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Biometrics, international migrants and human rights

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Global Commission on International Migration

In his report on the 'Strengthening of the United Nations - an agenda for further change', UN Secretary-General Kofi Annan identified migration as a priority issue for the international community.

Wishing to provide the framework for the formulation of a coherent, comprehensive and global response to migration issues, and acting on the encouragement of the UN Secretary-General, Sweden and Switzerland, together with the governments of Brazil, Morocco, and the Philippines, decided to establish a Global Commission on International Migration (GCIM). Many additional countries subsequently supported this initiative and an open-ended Core Group of Governments established itself to support and follow the work of the Commission.

The Global Commission on International Migration was launched by the United Nations Secretary-General and a number of governments on December 9, 2003 in Geneva. It is comprised of 19 Commissioners.

The mandate of the Commission is to place the issue of international migration on the global policy agenda, to analyze gaps in current approaches to migration, to examine the inter-linkages between migration and other global issues, and to present appropriate recommendations to the Secretary-General and other stakeholders.

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Potential contributors to this series of research papers are invited to contact the GCIM Secretariat. Guidelines for authors can be found on the GCIM website.

Introduction

Heightened security concerns arising from the growth of transnational crime and terrorism have in recent years led to increased interest and research into the potential of biometric technology. Although biometric data has long been used in the realm of criminal proceedings, involving the use of fingerprinting, photographic images and DNA, it is increasingly being seen by governments and businesses as a way of ascertaining individual identity with far greater precision and efficacy, providing more secure checks on access to both virtual and physical spaces.

The technology associated with this debate relies on a template taken of the unique biological makeup of each individual as a means of authentication and/or verification, the former being, in simple terms, whether a person is who he claims to be, while the latter entails the identification of one person from among many.

Biometric 'identifiers' may be based on either physiological patterns such as fingerprint or hand geometry verification, (as well as iris, face or voice recognition, even ear shape recognition and body odour detection) or behavioural patterns such as hand-written signature verification, keystroke or gait analysis.

The actual process of biometric identification first entails the collection of the 'raw biometric data' (a process known as 'enrolment')¹, through a fingerprint, iris scan or photographic image. This data is then processed into a form known as a 'template', which may be stored either in the memory of a biometric device, in a centralized database or in a 'smartcard' device carried by the end user and through which a reading is made possible via a contactless integrated circuit chip also called RFID (Radio Frequency Identification). The particularity of biometrics is therefore their quality as a unique, permanent and universal imprint of a person's identity.

The future of biometrics is certainly not restricted exclusively to travel and identity documents, but indeed extends into commercial and other private sector areas. Spain has commenced a national fingerprint system for unemployment benefits and healthcare entitlements, Russia has announced plans for a national electronic fingerprint system for banks, Jamaicans are required to scan their thumbs into a database before qualifying to vote in elections, and in France and Germany, tests are under way with equipment that puts fingerprint information onto credit cards. Biometrics have even been used for humanitarian ends by UNHCR to assure the equal distribution of emergency supplies to refugees in Afghanistan.² Nevertheless, the incorporation of biometric technology into travel and other identity documents is likely to have a crucial impact on migrants, a people defined by their very movement across borders. Furthermore, the motivation behind the development of biometrics in this area is driven largely by a desire to tackle illegal migration and it is these consequences that we are to consider in this paper.

¹ The terminology 'enrolment' is criticized by some civil liberties groups as suggesting the process is a voluntary one, which, once legislation requiring biometric documents is in force, is not the case. See Statewatch: "*The Road to 1984* part II", EU available at <<http://www.statewatch.org/news/2004/feb/26eu-biometric-passports.htm>>

² See Privacy International.org, 'Biometrics', available at <<http://www.privacyinternational.org/survey/phr2003/threats.htm# Biometrics>>

³ See "*Prepare to be scanned*", The Economist, (4 December, 2003) Available at <http://www.economist.com/science/tq/displayStory.cfm?story_id=2246191>

Biometrics and border controls

The use of biometric technology in passports, visas and residence permits has been hailed by its advocates as a way of ‘filling the gaps’ in traditional methods of border control. Several legislative and policy measures have been adopted at national, regional and international level to incorporate ‘biometric identifiers’ into ‘machine-readable’ travel documents, and identity cards.³

Among the most significant legislative developments are the USA’s Enhanced Border Security and Visa Entry Reform Act⁴ which makes the presentation of machine-readable, biometric travel documents at border entry points mandatory for countries requiring an entry visa, as well as the 27 countries who previously benefited from a visa-waiver exception,⁵ as well as monitoring entry and exit movements on US territory through ‘enrolment,’ (a photograph and inkless fingerprint scan will be taken at arrival and departure, to verify identity and to check against watch lists). This latter measure, introduced subsequent to the United States Visitor and Immigrant Status Indicator Technology programme (US-VISIT), is due to be fully implemented at every land, sea and air border by 2005, although will be phased-in gradually. Registration initially focused only on men of 16 years or older and who it is determined may represent a potential national security threat,⁶ but now includes, (as of September 30, 2004), all EU travellers⁷.

The UK has announced the introduction of similar measures, to be fully effective by 2008, under the ‘eborders’ scheme which uses on-line technology and advance passenger information provided by airlines before arrival to screen and record individuals as they enter and leave the UK.⁸

These measures follow the recommendations of the ICAO, a UN specialized agency that in May 2003 advocated the adoption of biometric data into machine-readable travel documents by member-states.

⁴ Machine-readable documents hold identification details (including photograph or digital image) as well as two-line machine readable zone holding biographical data. This data is standardized so that it can be read by all other countries issuing the same type of document. Currently, 110 states have, or have plans to have machine readable travel documents. See ICAO, MRTD Overview, available at <<http://www.icao.int/mrtd/overview/overview.cfm>>

⁵ H.R 3505 The *Enhanced Border Security and Visa Reform Act* (Section 303) (which builds on the provisions of the *USA Patriot Act*), came into force in May 2002. Available at <<http://travel.state.gov/visa/state093239.html>>

⁶ *Visa Waiver Permanent Program Act of 2000*. Applies to Andorra, Austria, Australia, Belgium, Brunei, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom (For citizens with the unrestricted right of permanent abode in England, Scotland, Wales, Northern Ireland, the Channel Islands and the Isle of Man.) Failing possession of such a document, (and unless the passport was issued prior to the deadline set at 26 October 2004), the traveller must be in possession of a tourist or short-term visa.

