

# Biometrics and Forensics Ethics Group Principles

The Biometrics and Forensics Ethics Group (BFEG)



Biometrics & Forensic  
Ethics Group

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# Principles

## The Biometrics & Forensics Ethics Group (BFEG)

### Remit

The BFEG's focus is strategic and broad, complementing the legal and regulatory functions of the Biometrics and Surveillance Camera Commissioner and the Forensic Science Regulator. The BFEG's remit includes consideration of the ethical impact on society, groups and individuals of the capture, retention and use of large and complex datasets, human samples and biometric identifiers for purposes that fall within the purview of the Home Office, including the differentiation between, or identification of, individuals (or particular groups of individuals).

The remit for the BFEG includes, but is not limited to, consideration of the ethical aspects of:

- the application and operation of technologies that produce biometric and forensic data and identifiers;
- biometric and forensic services currently provided, techniques employed and proposals for new services and techniques;
- applications for research involving access to biometric or forensic data; and
- other matters relating to the management, operation and use of biometric or forensic data.

The BFEG may also, at the request of Ministers, consider other ethical issues relating to scientific services provided to the police service and other public bodies within the criminal justice system.

### Role

The BFEG operates based on a broad ethical spectrum that embraces moral, legal, and societal considerations, recognising that policy needs must be reconciled with ethical concerns.

Observing these principles should enhance trustworthiness in the use and governance of biometric and forensic services, and in the use of complex datasets.

### Scope of the Principles

These principles apply to all operational and governance stages, including procurement, operation, and review, of the systems, procedures and instruments, used in biometric and forensic services, and data analysis used for purposes that fall within the purview of the Home Office.

# Governing principles

The Governing Principles that should apply to the use of biometric, forensic, and data analysis procedures are as follows:

- **Principle 1:** procedures should enhance the public good
- **Principle 2:** procedures should respect the dignity of individuals and groups
- **Principle 3:** procedures should not selectively disadvantage any group in society, particularly those most vulnerable, as protected under UK law, such as those who have ‘protected characteristics’ as defined in the [Equality Act 2010](#) (age, disability, gender reassignment, marriage or civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation)
- **Principle 4:** procedures should respect the processing of sensitive personal data and human rights as guaranteed by UK law, including the [Human Rights Act 1998](#) and the [Data Protection Act 2018](#). Any limitations of non-absolute rights, such as the right to respect for private life and the right to freedom of expression, must be demonstrably lawful, for a legitimate aim, proportionate and necessary
- **Principle 5:** scientific and technological developments should be harnessed to advance the process of criminal justice and its governance; promote the swift exoneration of the innocent; and afford protection and redress for victims
- **Principle 6:** procedures should be publicly accessible and explainable
- **Principle 7:** procedures should be based on robust scientific principles, including evidence and ongoing review of their necessity and ethical robustness
- **Principle 8:** procedures should be subject to review by an independent body, both *ex ante* and *ex post* where possible

## Implementation of the Governing Principles

The Governing Principles should be implemented with due regard to the following:

- Impartiality – procedures should be applied without bias; attention should be given, and mitigating safeguards should be put in place, to avoid any risks of unfair discrimination against vulnerable people or based on protected characteristics
- Proportionality – justifying the limitation of rights by reconciling the means used with the intended legitimate aim; does the procedure meet a pressing social need; are there alternative adequate measures that are less intrusive to these affected rights
- Openness and transparency
- The need for systems to be in place to identify errors as well as potential harms and means of mitigation
- The need for quality control and data integrity
- The need for public accountability
- The need for independent oversight and redress
- The need to provide adequate, clear, and publicly accessible information and, where appropriate, to obtain consent from those from whom data or samples are sought
- The undertaking and, where possible, the publication of the relevant *ex ante* and *ex post* impact assessments that address each stage of the data processing cycle (including retention, use, analysis, sharing, storage, destruction)

## Considerations Specific to the Processing of Data

Governing Principles should be applied as follows:

- data should be processed (collected, used, analysed, shared) only for clear, specific, and lawful purposes
- data collection, storage, and use must adhere to legal requirements of legality and proportionality
- steps should be taken to ensure the accuracy, security, integrity, and timely destruction of data collected, stored, and used
- processes should conform to the relevant international standards, and be applied by professionally trained staff
- intrusion into private lives and other human rights should be minimised and shown to have a legal basis that is publicly accessible, necessary, and proportionate
- regard should be had for the rights of secondary data subjects (i.e. people potentially affected by data collected from others, e.g. family members)

## Annex A: Questions to accompany the principles

The following questions are intended to clarify and aid the interpretation of the Governing Principles that are the foundation of the work of the BFEG. Their purpose is also to assist those who are seeking the approval of the BFEG for new procedures in order to demonstrate that they have considered relevant aspects.

### Governing principles

#### Principle 1: Procedures should enhance the public good.

- What aspect of the public good is enhanced by the procedure?
- Is there anything further that could be done to ensure that the procedure advances the public good, without unjustifiably interfering with individual human rights, e.g. the right to private life?

#### Principle 2: Procedures should respect the dignity of individuals and groups.

- What steps have been taken to ensure that the procedure respects the dignity of all individuals and groups?
- Is there any way in which the procedure could undermine the dignity of individuals and groups? If so, how? Do the benefits of the procedure outweigh its negative side effects, and how can this be determined?
- What steps could be taken to reduce this negative impact? Could the benefit of the procedure be achieved by different means that have a less negative impact?
- What could be done to mitigate any deliberate or inadvertent adverse outcomes of the procedure on people or on society in general?

**Principle 3: Procedures should not selectively disadvantage any group in society, particularly those most vulnerable, as protected under UK law, such as those who have ‘protected characteristics’ as defined in the [Equality Act 2010](#) (age, disability, gender reassignment, marriage or civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation).**

- How does the procedure affect the most vulnerable?
- Would the procedure lead to differential treatment of a person based on protected characteristics?
- What could be done to ensure that the procedure does not deliberately or inadvertently target or selectively disadvantage people or groups on the basis of protected characteristics?

**Principle 4: Procedures should respect human rights as defined in the Human Rights Act 1998. Any limitations of non-absolute rights, such as the right to respect for private and family life or the right to freedom of expression, must be demonstrably lawful, for a legitimate aim, proportionate and necessary.**

- Would human rights be interfered with by the procedure? If so, in what way?
- Are the human rights of any group or section of the community likely to be especially adversely affected?
- What steps have been taken to respect all human rights?
- How has public protection been reconciled with the respect for all human rights?
- What steps could be taken to reduce any limitation of human rights without jeopardising the procedure itself? Could its benefits be achieved by different, less invasive, means?

**Principle 5: Scientific and technological developments should be harnessed to advance the process of criminal justice and its governance; promote the swift exoneration of the innocent; and afford protection and redress for victims.**

- How will the procedure assist the criminal justice system by promoting swift exoneration of the innocent, and afford protection and resolution for victims?
- What could be done to achieve these goals even more effectively and with less adverse impact on human rights and liberties?

**Principle 6: Procedures should be publicly accessible and explainable.**

- How has information concerning the procedure been made publicly accessible?
- Does this information explain the scope and circumstances of when this procedure may be used?
- Is consent required or not?
- Does this information also explain and set out relevant safeguards, including: authorisation of the procedure; who has access to any data; what are the data storage limits; who is responsible for its monitoring and oversight?

**Principle 7: Procedures should be based on robust evidence of their necessity and ethical robustness.**

- What is the evidential basis for the procedure?
- How has it been tested?
- How has it been subject to peer review?
- Has the evidential basis been challenged?
- What is the error rate?
- What are the quality control mechanisms?
- What evidence is available of the likely impact of the procedure on those to whom it is applied and any others who could be affected by it?

- What ethical criteria and deliberative processes have been applied to the procedure, and what conclusions have been drawn?

**Principle 8: Procedures should be subject to *ex ante* and *ex post* oversight by an independent body.**

- What independent body or bodies have scrutinised the procedure, both before and after its entry into use, and with what result?
- Have any impact assessments that specifically embody ethical criteria been performed on the procedure? What modifications have the impact assessments resulted in? Are these assessments publicly available?

