The European Court of Human Rights
Ruling against the Policy of Keeping
Fingerprints and DNA Samples of
Criminal Suspects in Britain, Wales and
Northern Ireland: The Case of S. and
Marper v United Kingdom

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Abstract

In England, Wales and Northern Ireland, the Police and Criminal Evidence Act 1984 (the PACE) contained powers for the taking of fingerprints, and samples in the form of deoxyribonucleic acid (DNA). In 2001, Section 64(1A) of the PACE was substituted with Section 82 of the Criminal Justice and Police Act. The change to legislation meant that a suspect of a crime would have their fingerprints and samples permanently stored on the police national computer (PNC) even after having been acquitted. This paper critically analyses the circumstances of the landmark case of S. AND MARPER V. THE UNITED KINGDOM in two different contexts (i) within relevant domestic law and materials; and (ii) within relevant national and international materials. A comparison is made between the rejection of the application to the Administrative Court on 22 March 2002, a subsequent decision to uphold this ruling by the Court of Appeal on 12 September 2002, and a further dismissal of an appeal by the applicants in the House of Lords on 22 July 2004. This is in direct contrast with a later ruling by the European Court of Human Rights (ECHR) that was made on 27 February 2008 which in effect rendered Section 82 of the Criminal Justice and Police Act to be in breach of human rights. In closing, the paper considers the reforms instituted by the United Kingdom thus far in response to the ECHR ruling, and their implications on the European Union (EU) at large with respect to elements of the Prüm Treaty.
Background: Who are S. and Marper?

Mr S (the first applicant) and Mr Michael Marper (the second applicant) are both British nationals. Mr S was born in 1989 and Mr Marper in 1963 and both reside in the city of Sheffield. Mr S was arrested on 19 January 2001 when he was only eleven years of age and charged with attempted robbery but about five months later he was acquitted. His fingerprints and DNA samples were taken when he was charged and not destroyed even though he was acquitted of the crime. The police wrote to Mr S’s solicitors to inform them that they would retain the samples. The solicitors objected and sought judicial review of that decision. Mr Marper was arrested on 13 March 2001 when he was 38 years of age and charged with harassment of his partner. Before a pre-trial review took place, he and his partner became reconciled, and his partner decided not to press further charges. About three months after he was charged the Crown Prosecution Service decided to formally discontinue the case after serving a notice of intent to the applicant’s solicitors. Mr Marper’s fingerprints and DNA were also taken and not destroyed after the case was discontinued. Mr Marper’s legal team wrote to the South Yorkshire Police requesting the DNA profile be deleted from the NDNAD and fingerprints removed from the Police National Computer (PNC) but the Chief Constable refused the request. The applicants both applied for judicial review of the police decisions not to destroy the fingerprints and samples. And that is when the more than seven year battle began. Mr S had no previous convictions, police reprimands or warnings,

1 Mr S’s name is never disclosed in the judicial proceedings.

2 Council of Europe, ‘Grand Chamber | Case of S. and Marper v. The United Kingdom (Applications nos. 30562/04 and 30566/04) Judgment’ (European Court of Human Rights, 4 December 2008).

3 ‘So the reality was that South Yorkshire Police had written a letter to all solicitors saying that because the law had changed they were going to keep all DNA samples of people. In other words they were saying, “[s]top asking for the DNA samples to be destroyed.” And then when the email came around and I read this letter, I immediately thought, well that does not really sound right and we should challenge it’ (Peter Mahy).

at the time of his arrest and Mr Marper was known to be a person of good character. In both the case of Mr S and Mr Marper the Criminal Justice and Police Act 2001 provided the impetus to retain the fingerprints and profiles indefinitely in relation to a recordable offence, even though both parties were innocent of the respective offences. It must be stated that since the fingerprints and profiles were retained in 2001, U.K. legislation has continued to change surrounding the collection and storage of DNA samples, profiles and fingerprints. In an exclusive interview to Sky News, Mr Marper said that the policy which allowed for the retention of a person’s DNA sample and profile was just not right. He was quoted:

‘It was an invasion of privacy, I was offended... They’d taken my rights away and I wasn’t going to let them do that... If people get arrested for assault then, yes, their DNA should be taken. But if it goes to court, and it fails, they should be taken off... that way there’ll be no innocent people on the database.’

It took Mr S and Mr Marper and the solicitor who represented the applicants, Mr Peter Mahy from Howells LLP on a long journey to the European Court of Human Rights (ECtHR) to finally get the judgment they were hoping for- and in the end a unanimous victory of 17-0 in the Grand Chamber (Figure 1).


6 Ibid 253: ‘[i]n practice this bioinformation is used speculatively in the investigation of other offences. That was the legislation in force when S and Marper were arrested. Subsequently the Criminal Justice Act 2003 extended police powers even further by allowing the indefinite retention of samples and profiles of those arrested but not necessarily charged with any offence. The Serious and Organised Crime Act 2005 widened the powers of arrest to all recordable offences, however minor.’

2 S. and Marper in the U.K. Courts

On the 22nd of March 2002, the Administrative Court rejected the application [[2002] EWHC 478 (Admin)] as ruled by Lord Justice Rose and Justice Leveson. The police refused to destroy the DNA sample and fingerprints of Mr S and Mr Marper. When the applicants appealed the decision to the Court of Appeal, the decision was upheld on the 12th of September 2002, adjudicated by Lord Woolf C.G. and Lord Justice Waller.\(^8\) This left the applicants no other choice than to take their appeal to the House of Lords who on the 22nd of July 2004 dismissed the appeal citing statistical evidence which suggested that some 6 000 DNA

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profiles had been matched to scenes of crime (SOC) stain profiles.\(^9\)

In commenting on the journey of S and Marper, the solicitor for the applicants, Peter Mahy, noted how the case began with an individual challenge against the U.K. laws. In the Divisional Court and the Court of Appeal, there was little interest by non-government organisations or even the media. Even when the case was heard in the House of Lords, there was relatively no media interest at all. So the case travelled from court to court without much additional physical legal support, save for moral support.

‘In the Court of Appeal, \textit{Liberty} tried to intervene but they could not come to the hearing. In the House of Lords, again, \textit{Liberty} intervened and they were threatened by the Government that if they did and they came to the hearing there would be costs against them and \textit{Liberty} was fearful of that. So in fact, \textit{Liberty} did not come to the House of Lords. So we were really the only ones against the Police and the Government and we were hugely outgunned’ (Peter Mahy).