⁷ See Department of State website, *Destination USA*, available at <http://www.unitedstatesvisas.gov/visapolicy/procedures_cont.html#different> and Department of Homeland security website, Travel and transportation, available at http://www.dhs.gov/dhspublic/interapp/content_multi_image/content_multi_image_0006.xml

⁸ Except those with a diplomatic passport, children under 14 and those over 79 years of age. See Justice and Home Affairs, available at <http://www.useu.be/Categories/Justice%20and%20Home%20Affairs/Index.htm>

⁹ See Home Office Press Release, ‘*Cutting edge technology to secure UK borders*’ (3 December, 2004), available at http://www.homeoffice.gov.uk/n_story.asp?item_id=1085

In Europe, the adoption of a ‘coherent approach’⁹ to travel documents has led to a decision (in the form of a Regulation, leaving no discretion to member states) to incorporate biometrics into visas and residence permits for third country nationals, and the decision to extend this to EU passports looks likely to be adopted by the end of the year.¹⁰ Despite increasing willingness on the part of a number of EU states to accelerate the introduction of biometrics, notably those of the G8, accelerated since the Madrid bombing, the question had been postponed amidst concern that the US decision was propelling the adoption of such measures, before thorough checks and balances had been put in place.¹¹

It should be noted that the EU Regulation on visas and residence permits has already caused some controversy within the EU, since it runs expressly counter to article 18 of the Nice Treaty, (providing that the Commission's powers to act to promote freedom of movement "shall not apply to provisions on passports, identity cards, residence permits").¹² To circumvent this, the EU has considered these measures as an extension of the Schengen acquis, and therefore forming part of evolution of ‘standards and procedures’ at external border controls.¹³

At National level, a number of policy initiatives have been taken to use biometrics for border control purposes. Pilot projects have been undertaken, such as that at Schipol airport in the Netherlands in 1992, the use of ‘smartgate’ technology in Sydney or the UK’s Iris Recognition Immigration System (IRIS), tried at Heathrow airport in 2002 to name but a few examples.

Furthermore, (and doubtless in large part due to the now delayed October 26 2004 deadline for visa-waiver countries to the US to introduce biometric machine-readable travel documents,)¹⁴ a number of countries in Europe and Asia have made a commitment to introduce biometric passports, as early as 2005, (Denmark will likely be the first, although Italy looks likely to have its passports ready by the 2004 deadline followed by Belgium, Switzerland, the UK and

¹⁰ “A coherent approach is needed in the EU on biometric identifiers or biometric data for documents for third country nationals, EU citizens’ passports and information systems (VIS and SIS II)” Thessaloniki European Council of 19/20 June 2003

¹¹ See Council of the European Union, “Draft Council Regulation on Standards for Security Features and Biometrics in Passports and Travel Documents issued by Member States”, 2004/039 (CNS) (Brussels: The European Council,

¹² November, 2004) available at <<http://www.statewatch.org/news/2004/nov/biometric-proposal.pdf>>. The Council has recently requested Parliament to use its “urgency” procedure to pass this regulation, both to comply with the Action Plan timescales which states the measures were to be implemented by the end of the year, and in order to be in compliance with US border control timescales. See Statewatch, (online) “EU governments demand that the European Parliament rushes through mandatory finger-printing and biometric passports” (25 November, 2004) available at <<http://www.statewatch.org/news/2004/nov/10biometric-rush.htm>>

¹³ See ‘Biometric passport delayed’, Eurosource, EUPolitix.com, (6 April, 2004), available at <<http://www.eupolitix.com/EN/LegislationNews/200404/2fe7f5db-acf2-421b-b51c-127fa6e7dc76.html>>

¹⁴ See Treaty of Nice, Amending the Treaty on European Union, the Treaties establishing European Communities and Related Acts, (2001/C 80/01), available at <http://europa.eu.int/eur-lex/en/treaties/dat/nice_treaty_en.pdf>

¹⁵ The legal basis is article (62)(2)(a) Treaty of European Communities. See “Proposal for a Council Regulation on standards for security features and biometrics in EU citizens’ passports” (23 February, 2004) available at <<http://register.consilium.eu.int/pdf/en/04/st06/st06406-re01.en04.pdf>>

¹⁶ This deadline was postponed until 2005 in May of this year, although its initial effect in propelling countries to come into line with the US biometrics standards is already underway. See *US Delays Biometric Passport Deadline until 2005*, (10 August 2004) available at <<http://consular.usembassy-israel.org.il/publish/press/2004/august/081102.html>>

Netherlands, Italy, Germany, Japan and Australia), while others are already incorporating biometric identifiers into their visa requirements.

The UK Visa Immigration and Asylum Application (VIAFS) programme imposes biometric fingerprinting from visa applications from Sri Lanka as well as five east African countries, (Djibouti, Eritrea, Tanzania, and Uganda, following false claims for asylum from these countries).¹⁵ France has also introduced fingerprinting for tourist visa applicants, while such measures are currently under consideration in Germany.¹⁶

What biometric?

