, respectively, were loaded to the database, bringing the total number of case reference profiles to 1,334 at 31 March 2014.

Crime Scene Samples

22. Crime Scene samples are those samples taken for loading to the Northern Ireland DNAD in cases where there is no suspect apparent at the time of the incident. During 2012-13 and 2013-14, the FSNI received 1,638 and 1,953 Crime Scene samples respectively. The total number of Crime Scene profiles held on the database at 31 March 2014 was 14,413. The chart below demonstrates the Crime Scene profiles by sample type at 31 March 2014.



Case study

DNA used to eliminate persons and ultimately focus an investigation to solving a murder.

A 76 year old retired post master was murdered and his 68 year old sister suffered serious assault injuries in the same incident on 18th December 2004 near Coalisland, County Tyrone. Such was the revulsion expressed by the local community, it was decided by police to carry out a mass screen of the local community. Arrangements were put in place to have locals who were willing to come forward, have their DNA sampled to eliminate them from police enquiries. A near neighbour was subsequently convicted of the murder.

Success rates

- 23. When a profile is derived from a sample, and a search carried out by FSNI staff on the Northern Ireland DNAD, a report is forwarded to the PSNI. If the profile does not yield a match on the Northern Ireland DNAD, it is uploaded to the National DNAD.
- 24. There were 1,180 'scene to person' matches and 49 'scene to scene' matches identified against NI crime scene profiles loaded to the Northern Ireland DNAD during the period April 2012 to March 2014.

Matches between the Northern Ireland DNA Database and the National DNA Database

- 25. Each week, all new subject profiles on the Northern Ireland DNAD are exported to the National DNAD; 15,702 criminal justice profiles were exported between April 2012 and March 2014. 166 of those profiles matched an as yet unsolved crime in England and Wales. The crime types included murder/manslaughter, rape, burglary, criminal damage and drug related crime.
- 26. Each week any NI crime scene profile which has not matched a subject on Northern Ireland DNAD is exported to the National DNAD. 556 crime scene profiles were exported between April 2012 and March 2013, and 702 were exported between April 2013 and March 2014. Of those profiles exported in the two year period, 122 matched a subject profile held on the National DNAD. The PSNI crime types included burglary, wounding/GBH, sexual offences and vehicle crime.

Summary analysis of profiles on Northern Ireland DNA database

- 27. The Northern Ireland DNAD is mainly populated with subject profiles derived from DNA samples taken from arrested persons in custody. The police officer taking the sample also records data about the arrested person; name, gender (as apparent), date of birth etc. and their ethnic appearance. This data is recorded on the PSNI computer and transferred electronically to the Northern Ireland DNAD.
- 28. As is the case with data held on the UK Police National Computer (PNC) and the National DNAD, the ethnic appearance data used for Northern Ireland subject profiles is based on the judgement of the police officer who takes the DNA sample as to which of 6+1 ethnic appearance categories he/she considers the person belongs (6 categories plus 'Unknown'), rather than the self-defined (16 + 1) system of self-declared ethnicity used in the Census population data.
- 29. The subject population, broken down by gender shows 81% male and 19% female at 31 March 2014. The chart below shows the subject population broken down by age.



30. Regarding ethnicity, almost 98% of subjects on the Northern Ireland DNA have their appearance recorded as 'White skinned European'. The chart below shows data for the remaining subjects (2.6%).



Legislative changes

- 31. The existing framework for the taking, retention and destruction of fingerprints, DNA samples and the profiles derived from such samples is set out in Part VI of the Police and Criminal Evidence (Northern Ireland) Order 1989 (PACENI). Amendments to PACENI made by the Police (Amendment)(NI) Order 1995 enabled DNA samples to be taken from anyone charged with, reported for or convicted of a recordable offence, and allowed profiles obtained from such samples to be retained and checked for matches against other profiles obtained from victims or scenes of crime. If the person was acquitted, samples and profiles had to be destroyed.
- 32. The Criminal Justice and Police Act 2001 further amended PACENI so as to remove the obligation to destroy fingerprints, DNA samples or profiles when a suspect was not prosecuted for, or was acquitted of, the offence with which he or she was charged. The power to take and retain fingerprints, DNA samples and

profiles was further widened by the Criminal Justice Act 2003, which allowed a DNA sample to be taken from any person arrested for a recordable offence and detained in a police station, whether or not they were subsequently charged. Any such sample, and the profile derived from it, could be retained indefinitely.