Despite the claims being made by the applicants on the right to private life, Article 8(1) of the European Convention on Human Rights (ECHR) was probably not even engaged. Art. 8(1) states that everyone has the right to respect for his private and family life, his home and his correspondence.

‘The feeling in the \textit{U.K.} was very much that this was not a very important issue and why are you here for. And we had a fairly rough ride in the \textit{U.K.} Courts, some even commented that they could not see any basis for the case at all’ (Peter Mahy).

The statements made by solicitor Peter Mahy are supported by numerous others analyzing the case at large. In her analysis of the \textit{S and Marper v. United Kingdom} case, Kate Beattie writes:

‘[o]ne of the curiosities of the \textit{U.K.} court judgments in S and Marper was their reluctance to find that retention constituted an interference with art.8 rights at all. Six \textit{U.K.} judges (Rose L.J. and Leveson J. in the Divisional Court and all members of the House of Lords save for Baroness Hale) considered that there was no interference with art.8 or were prepared to acknowledge at most only a very modest interference, seemingly for the purposes of proceeding to the justification analysis under art.8(2).’\(^{10}\)


Unlike the longstanding United States Fourth Amendment provisions, English law does not have a tradition of privacy protections or mechanisms, despite that it now has a Data Protection Act (1998)\(^{11}\) and Human Rights Act (1998)\(^{12}\) in place. The conflict between the judgments by the *U.K.* courts and the ECtHR are as stark as black and white. Beattie emphasizes the point that what the U.K Courts completely ignored, the Grand Chamber considered as vital from the outset- the principle of proportionality was the starting point for Strasbourg.\(^{13}\) At the heart of the matter in the U.K. courts should have been the foundations of the Data Protection Act spelled out in the definition of “sensitive personal data” and proportionate in relation to the purpose of collection.

### 2.1 The Administrative Court

One of the major issues raised in the Divisional Court by the legal counsel of Mr S and Mr Marper was the process for removing personal details from the NDNAD and PNC for innocents. As it stood, Peter Mahy made the obvious but important point that the only way innocents could get their details removed from the police databases was by writing a letter to the Chief Constable of the Constabulary where the initial arrest or charges were made.

> ‘I think the other major finding was identification from the court that there was no independent system in the *U.K.* for review, and so you have to ask the Chief Constable to remove your DNA and simply that is not fair. That is something that the *U.K.* Government has tried to whitewash a bit, saying that well, we are going to keep that, and the Council of Ministers are saying well that is not good enough. So the finding that you should have the opportunity to have somebody else make the decision was important’ (Peter Mahy).

Post the ECtHR judgment Peter Mahy believes that innocent people whose DNA samples and profiles and fingerprints have been obtained are inundating Chief Constables across the U.K. with daily requests to remove their personal details and citizens are certainly voicing and demanding their rights. The S and Marper case challenged the powers of the Chief Constable who only under “exceptional circumstances” and at their own “discretion” could/would remove the details of


\(^{13}\) Beattie, above n 10, 235.
innocent persons. As has been noted the applications were rejected by the Division Court in March 2002 and the Court of Appeal upheld the judgment by a majority 2:1.

2.2 Court of Appeal

With respect to the Court of Appeal something that is often overlooked is that the Court did find that the retention of DNA samples did interfere with the rights set out in Art. 8(1) but Lord Woolf concluded that the interference was not a significant one given that the personal details of the individual would only be returned given a successful hit in the NDNAD.\(^{14}\) Thus the risks to a subject’s private life, according to the Court of Appeal were of importance between the time the DNA profile was stored in the NDNAD and that time where a successful hit was achieved. But the fact that a successful hit had been achieved to return an individual suspect’s DNA profile meant that they might have committed a crime and thus it was a proportionate interference. The Court did not see the indefinite storage of the DNA profile and sample and fingerprints to be a continuing interference with an individual’s private life, which might affect the person in a number of different ways, including psychologically, severe inconvenience, lost remuneration, pain, embarrassment etc.\(^{15}\) The problem with storing personal details of innocents indefinitely is that you are potentially causing indefinite trauma to the individual, a feeling of hopelessness, invasion, loss of dignity, self-confidence and this is a fundamental breach of existing human rights (Art. 11). What good is a clause in an Act, such as the right for an innocent to request the removal of DNA profiles and samples and fingerprints to a Chief Constable, if that discretion is seldom exercised on the premise of making the nation a safer state?

The Administrative Court judgment in the S and Marper case was of no surprise to commentators in the field. In fact, the ‘court’s deference to the balance struck by Parliament in favour of crime control’ was seen by many as predictable but nevertheless a disappointing outcome. The greater inadequacy however probably occurred in the Court of Appeal, when instead of using their own judgment, Lord Woolf C.J and Justice Leveson relied on the conclusion of

\(^{14}\) Barsby and Ormerod, above n 4, 39: ‘[a]lthough the retention of fingerprints and DNA samples interfered with the right of privacy contained in Article 8(1), the adverse consequences to the individual were not out of proportion to the benefits to the public so that there was no defence under Article 8(2).’

the Administrative Court reaffirming that the PACE did indeed still strike a balance between the rights of the individual and society at large. We might ask ourselves what kind of balance this really is when an innocent person has to have their details stored indefinitely on a national crime information system? What common good is this really achieving? How does it really help society? Surely, it is just impacting on the individual and as Lord Justice Sedley said the individual will “always lose”. The idea of “balance” also comes into dispute. Denise Meyerson, plays the devil’s advocate, arguing that

‘instead of balancing rights against the public interest, courts should ‘over-enforce’ rights, and downgrade the public interest arguments. In effect, this approach would give rights and the public interest different weights from the weight that they would attract on a balancing approach.’

Meyerson claims that we cannot view individual rights and the public interest on the same sliding scale, and when these two claims come head-to-head with one another as competing interests, one must always be considered weightier than the other and that Courts should not use their first order reasoning to defend their usual position but consider the problem at hand from the second order reasoning.