The ICAO advocates facial recognition as the primary, and fingerprints as the secondary preferred biometric identifier.¹⁷ This choice of identifier was premised largely on the basis of the need for global interoperability, the familiarity with more traditional methods and the political controversy surrounding newer technologies. Iris scans were considered potentially socially unacceptable, and presented intellectual property problems not encountered with facial recognition.¹⁸

The US had also advocated the use of facial recognition as the primary biometric identifier, but has effected a recent U-turn on this matter, now preferring fingerprint analysis, on the basis of the greater availability of fingerprint records.¹⁹ Europe advocates two mandatory biometric identifiers, facial recognition and fingerprints (with iris scans possibly being introduced

¹⁷ See eGovernment News, “Increased use of Biometrics to tackle immigration abuse,” (21 January 2004) available at http://www.homeoffice.gov.uk/n_story.asp?item_id=776. See BBC News World Edition “France to Fingerprint Tourist Visa Applicants,” (30 April, 2004) available at <http://news.bbc.co.uk/2/hi/europe/2989637.stm>, and eGovernment News, ‘Germany weighs biometrics registration options for visa applicants’ (1 July, 2003) available at <http://www.migrationinformation.org/Feature/display.cfm?id=141>

¹⁸ See BBC News World Edition “France to Fingerprint Tourist Visa Applicants,” (30 April, 2004) available at <http://news.bbc.co.uk/2/hi/europe/2989637.stm>, and eGovernment News, ‘Germany weighs biometrics registration options for visa applicants’ (1 July, 2003) available at <http://www.migrationinformation.org/Feature/display.cfm?id=141>

¹⁹ “Accelerating a Worldwide Approach to Biometric Identity Confirmation in MRTD’s as the Key Token of Entitlement for Simplified Passenger Travel” (Facilitation (FAL) Division), Twelfth report, Cairo, Egypt, 22 March 2004 to 2 April 2004 Available at http://www.icao.int/icao/en/atb/fal/fal12/documentation/fal12ip007_en.pdf,> see also *The Biometric Deployment of Machine Readable Travel Documents*, ICAO TAG MRTD/NTWG Technical Report, May 2004, available at <http://www.icao.int/mrtd/download/documents/Biometrics%20deployment%20of%20Machine%20Readable%20Travel%20Documents%202004.pdf> >.

²⁰ Facial recognition generally refers to a three dimensional image, and may be obtained via several methods such as feature analysis, neural network, automatic face processing or *eigenface*. See ‘Advanced Biometrics technologies: What is biometrics’, available at <http://www.abtbiometrics.com/facial.html> < Iris scans should not be confused with retinal scans, considered far more invasive.

²¹ See Department of Homeland Security Press Room available at <http://www.dhs.gov/dhspublic/display?content=736>.

voluntarily at a later stage), for both visas and residence permits, as well as for future biometric passports.²⁰

It is worth noting that this decision has been staunchly opposed by certain civil liberties groups, for the lack of debate surrounding the decision to include two rather than one mandatory biometric (this decision was taken in private by the Justice and Home Affairs Council and not considered sufficient grounds for renewed debate before Parliament²¹), the legal basis for such inclusion (as above), the lack of data protection to cover such measures and the still problematic technologies associated with biometrics.

Interestingly, with regard to the ICAO's decision, the United Arab Emirates, having adopted biometrics at its borders to prevent expelled foreigners re-entering the country, determined that iris recognition technology was the only technology that produced a single-person match in a sufficiently short period of time to meet its needs.²²

Nevertheless, the technology is constantly evolving, and recent research has shifted its focus to multimodal biometric identifiers as well as vein prints from the veins on the back of the wrist, bones in the finger, facial thermograms and the bones in the inner ear. Neither Europe nor the US have ruled out incorporating such 'enhancements' as the technology evolves,²³ but for the meantime multimodal identifiers present overly excessive overhead costs to be a realistic option.²⁴

Storage of biometric information

One of the more controversial aspects of biometric technology is the retention of such information once it has served its initial purpose. EU legislation leaves it up to member states to decide how such information will, if at all, be stored nationally, leaving open the possibility of public/private collaboration. Centralized national databases have been established in the UK, US and also region-wide in Europe, logging biometric information pertaining to specific groups, obtained at, or prior to crossing the border. In the UK, asylum seekers, as well as those refused

²² See "Future EU passports to include fingerprint scans", EUROPE IDA eGovernment News, (27 October, 2004), available at <<http://europa.eu.int/ida/en/document/3421/5640>>

²³ Prior to the Council's decision, only facial recognition was to be mandatory, leaving it to each state's discretion to include a second identifier. The Council's argument supporting inclusion of fingerprints suggests the necessity to be in line with US guidelines, themselves premised on the ICAO's recommendations. There is some confusion here though since the ICAO proposes only facial recognition, leaving the choice as to other identifiers up to each member state. See Statewatch, Privacy International, European Digital Rights, 'An Open Letter to the European Parliament on Biometric Registration of All EU Citizens and Residents' (26 November, 2004) available at <<http://www.privacyinternational.org/article.shtml?cmd%5b347%5d=x-347-85336&als%5btheme%5d=National%20ID%20Cards>>

²⁴ See Kochems, A, Rosenzweig, P, Schwatz, A, "Biometric Technologies: Security, Legal, and Policy Implications" (21 June, 2004), available at <<http://www.heritage.org/Research/HomelandDefense/lm12>>.

²⁵ See Department of Homeland Security (online), Travel and Transportation, "US-VISIT programme" (n.d) Available at <http://www.dhs.gov/dhspublic/interapp/content_multi_image/content_multi_image_0006.xml>

²⁶ EUROPA, IDA, eGovernment News, "Concerns over maturity of biometric technologies for citizen identification are growing", (8 December, 2003) available at <<http://europa.eu.int/ida/en/document/1862/355>>

entry and other 'immigration offenders' have their fingerprints taken and logged onto a national database or smartcard, information which is then transferred to a European-level database on asylum seekers in Luxembourg.²⁵

Third country national visa applicants to Europe have their biometric details logged on to the European Visa Information System (VIS) - irrespective of whether the visa was issued or the application refused - a system that will operate in parallel with the updated Schengen Information System (SIS II), the EU database of wanted persons. The VIS is expected to be up and running by 2007 although it is as yet unclear whether SIS II will also log information gathered by the VIS on third country nationals.

Finally, should Europe adopt biometric passports, it seemed likely, until recently, that a centralized 'passport register' of fingerprints and photographs would be created to store this information and make it accessible across the EU.²⁶ However, a recent report by the European Parliament has made an amendment to this proposal on the basis that it contravenes the purpose and principle of proportionality".²⁷

In the US, visa applicants details are logged on to the US Automated Biometrics Identification System (IDENT)²⁸ database prior to entry, details which are then retained for verification purposes at border checks under the entry-exit scheme. This system was created in 1994 and widely deployed from 1997 to 1998, and at its outset contained a recidivist as well as lookout database tracking all foreign nationals apprehended by the INS.