## Implementation of the governing principles

What steps have been taken to ensure the following?:

- impartiality – procedures should be applied without bias
- proportionality – justifying the limitation of rights by reconciling the means used with the intended aim
- openness and transparency
- the need for systems to be in place to identify errors as well as potential harms and means of mitigation
- the need for quality control
- the need for public accountability
- the need for independent oversight where appropriate
- the need to provide adequate information and, where appropriate, to obtain consent from those from whom data or samples are sought

## Considerations specific to the processing of data

With respect to the collection, storage and use of data, what steps have been taken to ensure the following?:

- restriction to specified and lawful purposes;
- adherence to legal requirements;
- accuracy, security, integrity and timely destruction of data;
- robust processes that conform to international standards and are applied by professionally trained staff;
- minimal limitation of human rights, particularly regarding intrusion into private life;
- account taken of rights of secondary data subjects, (e.g. family members affected by data collection from others)?

# Annex B: Authors and Modifications

## Version 1.0, April 2018

**Jennifer Temkin LLD, FAcSS, Professor of Law**, The City Law School (City, University of London)

**Professor Barbara Prainsack**, King's College London

**Carol Moore**, Retired Civil Servant in the Northern Ireland Civil Service (NICS)

## Version 1.1, December 2020

Following a proposal from **Dr Adil Akram**, BFEG member, these principles were updated in October 2020 to recognise the need to consider explicitly the effects of procedures on people or groups with protected characteristics as set out in the Equality Act 2010.

The updated principles were ratified by all members of the BFEG, see Annex C for a list of members.

## Version 1.2, February 2023

In September 2022 BFEG members agreed that the BFEG principles should be reviewed and updated. **Dr Nóra Ni Loideain** and **Professor Emeritus Charles Raab**, members of the BFEG, drafted and updated the principles. The updated draft was shared at the BFEG group meeting in December 2022. The members of the BFEG agreed the principles should be updated to reflect ethical procurement and the jurisdiction of the principles. Reference to monetary considerations in Annex A “Questions to Accompany the Principles” was removed.

The updated principles were ratified by all members of the BFEG, see Annex C for a list of members.



# Annex C: Members of the Biometrics and Forensics Ethics Group

## Chair

**Professor Mark Watson-Gandy** – Barrister at Three Stone Chambers and Visiting Professor, Universities of Westminster and Lorraine

## Committee Members

**Professor Louise Amoore** – Professor of Human Geography at Durham University.

**Professor Liz Campbell** – Chair in Criminal Jurisprudence at Monash Law, Australia

**Professor Simon Caney** – Professor in Political Theory at the University of Warwick

**Professor Ann-Maree Farrell** – Professor of Medical Jurisprudence at Edinburgh Law School

**Professor Richard Guest** – Professor of Biometric Systems Engineering and Head of the School of Engineering, University of Kent

**Professor Nina Hallowell** – Professor of Social and Ethical Aspects of Genomics at Oxford University

**Dr Julian Huppert** – Director and Fellow at the Intellectual Forum, Jesus College Cambridge

**Professor Mark Jobling** – Professor of Genetics at the University of Leicester

**Dave Lewis** – Retired Deputy Chief Constable of Dorset and Devon & Cornwall Police, and previous National Police Chiefs' Council lead for ethics and national lead for forensics performance and standards

**Professor Sarah Morris** – Professor of Digital Forensics, The University of Southampton

**Dr Nóra Ní Loideáin** – Director of the Information Law and Policy Centre, Institute of Advanced Legal Studies, University of London

**Professor Niamh Nic Daeid** – Professor of Forensic Science and Director of the Leverhulme Research Centre for Forensic Science at the University of Dundee.

**Professor Emeritus Charles Raab** – University of Edinburgh and Turing Fellow, Alan Turing Institute

**Professor Tom Sorell** – Professor of Politics and Philosophy at the University of Warwick

**Professor Denise Syndercombe Court** – Professor of Forensic Genetics at Kings College London

**Dr Peter Waggett** – Director of Research at IBM



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