The decision in the Court of Appeal to uphold the rejection of the S and Marper case in late 2002 did open the floodgates towards the implementation of a compulsory national DNA database. If there was merely a ‘moderate’ interference with respect to someone’s private life, and this interference was proportional based on the public interest, then did it mean that the Government and more specifically the Police, have the power to ask for every single person’s DNA and fingerprints and personal information to be stored on the NDNAD, just


17 Ibid 879: ‘[a]ccording to Alexy, when two principles come into conflict, the satisfaction of one must be at the cost of the other and it then becomes necessary to balance the competing interests. He says that in such cases we need to decide which of the principles has more weight on the facts of the case. He understands the concept of proportionality in the narrow sense as demanding such a balancing enquiry, which he sees as requiring a comparison between the ‘degree’ or ‘intensity’ of interference with a right and the ‘importance’ of satisfying the competing consideration. He calls this the ‘Law of Balancing’, in terms of which, ‘[t]he greater the degree of non-satisfaction of, or detriment to, one principle, the greater must be the importance of satisfying the other’. Thus, on Alexy’s sliding scale approach, the more intensive the restriction, the weightier the reason for restricting it must be.’
in case someone offended in the future.\textsuperscript{18} According to Peter Mahy, the U.K. ‘[h]ad always… wanted the largest database possible… [and]… if it was not for the ECtHR ruling, they would have gone for a fully fledged national DNA database.’ The second issue stemming from the outcome of the Court of Appeal was that of the future uses (or misuses) and applications that could be based on the DNA samples that were indefinitely stored. These were significant public concerns, especially given the fact that the system was ‘devoid of independent organisations safeguarding access, use, research etc.’\textsuperscript{19}

2.3 The House of Lords

In the House of Lords the appeal by the applicants was again dismissed. The issue pertaining to Chief Constables’ powers came to the fore yet again, when it was concluded by their Lordships that:

‘…a chief constable need not review every case in which samples had been taken from an unconvicted suspect. To do so, it was asserted, “would involve the examination of many thousands of cases and involve large numbers of decision-makers” and consequently “would not confer the benefits of a greatly extended database”.’\textsuperscript{20}

This response by the Lords was getting to the heart of the matter and signaled to the many observers, including the media, non-government organizations (NGOs) and self-interest groups, that something had to be done about the way in which requests from innocents for the removal of DNA and fingerprint data would be handled. It simply did not make sense that every request could not at least be considered through a standard procedure by an independent review body. The process of involving the Chief Constable was plainly flawed and did not work. But instead of the House of Lords acknowledging this they went on to brush it to the side as an insignificant matter. Post the ECtHR judgment, this has come back to hurt the Constabulary as thousands of U.K. citizens have flocked to exercise their rights.

Again, in the House of Lords, their Lordships stated that they did not consider the retention of DNA samples and fingerprints amounted to an interference with Art. 8. But they did indicate that:

\textsuperscript{18} Roberts and Taylor, above n 15, 391. They reiterated that the outcome of the House of Lords was to strive toward a comprehensive NDNAD, even though this was happening in a haphazard fashion.

\textsuperscript{19} Barsby and Ormerod, above n 4, 40.

\textsuperscript{20} Roberts and Taylor, above n 15, 391.
‘[i]f any interference did arise, they considered it a very modest one that could be justified by factors which were proportionate to the legitimate aim in question, including that the information was kept for the limited purpose of the detection, investigation and prosecution of crime.’

The principle of proportionality kept being referred to as the reason why the retention of DNA and fingerprint data could be kept indefinitely, throughout the whole U.K. court journey of S and Marper. But when compared to the statements made by the members of the Grand Chamber at Strasbourg, it is clear that the Lordships in the U.K. were providing a series of argumentation in support of disproportionality. Furthermore the Lordships rejected the applicants’ complaint: ‘that the retention of their DNA samples and fingerprints subjected them to discriminatory treatment in breach of art.14 when compared to a general body of persons who had not had their fingerprints and samples taken by the police in the course of a criminal investigation.’

3 S. and Marper v. United Kingdom at the ECtHR

In 2005, three years before the ECtHR judgment, Andrew Roberts and Nick Taylor on analyzing the unsatisfactory outcome of the S and Marper case in the House of Lord’s predicted to some degree of precision what might happen if the case proceeded to Strasbourg. They pointed out that if the House of Lords’ conclusion on Art. 8(1) was to be challenged in Strasbourg and subject to an adverse finding that the domestic analysis on the question of proportionality would come into closer scrutiny. And just as they predicted, the U.K. judgments certainly did come under scrutiny. In the cases of S v. United Kingdom (30562/04) and Marper v. United Kingdom (30566/04), [2008] 25 B.H.R.C. 557, the Grand Chamber of the ECtHR unanimously held that the practice in England, Wales and Northern Ireland of indefinitely retaining fingerprints and DNA samples and profiles of unconvicted persons, without their consent, was a violation of the right to private life guaranteed by Art. 8 of the European Convention on Human Rights (ECHR).

21 DNA and Fingerprints, above n 9, 260.

22 Ibid.

23 Roberts and Taylor, above n 15, 391-2.

24 Hepple, above n 5, 253.
gathering of personal information for the purposes of crime prevention.\textsuperscript{25}

Table 1: Art. 8 and 14 of the Convention for the Protection of Human Rights and Fundamental Freedoms as amended by Protocol No. 11\textsuperscript{26}

<table>
<thead>
<tr>
<th>Article 8 – Right to respect for private and family life</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Everyone has the right to respect for his private and family life, his home and his correspondence.</td>
</tr>
<tr>
<td>2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.</td>
</tr>
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<tr>
<th>Article 14 – Prohibition of discrimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>The enjoyment of the rights and freedoms set forth in this Convention shall be secured without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion.</td>
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</table>

Art. 14 as shown in Table 1 was not engaged given that the ECtHR found a violation in Art. 8(2) by the United Kingdom. All in all, the ECtHR focused on the issue of the indefinite retention of a person’s DNA and did consider expressly the applicants’ ‘related criticisms regarding the inadequacy of safeguards surrounding access to their personal data and the insufficient protection against the misuse of such data.’ The Court also did not consider it necessary to examine separately the applicants’ complaints under Art. 14. The ECtHR judgment is an outcome with incredible repercussions that will take the U.K. years to comply with properly.