The implications of biometrics

The stated objectives of biometric verification and identification, at least as concerns border controls, are multiple. Advocates point to a more efficient, secure and expeditious procedure; the screening of low-risk passengers frees up resources to focus on priority areas, allowing registered frequent travelers to pass through an expedited airport control procedure,²⁹ airport security is improved, congestion reduced, and fraudulent attempts to pass border controls minimized.

²⁷ The EURODAC database came into operation in January 2003 and has been heralded a success after identifying 7% of multiple asylum claims within its first year of activity. See "EURODAC detects 7% of multiple asylum applications during its first year of activity," (5 May 2004) available at <<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/581&format=HTML&aged=0&language=EN&guiLanguage=en>>. In practice, 90% of those whose fingerprints are taken are asylum seekers. See ICAO 12TH Session 22 March – 2 April 2004, Biometrics, Presented by the European Civil Aviation Conference (ECAC) available at <http://www.icao.int/icao/en/atb/fal/fal12/documentation/fal12ip002_en.pdf>

²⁸ See Statewatch (online) 'EU: Compulsory Fingerprinting for all passports', available at <<http://www.statewatch.org/news/2004/oct/10eu-biometrics-fp.htm>>

²⁹ See Final Report on the Proposal for a Council Regulation on standards for security features and biometrics in EU citizens passports, Committee on Civil Liberties, Justice and Home Affairs, 28 October, 2004 (COM(2004)0116 – C5-0101/2004 – 2004/0039(CNS)), A6-0028/2004, available at <<http://www2.europarl.eu.int/omk/sipade2?PUBREF=-//EP//NONSGML+REPORT+A6-2004-0028+0+DOC+PDF+V0//EN&L=EN&LEVEL=2&NAV=S&LSTDOC=Y>>

³⁰ See Wolfsdorf, B, and Walsh, T, "Biometrics is coming" (n.d) *Immigration Daily*, available at <<http://www.ilw.com/lawyers/articles/2004.0610-Wolfsdorf.shtm>>

³¹ Such systems have been adopted in the US, Canada, Australia and the UK, for example, INSPASS, SENTRI and DLC in the States, the Canadian equivalent, CANPASS and the UK Automated Border Entry System (IRIS).

Yet it is in their capacity as a tool for border and immigration controls that biometrics have really caught the attention of governments. It is interesting to note that while biometric information has made its way into travel documents regulating border movements (mostly visas and third country resident documents), there is still considerable opposition to the inclusion in national identity cards of such information, betraying perhaps a real double-standard in terms of privacy rights as between nationals and non-nationals.³⁰

In the fight against illegal migration, biometric identifiers certainly present a number of advantages. They may, for example, help facilitate return procedures of failed asylum seekers. Under international law, since states cannot deport individuals without knowing their country of origin, many asylum seekers, both genuine and 'false' will have lost or destroyed their travel documents upon arrival. States of origin may then use this uncertainty about the background of failed asylum seekers to justify a refusal to accept the return of their citizens.³¹

Furthermore, by tracing asylum seekers' various attempts at obtaining asylum, biometrics stored on the EURODAC database operate 'as a frontline asylum management tool' to prevent multiple asylum claims, and 'visa' shopping, in line with the Dublin II regulation.³² Under this regulation, criteria are established allocating responsibility for examining an asylum application to the Member State responsible for the entry or residence of the asylum-seeker. That Member State must examine the application in accordance with its national law and is obliged to take back applicants who are irregularly in another Member State.

On the other hand, in principle, even 'regular' migrants and genuine asylum seekers, it is suggested, will benefit from the new technology. A unique and permanent biometric profile will ensure more objective and efficient border controls, the question of identity being removed from the individual assessment of border guards to a neutral automated procedure. Asylum-seekers can provide credible, immutable evidence of their claim; traffickers will be hindered in their attempts to use false identities³³; and the knock-on effect of increased confidence in border security and immigration controls, enabled by the availability of reliable and accurate data should

³² See for example, the current explosive debate in the UK surrounding the introduction of 'entitlement cards'. See Privacy international (online) "*UK ID card moving forward despite significant opposition*", (27 October, 2004) available at <<http://www.privacyinternational.org/article.shtml?cmd%5b347%5d=x-347-79542>>, JCWI "*Statement of the Joint Council for the Welfare of Immigrants on the identity card bill, announced in the Queen's Speech this afternoon*", (23 November, 2004) available at <<http://www.jcwi.org.uk/newsitems/35idcard.pdf>>, *Blair ID card trashed at public meeting*", (21 May, 2004), available at <<http://www.privacyinternational.org/article.shtml?cmd%5b347%5d=x-347-50948>>

³³ See "*Germany Weighs Biometric Registration Options for Visa Applicants*," Oezcan, V, Humboldt University, (1 June, 2003)

³⁴ See EUROPA, Press Releases, "*EURODAC detects 7% of multiple asylum applications during its first year of activity*," (5 May, 2004) Available at <<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/581&format=HTML&aged=0&language=EN&guiLanguage=en>>

³⁵ Computerized National Identity Cards (CNICs) and machine-readable passports have been introduced recently to check the menace of human smuggling and trafficking. See IRIN News Reports, "*PAKISTAN: IOM developing strategy to counter human trafficking*", (25 November, 2004), available at [Http://www.irinnews.org/report.asp?ReportID=44344](http://www.irinnews.org/report.asp?ReportID=44344)

also help reduce or dispel the myths and stereotypes associated with asylum seekers and migrants, and upon which many of the problems of xenophobia, racism and discrimination feed.

Finally, it is argued that biometrics serve to enhance rather than ebb away at individual privacy, preventing identity theft and providing increased anonymity for the user. Rather than revealing the personal details about the traveler found on a passport, an automated process will simply check that the codified data encrypted on your travel document corresponds to that provided at the border check.

However, biometrics raise a number of controversial issues, calling into question the relation between the state and the individual in general, and the discriminate effects felt by migrants in particular, the primary ‘targets’ of such measures. (Certainly biometrics are designed to benefit other groups such as frequent travelers, but these advantages are less cause for controversy being based on the more voluntary ‘surrender’ of biometric information.)