S & Marper

- 33. In December 2008, in the case of *S* and Marper v United Kingdom [2008] ECHR 1581, the European Court of Human Rights ("ECtHR") ruled that the provisions in the Police and Criminal Evidence Act 1984 ("PACE") for England and Wales, permitting the indefinite retention of DNA and fingerprints from unconvicted individuals, violated Article 8 (right to privacy) of the European Convention on Human Rights. Northern Ireland has equivalent provisions in PACENI.
- 34. In particular, the Court was struck by the "blanket and indiscriminate" nature of the power to retain material irrespective of the nature or gravity of the offence with which the individual was originally suspected or the age of the suspected offender. The Court found that retention was not time limited and there existed only limited possibilities for an acquitted individual to have the data removed from the database or materials destroyed. The Court pointed to the current retention policy in Scotland as a model which, in relation to unconvicted persons, discriminated between different kinds of cases and applied strictly defined storage periods for data, even in more serious cases.
- 35. The Criminal Justice Act (Northern Ireland) 2013 received Royal Assent on 25 April 2013 and includes provisions to remedy the incompatibility with Convention rights identified by the ECtHR³.
- 36. In summary, all DNA samples taken from persons on arrest, whether the individual goes on to be convicted or not will be destroyed. Samples will only be retained for only as long as necessary to create a DNA profile and, in any event, for no longer than six months, with an exception for temporary retention where the sample is likely to be needed as evidence in criminal proceedings. There is

³ <u>http://www.legislation.gov.uk/nia/2013/7/contents</u>

also a statutory requirement for the Chief Constable to destroy fingerprints and DNA in cases where the taking of the samples was unlawful or the arrest of the person was unlawful or based on mistaken identity, with an exception for temporary retention where the material has evidential value, subject to its admittance by a court.

- 37. The new legislation will enable all DNA profiles which would otherwise fall to be destroyed under the new rules to be retained until a search of the Northern Ireland DNAD has been carried out. This is to ensure that no investigative opportunities are lost against material which is subject to destruction.
- 38. The overarching objective of the legislative provisions is to put in place a retention framework which has the support and confidence of the public and achieves a proportionate balance between the rights of the individual and the protection of the public. The Board received updates on the development of the legislation. The key aspects of the Act are as follows:

Occurrence	Retention period
Adult	
Conviction – All Crimes	Indefinite
Charged but not convicted-	3 years + single 2-year extension on application to court
Serious Crime	(Indefinite retention will apply if previously convicted)
Arrested but not charged – Serious Crime	Immediate destruction (unless prescribed circumstances* apply in which case 3 years on consent of Commissioner + single 2-year extension on application to court)
	(Indefinite retention will apply if previously convicted)
	Immediate destruction
Non-conviction – Minor Crime	(Indefinite retention will apply if previously convicted)
Conviction – Serious Crime	Indefinite
Caution	Indefinite
Penalty Notice	2 years
Juvenile	
Conviction – Serious Crime	Indefinite

Occurrence	Retention period
	1 st conviction - 5 years (for non-custodial sentence)
	or length of sentence + 5 years for custodial sentence
Conviction – Minor Crime	or indefinite where initial sentence is over 5 years
	2 nd conviction - Indefinite
	3 Years + single 2-year extension on application to court
Charged but not convicted – Serious Crime	(Indefinite retention will apply if previously convicted and the conviction is not an exempt conviction)
Arrested but not charged – Serious Crime	Immediate destruction (unless prescribed circumstances* apply in which case 3 years on consent of a Commissioner + single 2-year extension on application to court)
	(Indefinite retention will apply if previously convicted and the conviction is not an exempt conviction)
Non-conviction – Minor Crime	Immediate destruction (unless previously been convicted)
Caution	5 years
Diversionary Youth Conference	5 years

* Prescribed circumstances are subject to introduction by Order of the Department of Justice

Implementation

39. The biometric provisions within the Criminal Justice Act have yet to be commenced. A complex programme of work is currently being undertaken by PSNI and FSNI in readiness for the legislation to be brought into operation. This work will include:

- Database software modifications to automate the retention and destruction of biometric material;
- processes to handle requests for profile deletions;
- processes to assist in the administration of sample destruction; and
- processes to manage deletion and destruction of legacy samples.
- administration of destruction of the subject cellular material retained frozen at FSNI - an archive containing over one million physical artefacts;
- additional scientific re-analysis of legacy samples prior to their destruction; and,
- implementation of demographic data decoupling (DDC) rendering the datasets held at FSNI (as a requirement of its quality accreditation systems) fully anonymous post-deletion.