3.1 The Principle of Proportionality and the Margin of Appreciation

For Peter Mahy, the solicitor representing Mr S and Mr Marper, the main findings from the European Court, in direct contrast to the findings of the House of Lords, was Art. 8(2):

‘what is called the Article 8(2) right, which is the proportionality argument [see Table 10]. They said that they were struck that in the U.K. there was a blanket policy so that everybody’s DNA was retained until they were 100 or until they died, no matter who they are or what offence they committed. And they found that the U.K. had


\textsuperscript{26} Council of Europe, Convention for the Protection of Human Rights and Fundamental Freedoms CETS No.: 005 (11 April 1950) <http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=005&CL=ENG> at 6 November 2009.
overstepped what is called the margin of appreciation, that is the right for each country to determine its own laws and try to strike a fair balance. So all in all, they found that not only was Article 8 (1) engaged but that Article 8(2) on proportionality where states have a lot of lee-way that the U.K. had just gone too far and were adopting a blanket one-for-all policy' (Peter Mahy).

In Rasmussen v Denmark, the ECtHR ruled on the scope of the margin of appreciation that it was willing to afford to Member States. It became obvious that some degree of harmonization or common ground had to exist between the laws of the contracting states. But in S and Marper, the laws applicable in England, Wales and Northern Ireland was more an exception than a standard when other states retained DNA samples for crimes of a serious nature, and even then, for a defined period of time.\textsuperscript{27} Table 2 shows the author’s classification of DNA retention laws in differing states in the Council of Europe (CoE) obtained from the actual judgment.\textsuperscript{28} The U.K. was the only state to allow for indefinite retention of DNA samples and profiles, and this even of innocents. As Sir Bob Hepple wrote:

‘England, Wales and Northern Ireland (but not Scotland) are alone in the 27 EU Member States and also in the 47 Member States of the Council of Europe in retaining indefinitely the DNA profiles and samples of those who have not been convicted of a crime.’\textsuperscript{29}

Liz Heffernan in further defining the breadth of the margin of appreciation afforded to national authorities in contracting states identifies important factors that should be considered. These include: (i) the nature of the right, (ii) its importance for the individual, and (iii) the characteristics of the interference and the object pursued.\textsuperscript{30} She rightly points out that the margin of appreciation is wider if there is a lack of consensus among the European states. Table 2 clearly shows there is some consensus among contracting states, and that the U.K. is on its own. In addition, given the ECtHR was ruling on something of grave importance to the right of the individual, the margin of appreciation was considered narrower. It is possible for instance to hypothesise, that even if the U.K. retained DNA data for 50 years as opposed to indefinitely, this would have still been seen as disproportionate because it was not in line with other

\textsuperscript{27} Roberts and Taylor, above n 15, 391-2.

\textsuperscript{28} Council of Europe, above n 2.

\textsuperscript{29} Hepple, above n 5, 253.

\textsuperscript{30} Heffernan, above n 25, 497-8.
contracting states, France being the country that retains the right to keep DNA profiles for 25 years after an acquittal or discharge. The other point to note from Table 2 is that not all contracting member states retain both DNA cellular samples and profiles.

<table>
<thead>
<tr>
<th>DNA Profile/Sample 'Standards' Category</th>
<th>Council of Europe (CoE) Member State</th>
<th>Period that DNA Profile/Sample Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite Retention</td>
<td>United Kingdom</td>
<td>Permits the systematic and indefinite retention of DNA profiles and cellular samples of persons who have been acquitted, or in respect of whom criminal proceedings have been discontinued</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Belgium, Hungary, Ireland, Italy, Spain</td>
<td>Require DNA profiles and samples to be destroyed on official acquittal or at the discontinuance of the criminal proceedings</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Germany, Netherlands</td>
<td>Retention of DNA profiles and samples where suspicions remain about the person or if further investigations are needed in a separate case</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Austria, Poland</td>
<td>Permit retention of DNA profiles and samples where there is a risk that the suspect will commit a dangerous offence/serious crime</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Norway, Spain</td>
<td>Permit the retention of DNA profiles if the defendant is acquitted for lack of criminal accountability</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Finland, Denmark</td>
<td>Allow retention for 1 to 10 years respectively in the event of acquittal</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Switzerland*</td>
<td>Allow retention for 1 year when proceedings have been discontinued</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>France</td>
<td>DNA profiles can be retained for 25 years after an acquittal or discharge (during this period the public prosecutor may order their earlier deletion)</td>
</tr>
<tr>
<td>Destruction on official</td>
<td>Estonia, Latvia</td>
<td>Appear to allow retention of DNA profiles of suspects for certain periods after acquittal</td>
</tr>
</tbody>
</table>

* Note: Norway and Switzerland are not EU Member States

Table 2: The ECtHR Ruling on the Margin of Appreciation. The U.K. DNA-related Laws were the Exception between the Contracting States, Not the Norm

In direct conflict with the ECtHR when the House of Lords was asked to consider Art. 8 the right to respect for private life and family life and Art. 14 the prohibition of discrimination, Lord Steyn concluded that:

‘in respect of retained fingerprints and samples article 8(1) is not engaged. If I am wrong in this view, I would say any interference is very modest indeed’ (para. 31)… and that any interference was justified under Art. 8(2) as ‘... it [was] in the public interest in its fight against crime for the police to have as large a database as possible’, with no adverse impacts upon those whose samples were retained.

‘The retention ... does not affect the appellants unless they are implicated in a future crime' (para. 37).

In commenting on Lord Steyn’s interpretation of Art. 8(2), Salim Farrar notes
cause for concern. He points out that Lord Steyn believes there is interference but qualifies it by his belief that the interference ‘...is plainly necessary in a democratic society to ensure the investigation and prosecution of serious crime.’ Farrar emphasizes in his paper that their Lordships do not consider the principles of proportionality, subsidiarity, accountability and finality, and do not address this principles with respect to Mr S and Mr Marper’s individual case.\textsuperscript{31} Lord Brown concluded by touting the benefits of an even larger NDNAD (para. 88):

‘... it seems to me that the benefits of the larger database brought about by the now impugned amendment to PACE are so manifest and the objections to it so threadbare that the cause of human rights generally (including the better protection of society against the scourge of crime which dreadfully afflicts the lives of so many of its victims) would inevitably be better served by the database’s expansion than by its proposed contraction. The more complete the database, the better the chance of detecting criminals...’\textsuperscript{32}

Perhaps the only congruity between the House of Lords and the ECtHR came from Baroness Hale, who dissenting on the issue of DNA indefinite storage, did make the observation that there could be almost nothing more private to the individual than the knowledge of their “genetic makeup.”\textsuperscript{33} Despite this level of awareness by the Baroness, it was extremely narrow-sighted for her not to attempt to consider whether the interference with the right to respect for private life was disproportionate in relation to the social benefits.\textsuperscript{34} She instead, followed suit with the other Lords, touting the benefits of an expanded database. The ECtHR agreed with Baroness Hale only insofar that ‘an individual’s concern about the possible future use of private information retained by the authorities is legitimate and relevant to the determination of the issue whether there has been an interference with the right to private life.’\textsuperscript{35} DNA and fingerprint personal data, Roberts and Taylor argue is analogous to a diary in which an individual has catalogued their life story through event descriptions.