The discriminatory effects of biometrics

Existing evidence demonstrates that migrants from third world countries are more likely to fall into the category of groups requiring visas for entry, and in the current political climate bent on tighter security and in fear of terrorism, certain ethnic groups, and nationals are deliberately targeted by immigration controls. The UK visa application system discriminates against asylum seekers and, (albeit on the grounds of previous false asylum claims from this area), applicants from east African countries, while the United States National Security Entry-Exit Registration System (NSEERS) was designed with a deliberate ‘focus’ according to which it has been shown to disproportionately target Arab and Muslim applicants.³⁴

Such measures apply within as well as at the borders, and according to one source, “the evidence from the identity card countries in Europe is that police and immigration officials in those countries check the identities of people from ethnic minorities disproportionately”.³⁵ A recent study has demonstrated that police identity checks give rise to the highest incidences of police violence, racist and xenophobic remarks and that these checks (and thus police violence) are disproportionately targeted against foreigners or those who may be perceived to be foreign.³⁶

³⁶ See “*Testimony of Susan Martin, Director Institute for the Study of International Migration*”, Georgetown University, To the Subcommittee on Immigration, Border Security, and Claims Judiciary Committee, House of Representatives, (16 October 2003) available at <<http://www.house.gov/judiciary/martin101603.pdf>>. NSEERS, or the National Security Entry Exit Registration was a pilot project focusing on a smaller segment of the non-immigrant population deemed to be of risk to national security. The NSEERS system was introduced at all ports of entry on October 1, 2002, and involved the registration of nearly 82,000 male immigrants and visitors from predominantly Muslim countries, leading to possibly 13,000 deportations. US-VISIT has since merged NSEERS and SEVIS, (the Student and Exchange Visitor Information System, designed to track the nearly one million foreign students in the US). See Privacy International, “*Threats to Privacy*”, PHR2004, (12 November, 2004), available at <[http://www.privacyinternational.org/article.shtml?cmd\[347\]=x-34782586&als\[theme\]=Privacy%20and%20Human%20Rights&headline=PHR2004#_ftn33](http://www.privacyinternational.org/article.shtml?cmd[347]=x-34782586&als[theme]=Privacy%20and%20Human%20Rights&headline=PHR2004#_ftn33)>

³⁷ Beck, A, Broadhurst, K, “*Policing the community: the impact of national identity cards in the European Union*”, *Journal of Ethnic and Migration Studies*, Vol.24, No. 3, 413-431, (July 1998)

³⁸ See ‘*Les étrangers sont les premières victimes des violences policières*’ *le Monde* (3 December, 2004), available at <<http://www.lemonde.fr/web/article/0,1-0@2-3226,36-389586,0.html>>

Furthermore, the cost, not to mention the complexity of biometric travel documents (particularly visas and residence permits which, as noted above, are required disproportionately from migrants of south-north flows) is likely to be a prohibitory factor for many migrants. Researchers in the science and technology fields of the US are already complaining that people are turning elsewhere for opportunities where they will be subject to less onerous visa requirements.³⁷ Further on the question of costs, admitting that biometrics do function effectively as a border control tool, the elevated costs of biometric scanning and reading equipment will perpetuate the inequality between the more technologically advanced countries, and less developed ones, leaving the latter more exposed (insofar as there exist less efficient border controls) to immigration, while making the borders of the north ever more impenetrable.³⁸

In addition to the above concerns, the actual retrieval, storage and use of biometrics has raised considerable resistance on the part of civil rights activists, and it is legitimate to question whether migrants will not be equally, if not more susceptible to the rights infringements feared as a consequence of biometric technology.

Enrolment, storage and processing – a threat to individual liberties?

Firstly, for many ordinary people, the very act of taking fingerprints is an attack on the right to privacy, a right upheld in much state legislation including the European Convention and Charter of Fundamental Rights of the European Union; the UN Declaration of Human Rights; the UN General Assembly's Guidelines on Computerized Data Files; the ICCPR; and US Supreme Court rulings.³⁹ Looking at this issue more closely, the argument follows that the very 'enrolment' of biometric information for essentially 'administrative' purposes, is a violation of physical integrity, and the right to private life.

As far as migrants are concerned, this argument may assume increased importance for cultural or even hygiene reasons, (the touching of fingerprint scanners for example, particularly sensitive since the SARS outbreak), some cultures being particularly sensitive to such information being obtained, the process by which it is obtained, or the implications of such a procedure, the stigma of criminal activity that is attached to fingerprints for example.

Furthermore, for asylum seekers, those persons fleeing their country for fear of persecution and who may have an acquired distrust of authority, such a procedure may not only be objectionable in principle, but may amount to a terrifying and traumatic experience.

³⁹ 25 US Science Organisations complained in May 2004 that new US visa rules are curbing the entrance of foreign students and scientists, especially from China. Foreigners must pay a nonrefundable \$100 visa application fee, and another \$100 to register in the Student and Exchange Visitor Information System (SEVIS), the US database that tracks them while they are in the US. See Migration News, Border, Interior, Visa, available at <http://migration.ucdavis.edu/mn/comments.php?id=3019_0_2_0>

⁴⁰ German estimates suggest the introduction of biometric ID cards and passports could cost up to 700m euros. See EUROPA IDA, eGovernment News, "Introduction of biometric ID cards and passports to cost up to EUR 700m in Germany", (18 November, 2004) available at <<http://europa.eu.int/ida/en/document/3495/194>>

⁴¹ The right to privacy is upheld under; Article 8 of the European Convention and of the Charter of Fundamental Rights of the European Union; Article 12 of the UN Declaration of Human Rights; under the UN General Assembly's Guidelines on Computerised Data Files; Article 17 of the ICCPR; and under the 9th amendment in US Supreme Court rulings.

Finally, for migrants, whose rights are often considered exclusively in proportion to their legal status, this issue is equally, if not more important, (by virtue of their particular vulnerability), to them as to any other traveler. If such measures present a risk to an individual's private life, or are considered illegitimate or disproportionate to the ends sought,⁴⁰ then it can certainly be argued that migrants are deserving of particular protection in such circumstances.