- 39. FSNI has also been compiling an inventory of all casework reference samples submitted to FSNI as part of case files since the introduction of DNA profiling. These samples predominantly refer to mouth swabs taken from known donors and relate directly to specific cases. To date, reference samples submitted between 1993 and 2011 have been manually logged. FSNI is working closely with the PSNI to design and implement a process for the destruction of these and criminal justice subject artefact samples.
- 40. To date, PSNI has identified 373 targeted subjects for upgrade from the 1st generation SGM DNA system. This work is required to retain these subject profiles on the routine Northern Ireland DNAD. As DNA17 systems have been deployed, SGM profiles have been transferred into a sequestered register.

TERMS OF REFERENCE FOR NORTHERN IRELAND DNA DATABASE GOVERNANCE BOARD

Introduction

1. On behalf of the Minister of Justice, the Northern Ireland DNA Database (NIDNAD) Governance Board will act as an advisory body on the use and retention of DNA samples and the information derived from them held as a DNA profile, to ensure compliance with relevant legislative provisions (see Annex A for a list of relevant legislation). It will assess whether Northern Ireland meets its obligations relating to the maintenance of the UK National DNA Database; and will consider the role and contribution of retained DNA profiles to the prevention or detection of crime, the conduct of a prosecution or the identification of a deceased person or of a person from whom a body part came.

2. Recognising the importance of DNA analysis to the effective investigation of serious crime, the NIDNAD Governance Board will aim to ensure that:

- the best use is made of NIDNAD in the interest of good policing and delivery of justice;
- the use of DNA information held on the database is subject to proper controls; and
- that robust governance arrangements are sufficient to maintain public confidence in the management of the arrangements

3. It will also, where appropriate, seek to promote public awareness of the effective use and management of DNA and the safeguards in place to ensure its proper usage.

Role of the Governance Board

- 4. The role of the NIDNAD Governance Board will be to:
 - assess arrangements for the control and operation of the local DNA database and criminal DNA profiling, and supply to the UK National DNA Database;

- assess compliance with relevant legislation and case law, seek assurance on compliance with relevant European Union directives, and that procedures are developed in line with UK obligations;
- ensure appropriate mechanisms are in place for the consideration of applications for the release of data from the NIDNAD for use in research. This includes requests from Forensic Providers to develop new products or processes relating to DNA Profiles on the NIDNAD. If the proposed use is approved, the NIDNAD Governance Board will advise the Data Controller on the release of data and their recall on completion of the research. Such material shall only be released after taking advice from the NDNAD Ethics Group and if, as a minimum requirement, the proposed use of the data:
 - i) is within the law;
 - ii) conforms to ethical guidelines for the use of genetic information, and any other applicable guidelines; and
 - iii) is not likely to prejudice the integrity or reputation of the NIDNAD nor infringe the human rights of individuals.
- o assess the performance of the NIDNAD practices and procedures;
- define and regularly review the level of security required and the arrangements for storage and access to samples for the creation of DNA profiles and their loading onto the NIDNAD and the level of security (physical and technical) required for the data held on the NIDNAD and by suppliers; and
- report annually to the Minister of Justice and provide responses to questions from Ministers, the Assembly and its Committees, and to media enquiries.

Governance Board Membership

- 5. Membership of the NIDNAD Governance Board will comprise:
 - Director of Justice Delivery, DOJ (Joint Chair).
 - > ACC Service Improvement, PSNI (Joint Chair)

- > Representative from the Public Prosecution Service.
- > DOJ Deputy Director, FSNI's Sponsor Division.
- > The Forensic Science Regulator.
- Independent representative from a legal/ethical/human rights academic discipline from Queen's University, Belfast.
- Independent representative from a scientific academic discipline from the University of Ulster.
- > The Information Commissioner, in an observer capacity.