\textsuperscript{33} Heffernan, above n 25, 495: ‘Cellular samples are an abundant source of genetic material and contain highly sensitive personal information about such matters as health and family relationships.

\textsuperscript{34} Meyerson, above n 16, 896.

\textsuperscript{35} Hepple, above n 5, 254-5.
‘If he is compelled to surrender the diary to a third party who then proceeds to read its contents, this would undoubtedly constitute an interference with the individual’s right to privacy. This will tend to have some inhibiting effect on the way he leads his life.’

Hepple’s summation of the House of Lords decision was in relating it to a rather unsophisticated form of utilitarianism, where the embrace of new technologies would herald in a period of optimal social welfare, and where the benefits to the common good would significantly outweigh the costs to the individual. Hepple distinguished between the English judges who perhaps rather lazily relied on age old case law and a utilitarian approach versus the European judges who were very much rights-based and proactive to understand the implications of indefinite DNA storage within the context of today’s world. Other differences in the conceptualization of the problem of indefinite DNA storage had to do with the English judges’ interpretation of the ECHR. The ECtHR stressed that the European Convention on Human Rights was a “living instrument that must be interpreted in light of present day conditions”; taking into account changing social circumstances and encompassing advances in technology. With this in mind, it is relevant to note that more recent judgments of the European Court disclose an increasing readiness to find that the collection, storage and processing of personal information or data about a suspect interferes with his or her rights under Art. 8(1).

The ECtHR’s directive was clear in condemning the U.K. Government (para. 119):

‘[i]n this respect, the Court is struck by the blanket and indiscriminate nature of the power of retention in England and Wales. The material may be retained irrespective of the nature or gravity of the offence with which the individual was originally suspected or of the age of the suspected offender; fingerprints and samples may be taken – and retained – from a person of any age, arrested in connection with a recordable offence, which includes minor or non-imprisonable offences. The retention is not time-limited; the material is retained indefinitely whatever the nature or seriousness of the offence of which the person was suspected. Moreover, there exist only limited

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36 Roberts and Taylor, above n 15, 384.
37 Hepple, above n 5, 255.
38 Roberts and Taylor, above n 15, 378-9.
possibilities for an acquitted individual to have the data removed from the nationwide database or the materials destroyed... in particular, there is no provision for independent review of the justification for the retention according to defined criteria, including such factors as the seriousness of the offence, previous arrests, the strength of the suspicion against the person and any other special circumstances.

4 Implications of the ECtHR Judgment

It has been almost 12 months now since the ECtHR judgment was handed down to the United Kingdom. According to Peter Mahy, ‘[t]he government has been doing as little as possible to comply with the judgment but the Council of Ministers is ensuring that they do comply with the judgment. So although to date, they have been doing as little as they can, in the end they are going to have to comply.’ It is interesting to ponder on what compliance actually means in this instance. In actual fact, the ECtHR has the power to award damages to the claimants but the ruling is not automatically binding to the United Kingdom or other contracting states. Thus, there has been some confusion over the impact of the ECtHR judgment on the practices, policies and laws of the United Kingdom, with respect to the indefinite retention of a suspect’s personal data, and more widely within the context of the European Union at large.

On the process begun immediately following the ECtHR judgment in December 2008, Peter Mahy commented that it all seemed quite optimistic after the ruling when the then Home Secretary Jacqui Smith MP, said there was going to be a White Paper and that the matter was going to be fully debated with common sense standards. Not soon after that, however,

‘...around about February 2009 time, the Government said they were going to make regulations and secondary legislation so the matter would not be debated. And that is now in jeopardy because the House of Lords Committee said that would be unlawful’ (Peter Mahy).

The Home Secretary’s exact words were:

‘We will consult on bringing greater flexibility and fairness into the system by stepping down some individuals over time--a differentiated


approach, possibly based on age, or on risk, or on the nature of the offences involved ... The DNA of children under 10--the age of criminal responsibility--should no longer be held on the database ... and we will take immediate steps to take them off."\(^{41}\)

It was also noted by the House of Lords Constitution Committee that primary legislation would replace the regulation with respect the NDNAD that was currently in place which followed an earlier recommendation by the House of Commons Home Affairs Committee.\(^{42}\)

This prompted the Government to introduce a three month consultation paper titled *Keeping the Right People on the DNA Database*,\(^{43}\) on the 7\(^{th}\) May of 2009. There were a number of problems related to this consultation paper. First, the Government based their statistics in the consultation on incomplete figures from the Jill Dando Institute, and second the Government provided a very long and very complex document for citizens to understand. Peter Mahy stated:

‘It is not the sort of document that most members of the public can easily read. It was not in an easy format. There was no sort of response leaflet that had five or six questions that you could answer and send in. There was none of that, no guidance of how to respond. I think for many members of the public that would have been difficult to respond to. We were told that there were however about 500 people that responded. And of course, it was only people who knew about the consultation and could access and understand the document and then just send their response to it’ (Peter Mahy).

The Council of Ministers debated the Consultation and U.K. Government proposals on the 15\(^{th}\) and 16\(^{th}\) of September and there was a resounding consensus amongst the ministers that if the changes were enacted that they


\(^{42}\) Beattie, above n 10, 238. See also the fine work of B. Hepple, ‘Forensic databases: implications of the cases of S and Marper’ (2009) 49(2) Medical Science Law 77 which provides a pioneering summative view of the implications of S. and Marper v United Kingdom. It is limited only in that it is not a historical analysis of the actual implications but speculative in what will happen. It must be noted that Sir Hepple is also the Chair of the Nuffield Bioethics Council.

would be unlawful. The other problem was that the Consultation was based on flawed statistics which would possibly make the proposed changes unlawful. In October Mahy reflected: ‘I think the U.K. is in a very difficult position because 10 months on they have not complied with the judgment.’