So not only is the right to private life of migrants and asylum seekers particularly jeopardized by the use of biometrics, but they may be particularly sensitive to such measures, necessitating particular forms of protection.

Processing and "function-creep"

Secondly, the low-level intrusiveness of such technology, it is suggested, invites a situation whereby the end-user is screened without his knowledge, leading to the further use of personal information, not foreseen, nor consented to at the time of enrolment (known as 'function-creep').⁴¹ This problem is only likely to be exacerbated by the use of contact-less RFID chips, such as those to be incorporated in the new US passports, containing biometric information and which may be read through a wallet, pocket or backpack at a distance of up to 20 metres by anyone with an appropriate reading device, a process called skimming.⁴²

With interoperability this potential for 'function-creep' grows ever stronger, and "could lead to detailed profiles of an individual's habits both in the public and in the private sector".⁴³ This problem has already come to light with the occurrence of advanced passenger screening programmes, undertaken in Australia, Canada, the US and the UK. Such programmes, in themselves controversial, (the European Article 29 Working Party on Data Protection tried to reject US proposals to submit such information exchanges, rejecting both the amount of data and the length of time it was to be retained) involve private air companies obtaining and passing on significant passengers details prior to arrival.

Another downside to global interoperability is the spiny question of who maintains authority over the data once it is transferred? Given the extensive movement of information, whether to private companies or other state authorities, that potentially may take place, this is an issue that deserves clearer regulation.

⁴² Legitimacy and proportionality are the benchmarks of 'legality' where measures involving breaches of privacy are involved.

⁴³ Guidelines on the subject recommend that the end-user should be at all times informed of the identity and purpose of controller, unless in exceptional cases of public interest. See UN General Assembly Guidelines to Computerised Data Files 1990, Article 3, and EC Directive 95/46/, Article 6.

⁴⁴ Figueiredo, J "Dutch EU parliamentarian raises privacy concerns over passport chip" (24 September 2004) available at <http://www.dmeurope.com/default.asp?ArticleID=3394>

⁴⁵ Letter to ICAO, "A second report on 'Towards an International Infrastructure for Surveillance of Movement'" (30 March, 2004) Available at <http://www.privacyinternational.org/issues/terrorism/rpt/icaoletter.pdf>

The US IDENT database for example cross-checks as a matter of course against FBI fingerprint records, a database which should be noted holds over 50 million fingerprints, and constitutes the world's largest biometrics database. EURODAC interacts similarly with national criminal databases, and VIS and SIS II users have mutual access to the other's information as and where necessary.

There are also links between the European immigration database and criminal files beyond Europe (for example, the US-Europol agreements, signed in December 2001 and in December 2002, which enable the exchange of trend and personal data between law enforcement authorities),⁴⁴ allowing immigration officials in the UK for example, to routinely target 'petty' criminals as a means to locate immigration offenders.⁴⁵

In a similar vein, others note that, should biometrics be introduced into identity cards, the existence of a comprehensive information database will simply aggravate 'stop and search' procedures that already disproportionately target minority immigrant communities.⁴⁶ A clear example of such measures has been noted recently in the UK where immigration officials ('clad in body armour and carrying handcuffs') have been carrying out 'swoops' on the capital's underground, stopping and interviewing those who may appear 'foreign' while their details are checked on wireless laptops and fingerprint-scanning technology linked to national databases.⁴⁷

Finally, function creep problems may lead to biometrics giving away DNA, racial or health information about the enrollee that he or she may wish to keep private, be used for commercial purposes, or even for tracking and surveillance, the primary bone of contention for privacy campaigners.⁴⁸ Such surveillance already exists in China allowing the authorities to better control 'hukou', by which internal population movements can be monitored and controlled, with the aim of preventing a mass rural exodus, and have previously been employed in the US under the Student and Exchange Visitor Information system, (now merged with NSEERS into the US-VISIT programme.)

Tracking pilots have also been introduced in the UK for example as an alternative to detention for

“asylum seekers with appeal rights exhausted, illegal entrants, those subject to administrative removal (workers in breach and overstayers), those served with notice of intention to deport or a deportation order; arriving passengers subject to further examination; and those refused leave to enter pending removal.”⁴⁹

⁴⁶ See EU-USA Proposed Exchange of personal data between Europol and USA evades EU data protection rights and protections, Statewatch.org, 9.12.02, available at <http://www.statewatch.org/news/2002/nov/12eurousa.htm>

⁴⁷ See Casciani, D, BBC News (online) “*Q and A: Identity cards and Immigration*,” (22 September, 2003) Available at <http://news.bbc.co.uk/1/hi/uk/3129446.stm>

⁴⁸ See D Casciani, “*Q and A: Identity cards and Immigration*” BBC News Online, 22.09.04 available at <http://news.bbc.co.uk/1/hi/uk/3129446.stm>

⁴⁹ Ibid. 27. See also

⁵⁰ See Asylum Policy Info Fact sheet on Monitoring, Joint Council for the Welfare of Immigrants, 20.11.04 available at <http://www.jcwi.org.uk/currentnews/mediafactsheet%20on%20Electronic%20monitoring%20of%20asylum%20seekers.pdf>

⁵¹ Under Section 36, (removal and detention: electronic monitoring) of the Asylum and Immigration Act 2004,

Such a system would operate either using a Global Positioning System (GPS) or through remote voice recognition, but is highly criticized by human rights and civil liberties campaigners as endorsing an ‘underlying and potentially flawed premise that asylum seekers are not trustworthy and otherwise require detention.’⁵⁰

More generally, Europe is considering similar measures of ‘tracking’ or electronic tagging through the use of identity cards but this debate is rarely examined in the light of its implications for human rights, but rather in a context of border control, demonstrating the overwhelming priority of ‘border security’ over the rights of non-nationals. Such measures however present a considerable threat to individual liberties, and this is no less true for migrants, the only difference being whereas nationals may have recourse to data protection rules and bodies, migrants are likely to find themselves in a legal no-man’s land.

Storage and Reliability

A further danger lies in the potential for misuse inherent in the retention of such data for an unlimited period.⁵¹ This issue raises a number of problems; the security of storage systems, the risk of disclosure of personal information (including the role of private agencies), and the security measures in place to ensure appropriate protection against such abuse, misuse and malfunction.