6. The Chief Executive of FSNI or his nominee, acting as the Data Processor, will attend meetings of the Governance Board to advise on aspects of the operation and management of the database.

7. The Chief Constable is the Data Controller for all data held within the Northern Ireland DNA Database. The Chief Constable may nominate the ACC Criminal Justice as his/her representative on the Governance Board in relation to matters relevant to the role of Data Controller.⁴

8. The role of the Joint Chairs will not include any responsibility which duplicates that of the Chief Constable as the Data Controller for the NIDNAD, nor will it seek to have an influence on matters relating to operational policing.

Relationship with Home Office Ethics Group

9. In line with national practice, the NIDNAD Governance Board will access the Home Office DNA Ethics Group. It will consider Ethics Group advice (whether issued as advice to the National Strategy Board, or provided in relation to a local issue) from a Northern Ireland perspective. While not bound by that advice, all related NIDNAD Governance Board decisions, together with the advice/views received from the Ethics Group, will be published on the DOJ website. The NIDNAD Governance Board will also provide assurance to the Minister and the wider

⁴ See Annex B for definitions of Data Processor and Data Controller

community that the database is being operated properly and in line with the agreed retention periods.

Meetings of the Governance Board

10. The Joint Chairs of the NIDNAD Governance Board will convene meetings of the Governance Board, initially on a quarterly basis. Meetings will only be convened if at least ten working day's notice has been given to each of the Members. A minimum of six full Members must attend for the meeting to be quorate. In addition to the regular meetings, the Joint Chairs may convene a meeting of the Board at any time at their own instance, or on request by at least two full Members as set out in paragraph 5.

11. An agenda with papers for each meeting will be issued to all Members by the NIDNAD Secretariat at least five working days before the meeting and minutes will be kept of meetings. Secretariat for the Governance Board will be provided by the Department of Justice.

Reporting Arrangements

12. The NIDNAD Governance Board will report annually to the Minister of Justice. The report will include a summary of the key issues which have arisen during the year, and developing issues on which the Board proposes to focus its attention in the year ahead. The report will also include an overview of the relevant science, a summary of key statistics on the data held on the database, information on data releases for research purposes, and other information relevant to the NI DNA Database. A copy of the report will be placed in the Assembly Library.

13. The report of the NIDNAD Governance Board will be published on the DOJ website, with links to the PSNI and FSNI Websites. The Governance Board will provide copies of the report to the National DNA Database Strategy Board at the time of publication.

Amendment of Terms of Reference

14. These Terms of Reference may be amended with the agreement of the majority of the full Members of the Board and all changes shall be notified to the Members no fewer than ten working days prior to changes taking effect.

RELEVANT LEGISLATION

The Police and Criminal Evidence (Northern Ireland) Order 1989, Article 64 (1A), as amended by the Police and Criminal Evidence (Amendment) (Northern Ireland) Order 2007.

The Data Protection Act 1998

The Freedom of Information Act 2000

The Human Rights Act 1998

The Northern Ireland Act 1998 – Section 75

The Criminal Justice Act (Northern Ireland) 2013

DEFINITION OF ROLES

(Definitions are taken from the Data Protection Act 1998)

"**Data controller**" means, subject to subsection (4), a person who (either alone or jointly or in common with other persons) determines the purposes for which and the manner in which any personal data are, or are to be, processed.

(4) Where personal data are processed only for purposes for which they are required by or under any enactment to be processed, the person on whom the obligation to process the data is imposed by or under that enactment is for the purposes of this Act the data controller.

"**Data processor**", in relation to personal data, means any person (other than an employee of the data controller) who processes the data on behalf of the data controller.

"**personal data**" means data which relate to a living individual who can be identified—

- (a) from those data, or
- (b) from those data and other information which is in the possession of, or is likely to come into the possession of, the data controller,

and includes any expression of opinion about the individual and any indication of the intentions of the data controller or any other person in respect of the individual;

"**processing**", in relation to information or data, means obtaining, recording or holding the information or data or carrying out any operation or set of operations on the information or data, including—

- (a) organisation, adaptation or alteration of the information or data,
- (b) retrieval, consultation or use of the information or data,
- (c) disclosure of the information or data by transmission, dissemination or otherwise making available, or
- (d) alignment, combination, blocking, erasure or destruction of the information or data.