4.1 Tangible Outcomes

One of the few tangible implications of the S and Marper v United Kingdom case was that both Mr S and Mr Marper had their DNA samples destroyed almost immediately after the ECtHR ruling when a request was made to the South Yorkshire Chief Constable. But unfortunately, this has not meant that innocent peoples’ DNA samples collected prior to the ECtHR judgment or during the consultation process (or even after for that matter) have been removed from the NDNAD upon request. According to Mahy what has been happening in the U.K. is:

‘…that the Government, the Home Office, have been telling forces to send a standard letter out to people who have requested destruction of their samples, saying that the law and policy in the U.K. has not changed and therefore they would have to wait for a change in the law or policy. And that is what the majority of the people get. And I guess for people who cannot afford to pay privately or eligible for legal aid, they think that that is it, and they do not know any different. We have had quite a lot of clients who have come to us about their situation and we have been challenging it and to date all of our clients

44 Genewatch UK, Home Office DNA consultation (2009) <http://www.genewatch.org/sub-564539> at 22 October 2009: ‘[t]he proposals in the consultation have been widely criticised for allowing the Government to keep the DNA profiles and fingerprints of innocent people for six to twelve years after they were arrested. Under these plans, people who are rearrested and found innocent again would have to wait another six to twelve years before their database records are deleted.’


46 ACPO, ACPO comment on consultation of DNA Database (7 May 2009) <http://www.acpo.police.uk/pressrelease.asp?PR_GUID=%7BB1F9EBA6-432B-45AE-AFCD-F151D621EE1E%7D> at 23 October 2009. In support of Peter Mahy’s claims is a statement made by the Association of Chief Police Officers: “[w]e hope this consultation will help to ensure that the police can continue to operate in a lawful, necessary and proportionate manner that is compliant with human rights, while protecting the public from harm. We welcome the opportunity for informed debate in public and parliament on the issues.” That is, that even after the consultation process began, fingerprints and DNA samples continued to be collected as the laws have yet to change in the U.K.
DNA samples have been destroyed and taken off but I think the problem is that the majority of people are not fully aware of their rights and are accepting what is said. They do not know how to challenge the government in what they are saying’ (Peter Mahy).

There is anecdotal evidence however to suggest that the U.K. police are paying closer attention to individual requests. Following S and Marper, Mark Thomas discussed his situation with a lawyer and a Metropolitan Police Commissioner and the request for his DNA profile to be struck off the NDNAD was fulfilled allegedly with a one line formal letter from the U.K. Police stating: ‘I can confirm that a decision has been made to delete your client’s fingerprints and DNA sample and DNA profile.’ 47 No explanation accompanied this letter. 48 The other issue related to destruction of DNA samples is the determination of a process for which samples to destroy and which to retain. 49 Will it be just those of innocents? Those of innocents under the age of 10 or 18? Or those of low-order recordable offences such as petty crimes that will be eligible to have their stored DNA samples destroyed? And when will this process take place?

While Art. 14 of the ECHR did not come into play during the ECtHR ruling, the legal counsel for Mr S and Mr Marper did rely on race and birth (i.e. age) issues to bring home their message. The solicitor for S and Marper made the discrimination argument, for instance, that there were more people with ethnic backgrounds on the NDNAD than Caucasians. They also relied on the UN Convention on the Rights of a Child and the European Court certainly saw this as a major issue and especially that children should be entitled to special consideration. 50 But in the end the ECHR did not need to rule on that matter at all, as they ruled on the importance of a right to private life. With respect to the destruction of DNA samples of innocents, Mahy spoke candidly about his personal beliefs:


48 In contrast to the Mark Thomas case, refer to David Mery, Three months on, you still can’t get off the DNA database: Carry on sampling... (2 March 2009) The Register <http://www.theregister.co.uk/2009/03/02/dna_dbase_stalling/print.html> at 23 June 2009.


50 See also, Cameron A. Price, DNA Evidence: How Reliable Is It? An Analysis of Issues Which May Affect the Validity and Reliability of DNA Evidence (1994) 2. Price provides a rich discussion on the rights of a child, and what it means for a child or guardian to consent to a sample being taken.
‘I am not sure that there is a huge difference… I think that the same rules should apply to everybody. If you are innocent, then it should not really matter what age you are, or what background you are from’ (Peter Mahy).

According to Peter Mahy, the current proposals from the Government offer the following guidelines for the retention and deletion of DNA samples and profiles and fingerprints:

‘For a serious violent, sexual or terrorism related offence, the DNA of a child would be retained for 12 years. For children between the ages of 10 and 18 years who are arrested but not convicted on one occasion, DNA is retained for 6 years then deleted on the 18th birthday, whichever happens first. And if a child is arrested on 2 occasions, their DNA is retained for the full 6 year term. So yes, a different regime for the retention of DNA for children’ (Peter Mahy).

4.2 Intangible Outcomes

Another tangible implication of the ECtHR ruling is that the judgment has created change and there is finally a great deal of debate between the parties, in the media, between NGOs, and academics. A comprehensive content analysis of the various stakeholders shows that the S and Marper v. United Kingdom case has now received the attention it deserves (Appendix 2); perhaps not S and Marper themselves but what the two gentlemen and their lawyer stood for. Mahy is realistic about what S and Marper really achieved:

‘I think in a way it has drawn a line in the sand, and hopefully in the next 10-20 years we will look back and say that was an important case. That that was a case, where we took a good look at what was going on in the U.K. and put a stop to the erosion of rights’ (Peter Mahy).

Mahy’s line in the sand metaphor is now resonating in the hearts and minds of civil liberty campaigners, who claimed victory on the 18th of October 2009 ‘after the government announced it [was] dropping current proposals to retain the DNA profiles of innocent people on the national database.’

This being the case, there is still no evidence to suggest when this practice by the police will actually begin and the process it will entail. We know from statistics quoted by the Secretary of State for the Home Department, Mr Alan Campbell, that no more than a total of

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255 subject profiles have been removed from the NDNAD between the 9 March 2009 and the 15 October 2009 (Table 3). Table 3 shows the breakdown of subject profiles that have been removed based on the exceptional case procedure from the NDNAD by U.K. Police Force. With only 40 profiles being removed monthly, it is hard to see at this rate how over 858,000 profiles of innocents will be removed. At this rate it will take the Police and innocent persons till the year 3,796 to remove profiles (1,786 years), and by then the innocents will be deceased anyway which means some profiles of innocents will remain there indefinitely. It seems that only as persons are requesting the deletion of their profiles from the chief officer responsible for a given police force, is the deletion occurring, not via a proactive approach by the Police Force to delete the profiles in one clean sweep. The Commission for Equalities and Human Rights however, is calling for Government ministers to instruct the police to immediately stop taking the DNA of innocent people.