The security issues of storing large numbers of data on centralized databases are far from resolved, and most organizations and authorities have recognized the implicit security and privacy issues involved. The U.S. Department of Homeland Security and the Department of State note that privacy issues need to be resolved prior to the implementation of these systems and the European Commission has noted that further research is necessary to "examine the impact of the establishment of a European Register on the fundamental rights of European citizens, and in particular their right to data protection. The French Government too has concluded similarly, requiring that any implementation of biometric techniques is systematically subject to prior agreement from its national privacy commission, and even the ICAO has itself noted, some states are legally barred from storing biometrics.⁵²

Storage also presents a number of problems with regard to biometric applications processed from sources that may leave physical traces unintentionally elsewhere (such as fingerprints), and thus which may be easily forged if collected on a centralized database.

In addition, there are issues of reliability that have yet to be fully considered, both with regard to both error and forgery, which biometrics sought to render impossible. Regardless of initial optimism, a Japanese researcher has already managed fooled a biometric finger reader with ‘gummy fingers’ in over 80% of test cases⁵³, and even admitting there is no such ill-intentioned interference, the risk of error remains unacceptably present.

⁵² Ibid.

⁵³ The EU proposes a maximum 5-year retention period, whereas the ICAO advocates a longer 10-year maximum.(op.cit.)

⁵⁴ Open letter to ICAO, *ibid*.

⁵⁵ See McKechnie, E “One in the eye for fans of ID cards”, *The Scotsman*, (24 March, 2004), available at <http://news.scotsman.com/archive.cfm?id=340152004>

According to an article published by the New Scientist in November 2003, iris recognition systems (currently the best case scenario), offer only 99% accuracy, while some face recognition mechanisms have failure rates of up to 40%. Even the most reliable uses of facial recognition technology – one-to-one verification using recent photographs – have been shown in U.S. government tests to be highly unreliable, returning a false non-match rate of 5 percent and a false match rate of 1 percent⁵⁴. In the best case scenario, while this is acceptable for small databases, it is not suitable for large-scale identification systems: in a 60 million record database each person's scan would indeed match 600,000 records. Such a system would thus fail to prevent identity fraud.

A more perplexing question is how to resolve such incidences should they occur. In the past, a stolen or mistaken 'identity' – a passport or identity card, is easily remedied, but when the stolen identity relates to an actual physical trait, how can this be retrieved? The possibilities enter the realm of fantasy, but are not that far removed from stories reporting that some migrants have already been known to mutilate their fingers to render their prints illegible.⁵⁵

Smartcard technology has been promulgated as an alternative to centralized storage, but this too has been criticized on the grounds that extra storage space will invariably mean more personal information being added, and more privacy protections being eroded. (The EU proposes a larger 64k chip rather than the ICAO recommended 32k to accommodate additional alphanumeric information).

Recent technological achievements however may signal an end to this debate, with the development of the Virtual Pin Based on Biometrics (VIPBOB). This system maps a user's biometric trait to a unique number, rendering storage in a centralized database unnecessary, and drastically reducing the associated privacy concerns.

Security and reliability issues form perhaps the crux of the problem with biometrics, pitting a number of contradictory factors against each other. The solution to increased security and accuracy will only, for the meantime, come at the expense of reduced privacy, by cross-checking from an array of personal details, or greater discrimination, preferring a 'blacklisted' database to a globally-interconnected centralized database, which in itself creates inestimable political problems as to who would be included on such a list. Similarly, the standardization of biometric technology is necessary for global interoperability yet encourages a dangerous and seemingly unlimited potential interlinking of data sources.

The other solution is through the creation of independent and competent data protection guidelines and monitoring bodies. Such bodies and measures do exist, both nationally and regionally⁵⁶ (with the notable exception of the United States) and might be utilized to counter

⁵⁶ Letter to ICAO, "A second report on 'Towards an International Infrastructure for Surveillance of Movement'" (30 March, 2004)

Available at <<http://www.privacyinternational.org/issues/terrorism/rpt/icaoletter.pdf>>

⁵⁷ See Statewatch (online) "Implementing the Amsterdam Treaty: Cementing Fortress Europe", (3 June, 2004) <http://www.statewatch.org/news/2004/jun/03fortress-europe.htm>

⁵⁸ In Europe, Directive 95/46 EC which sought to harmonize European data protection standards, covers biometrics under its provisions protecting the right to privacy, notably Article 6, the limitation principle (proportionality),

such problems, but there are concerns they are neither powerful enough nor sufficiently well-equipped to guarantee protection in the face of such advanced technology.

Experts, politicians and activists alike have expressed their concerns on this subject recently, an expert panel participating in a Hearing held by the European Parliament Committee on Civil Liberties, Justice and Home Affairs, warned for example, that the technologies were not ready for widespread implementation.⁵⁷ The UK's Information Commissioner Richard Thomas has also urged caution at the risk of "sleepwalking into a surveillance society"⁵⁸, and a recent French Parliamentary report criticized the lack of a legal framework to accompany the possible introduction of biometrics into national identity cards, to name but a few examples.⁵⁹

Finally, there are concerns as to what the future of biometrics holds. Current plans in the UK and elsewhere in Europe are looking at their incorporation into ID cards, and eventually, the use of such cards for access to health, welfare and other public services, as well as the creation of a National register. The use of such cards is already underway in some countries as a means to locate and 'monitor' foreign citizens, the Netherlands for example, makes routine compulsory use of biometrics to identify both its own citizens and foreigners over 14 years of age,⁶⁰ and some of the Benelux countries, to guard against fraud, are increasing their use of biometrics to identify relatives presented by resident immigrants for family unification.⁶¹

In the UK, concerns have been voiced already, by the British Medical Association, that legislation to introduce national ID cards must not lead to vulnerable groups being denied access to the NHS. "If ID cards are eventually linked to access to health services there is a risk of vulnerable groups, such as the homeless, the elderly, and asylum-seekers, being denied essential treatment. Safeguards must be in place to ensure this does not happen."⁶²