On the optimistic side however, the Home Office has announced that its plans to keep DNA profiles of those arrested (but never convicted) from between six and twelve years depending on the seriousness of the offence have now been dropped from the policing and crime bill currently going through parliament. It has also now been confirmed that the DNA samples of children under 10 have been removed from the NDNAD but it hard to tell whether these subject profiles have been included in official counts of destruction in Table 3. Mr Alan Johnson has assured Parliament that the NDNAD will from now on be regularly monitored to confirm that this policy remains in effect.

**Table 3: Number of subject profiles removed from the National DNA Database by each police force from 9 March 2009 to 15 October 2009 (21 Oct 2009: Column 1532W)**

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53 Dayspring, above n 138.

54 Travis, above n 51.


Mahy however, is under no illusion. The S and Marper case was not the end of the DNA controversy in the U.K., but perhaps the very beginning of a new phase in the history of national criminal identification databases for the U.K., Europe and beyond. While the judgment has now well and truly entered the political debate, and the Government will have to shortly respond to the consultation submissions, there will have to be further test cases both from within the U.K. and other contracting members of the ECtHR. In strategizing about the future, Mahy is forward-looking about his plans:

‘I see the next test case could be somebody who tries to have their DNA destroyed only to be told by the Chief Constable that it cannot. At the moment the Chief Constable is relying on guidelines from 2006 which says the House of Lords ruling is the law. And I think that that is just crazy. The Government is not even taking into account the ECtHR judgment really. I think there would also be an interesting test case on whether it is lawful to take DNA on arrest given that there is no evidential threshold at that stage and I think there is going to be another test case on the issue of keeping DNA for ever and for minor crimes. I think there is going to be lots of test cases as well as the Council of Ministers driving the political debate, so altogether really’ (Peter Mahy).

Of the intangible implications of the S and Marper ECtHR judgment one can point to a long list of hopeful outcomes based on proposals submitted to the Home Office during the consultation process by a diverse range of stakeholders. Of the self-interest groups, Genewatch and Liberty have been the most outspoken on the minimal changes that must take place in the U.K. Table 4 is a five point summary of the demands made by Genewatch that are representative of the majority view of most self-interest groups lobbying for socio-ethical issues. These groups do not wish to see the abolishment of the NDNDA but they are very keen that the current laws must be revised and that more public debate is needed to determine the appropriate balance between crime detection, human rights and privacy. Liberty and other such self interest groups welcomed the decision and wished to see the removal of 858 000 profiles of innocents removed
from the NDNAD. Genewatch U.K. has provided fine details in how individuals should go about requesting the removal of their DNA from the NDNAD calling for all innocents to act:

‘[i]f your DNA is on the database you should now write to the Chief Constable of the police force that arrested you. Ask for them to remove your DNA, fingerprint and police records, and destroy your DNA sample, in the light of the judgment of the European Court of Human Rights. The judgment applies to anyone who has had charges dropped or been acquitted of a crime. But other cases (e.g. cautions, final warnings, spent minor convictions) may be arguable.’

What is clear from the ECtHR judgment is that the Court was particularly concerned about the risk of stigmatisation and the perception that the applicants were not being treated as innocent, and also about the impact on minors such as Mr S. Perhaps we see this most evidently in Mr. S who on 1 August 2009 somehow found his way back onto the NDNAD. What to make of this happenstance? Authorities would have us believe that his DNA profile perhaps should not have been removed from the NDNAD in the first place. But possibly the real answer lies in the ease with which one could find themselves on the NDNAD? Or from a deeper inquiry, Mr S has just lived up to his stigmatization of criminality? Further research inquiry would certainly have to go into the latter. In any case, when asked about Mr S’s circumstances, Peter Mahy contented yet again, that in both arrests, DNA was not required in the investigation so it should never have been collected.

| Table 4: Proposed Changes Following the S and Marper v. United Kingdom ECtHR Judgment- The Majority Representative View of Self-Interest Groups and NGOs |


59 David Barrett, Youth who had DNA wiped from database is back on list for drug crime (1 August 2009) <http://www.telegraph.co.uk/news/newstopics/politics/lawandorder/5955785/Youth-who-had-DNA-wiped-from-database-is-back-on-list-for-drug-crime.html> at 7 November 2009.

60 Genewatch UK, above n 58.
Whatever further outcomes are to be implied by the S and Marper case, time will tell as further provisions on DNA retention will soon be discussed in Parliament on the 18th November when the controversial Policing and Crime Bill will be under scrutiny. 61 Clause 96 of this Bill proposes to insert new sections into the PACE ‘…which would enable the Secretary of State to make regulations about the retention, use and destruction of material—including photographs, fingerprints, footwear impressions, DNA samples and information derived from DNA samples.’ 62 The House of Lords considered the question of retention of samples gathered during police investigations in the course of an inquiry into the constitutional framework governing surveillance 63 and concluded that

‘... DNA profiles should only be retained on the National DNA Database (NDNAD) where it can be shown that such retention is justified or deserved. We expect the Government to comply fully, and as soon as possible, with the judgment of the European Court of

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62 Ibid.

The Grand Chamber judgment has forced a belated reconsideration of the overgrown NDNAD and DNA retention laws in England, Wales and Northern Ireland. In this instance, rather than looking at models of retention abroad, the U.K. could look to align with Scotland. Beyond the implications of S and Marper in the U.K. however, we must also look at what the judgment means for the
Council of Europe member states. The Grand Chamber of the ECtHR was sending a clear message to national authorities abroad,\(^70\) and not just with respect to the collection and storage of DNA samples and profiles but also of fingerprint data in criminal identification applications. Fingerprint data because it cannot divulge sensitive genetic-based information has been somewhat ignored by the media and even the self-interest groups. This may have something to do with the widespread use of fingerprints today for international travel in electronic passports etc. Even Peter Mahy commented:

‘I do not see fingerprints as being as big an issue as DNA. I think with DNA it is the fear of future uses that worries people and people do not understand exactly what DNA is and what it could be used for. Whereas fingerprints are seen more as a signature and that less pieces could be extracted from it. But I think generally, especially with my clients, they are less concerned about fingerprints or a photograph than they are about DNA’ (Peter Mahy).

But even so, the onus is now back on the member states to provide adequate proof of their personal data collection regimes as being proportionate to the need to reduce crime.

Inevitably such realignment of DNA regulations and laws would have repercussions on new treaties, such as the European Union’s Prüm Treaty of 2005 which allows for the sharing of DNA data, fingerprint and vehicle registration data for the purpose of countering acts of terror and bringing criminals to prosecution. The Prüm Treaty was a German-led initiative to increase cross-border cooperation for the combating of terrorism, crime and illegal immigration.\(^71\) The Agreement was hastily\(^72\) signed raising fundamental

\(^70\) Heffernan, above n 25, 503: ‘…given the range and diversity of European state practice, other governments are also on notice of the need to ensure that they meet the rigorous standards for the protection of personal information set down by the Court. By setting a relatively low threshold for an interference with the right to respect for private life under Art.8 para.1, the Court has placed the onus squarely on national authorities to monitor compliance with the Convention and justify any encroachment as proportionate to society’s interest in the prevention of disorder and crime.’

\(^71\) Council of the European Union, Prüm Convention between the Kingdom of Belgium, the Federal Republic of Germany, the Kingdom of Spain, the French Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands and the Republic of Austria on the stepping up of cross-border cooperation, particularly in combating terrorism, cross-border crime and illegal migration (7 July 2005) <http://register.consilium.europa.eu/pdf/en/05/st10/st10900.en05.pdf> at 22 June 2009.
questions over the main provisions of the Treaty which focused on reciprocal access of Member States to national databases containing biometric data (such as DNA profiles and fingerprints), and vehicle registration data. Despite, little time being dedicated to debating the contents of the Agreement, by June 2007 the provisions had found their way into the legislative framework of the European Union. Even the United Kingdom reluctantly signed the Convention. In provisions in Chapter 2 of the Prüm Treaty, it is written that contracting parties must ensure both availability and access to data such as DNA identifiers through automated online searches. Art. 2(1) states that: ‘Contracting Parties shall ensure the availability of reference data from their national DNA analysis files’ and that ‘[r]eference data shall only include DNA profiles established from the non-coding part of DNA and a reference.’ It is clear that the reference data must not contain any information that can identify the subject but it still does build on a great number of attributes (compare for instance the Schengen Information System (SIS) dataset with the Prüm Treaty additional attributes in Table 5). What implications does this have for the U.K. NDNAD? If the DNA profiles of innocents continue to be stored on the NDNAD, then it is quite possible that the risk associated with a false hit on these profiles is not merely, national, but now European Union-wide.

**Table 5: Personal and Biometric Data Collected of Criminals Stored on the SIS and Prüm Treaty Mechanism that can now be Shared between Contracting Parties of the EU**

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<table>
<thead>
<tr>
<th>Schengen Information System (SIS) Data</th>
<th>Prüm Treaty Data Additions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Person-specific Data:</strong></td>
<td><strong>Person-specific Data:</strong></td>
</tr>
<tr>
<td>Surnames, aliases, physical characteristics not subject to change, date and place of birth, sex, nationality, whether persons concerned are armed or violent, reason for alert, action to be taken</td>
<td>Biometric data including DNA and fingerprint (dactyloscopic) data identification patterns</td>
</tr>
<tr>
<td><strong>Object/Vehicle-specific Data:</strong></td>
<td><strong>Cross-border Flows:</strong></td>
</tr>
<tr>
<td>Stolen motor vehicles, firearms which have been misappropriated, blank official documents which have been stolen, issues identity papers which have been stolen and suspect banknotes.</td>
<td>Cross-border access to data subject to the principle of availability</td>
</tr>
<tr>
<td><strong>Hot Pursuit:</strong></td>
<td></td>
</tr>
<tr>
<td>In urgent situations, officers from one Contracting Party may, without another Contracting Party’s prior consent, cross the border so that they can take provisional measures necessary to avert imminent danger to the physical integrity of people.</td>
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</tr>
</tbody>
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### 5 Conclusion

Reflecting on the complexity of changes to national laws and supranational laws and these contending with conflicting conventions at the EU and CoE levels, we can only come to the conclusion that the road ahead will be increasingly challenging for law enforcement agencies, governments, and citizens in the EU especially. If S and Marper achieved anything of long-standing acclaim, it was in the words of Liz Heffernan, a

‘tightening in the governance of the flourishing phenomenon of criminal databasing across Europe… S and Marper v United Kingdom is a telling reminder that a careful watch must be maintained to ensure that the gradual extension of databasing programmes, with associated increases in police powers, does not infringe protected rights and freedoms.’

The ECtHR highlighted the major responsibility placed on nations like the U.K. and the U.S. who are leading in the development of new technologies and innovations as applied to crime. What is clear from our experience of fingerprints is that if we do not protect the rights of citizens from the encroachment of biometrics (including DNA) in applications like border control, or other aspects of

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76 Heffernan, above n 25, 503-4.
social life such as employment and health insurance, then we will almost certainly find ourselves living in a world portrayed in the realms of *Gattaca.* For Heffernan, this is not just an accidental occurrence, it is technological intervention creeping into social life, ‘gradually, incrementally, but deliberately, increased over time.’ The concept is not new in the field of information systems development. The idea is known as “function creep”, the way in which information that has been collected for one limited purpose is gradually allowed to be used for other purposes which people may not approve. And it is here where the interplay between science, law and society will inevitably see a great deal of new research being conducted.

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77 Price, above n 29, 39. ‘There is growing concern in the USA about the intrusive requests by employers and insurance companies for DNA tests as a prerequisite for one to be hired or insured. The rationale for the requests is based on the financial risks that are assumed by both employers and insurance companies, both often in the field of pension benefits. Insurance companies have always been entitled to require applicants to undergo medical tests before an insurance proposal is accepted, accepted with conditions, or declined. Some of their newer medical questions over the last ten years have been directed at lifestyle habits which could indicate an increased likelihood of exposure to AIDS. Because premiums are calculated actuarially from life expectation tables, any undue exposure to high risks reflects in increased premiums, or lower bonuses, for all policy holders. Consequently there has been only muted objection to the direction taken by insurance medical questionnaires.’