Article 8: Sensitive data, Article 10: Transparency and Article 17: Technical means to protect unauthorized access. The EU has also set up a Working Party comprised of EU data protection authorities on the Protection of Individuals with regard to the Processing of Personal Data For a complete list of national and regional data protection mechanisms, see "*Legal issues of the Information society*", Data Protection, available at <<http://europa.eu.int/ISPO/legal/en/dataprot/dataprot.html>>

⁵⁹ See *EUROPA IDA, eGovernment News*, "Experts concerned with premature introduction of biometric identifiers" (14 October 2004), available at <<http://europa.eu.int/ida/en/document/3385/194>>

⁶⁰ BBC News, UK Edition (online) "Watchdog's Big Brother UK warning", (16 August, 2004) available at <http://news.bbc.co.uk/2/hi/uk_news/politics/3568468.stm>

⁶¹ Guillemin, C « *Un rapport parlementaire réclame une nouvelle loi sur la biométrie* », ZDNet France, (18 June, 2003)

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⁶² See International Refugee News, April 17-30, 2001,

<http://www.hambastegi.org/internationalnews/news043001.htm>

⁶³ See Australia Visa, Immigration Laws, (May 2001) available at

http://www.migrationint.com.au/news/american_samoa/may_2001-10mn.asp>

⁶⁴ BMA, "BMA calls for safeguards on ID cards", (23 November, 2004)

available at <<http://www.bma.org.uk/pressrel.nsf/wlu/SGOY-66ZKD5?OpenDocument&vw=wfmmms>>

Conclusion

The driving force behind this technology, the development of which has been greatly accelerated since the September 11 attacks, is, as we have seen, born out of concern to prevent the infiltration of terrorist cells, and illegal migrants.

There is a tendency however, to consider biometrics as a panacea to these ills, even though this suggests a rather crude interpretation of the causes for, and varied routes of illegal migration.⁶³ This conviction in the powers of biometrics has manifested itself in the momentum gathering in various political circles for their incorporation into identity cards, the creation of national identity registers, as well as smart ‘entitlement’ cards, all targeted primarily at ‘illegal’ migrants and terrorists.

However, in the same way that biometrics do not in reality, offer such a panacea, it is not biometrics in themselves that pose the greatest threat to migrants. It is the effect of biometrics on the public perception, the confidence of public opinion in biometric technology that has unlocked the door to previously unthinkable invasions of privacy. By placing an emphasis on security, coupled with a discriminatory application of biometrics, a view is being perpetrated that only ‘illegal immigrants and bogus asylum seekers have anything to fear from surrendering their biometric details. Not only is this misconceived, but it overlooks the fact that even irregular migrants are entitled to the full respect of their human rights, and that these are not ‘traded-in’ the moment a migrant undertakes ‘illegal’ entry into a foreign country.

What this situation reveals in effect is an imbalance between the ‘right to migrate’ and the right to travel, with the rights of states to control their borders and to ensure internal security. The end goal of biometrics, whether incorporated into documents for travel, or identity cards to access services, is often cited as being ‘national security’, security from ‘illegal’ migrants and terrorists. Failing a radical shift in public and political perceptions, it is unlikely that the breach of migrants’ privacy rights will stir much sympathy against this overriding priority.

Nevertheless, these two ‘rights’ may not be incompatible, and the development of such technology can operate within a context that reconciles the needs and rights of all parties. To do so, we should re-consider two points. Firstly, the use of biometric documents must be proportional to the risk faced and the consequent restrictions placed on freedom of movement, albeit this concerns the movement of non-nationals. Secondly, there is an urgent need to approach immigration reform and anti-terrorism as two separate and distinct issues.

The use of the proportionality and legitimacy principles could be invoked with greater authority as a gauge of the legitimacy of such border control measures. Proportionality is defined under EC Directive 95/46 EC as requiring an assessment of the “risks for the protection of fundamental rights and freedoms of individuals and notably whether or not the intended purpose could be achieved in a less intrusive way.”⁶⁴

⁶⁵ Biometrics in travel documents for example will do nothing to prevent the ‘overstay’ of legitimate travelers.

⁶⁶ This principle is also referred to under UN General assembly Guidelines on the use of Computerised Data, (article 3)

As it stands, there are concerns that only broadly-based reasons are given to justify identity authentication which may circumvent data protection legislation. Similarly, that the storage of biometric data on centralized databases “substantially increases the risk of the data being used in a manner that was disproportionate to, or incompatible with, the original purposes for which they were collected.”⁶⁵

Another facet of proportionality is that the measures undertaken are effective enough to justify such radical inroads into privacy rights. There is little evidence so far that biometric technology has contributed to reducing either terrorism or irregular migration as intended.

According to the Department of Homeland Security, more than 200 persons have been arrested since the launch of US-VISIT, including "convicted rapists, drug traffickers, individuals convicted of credit card fraud, a convicted armed robber and numerous immigration violators and individuals attempting visa fraud'. However, having processed over 2.5 million visitors, no terrorist suspects have been caught to date, and these statistics do nothing to change the numbers of migrants who enter legitimately but who become irregular once inside the country. Similarly in the UK, a six-month biometrics visa trial involving Sri Lanka uncovered seven undocumented migrants, on the basis of which 'success' the UK announced it was to extend the project.

Finally, biometric identity cards designed to prevent migrants signing up for work or claiming benefits ignore the fact that 'clandestine' migrants live and work clandestinely. In the same way, 'smuggled' illegal migrants, have little use for identity travel documents, biometric or otherwise. If current methods are failing, it must be questioned whether this is really a result of a lack of technological advancement.

To end on a positive note however, there is reason to be hopeful that a balance can be struck. The EU's agreement to concede to US plans to establish an exchange of passenger information, including biometric data (the EU-US Passenger Name Record deal¹) across the Atlantic is currently being challenged before the European Court by the Parliament itself, on the grounds that the USA 'undertakings' with regard to security of privacy rights and data protection are inadequate. Evidence, one hopes, that biometrics are not being adopted in total disregard of individual liberties.

⁶⁷ See The British Journal of Healthcare Computing & Information Management (online) (October 2004), available at <<http://www.bjhc.co.uk/news/1/2004/n41006.htm>>

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