Contents

1
The Migration Machine

Huub Dijstelbloem, Albert Meijer and Michiel Besters

Europe's technological borders

Anyone travelling to Europe these days comes across not only barriers but also an increasing amount of technology. Bona fide travellers are offered high-tech initiatives (such as iris scans) in the hope that the desire for safety can still be combined with freedom of movement for all citizens. As a result, the borders of Europe are changing into an 'e-Border'. Behind the scenes, various government services are drawing up risk profiles for all kinds of aliens. If migrants risk crossing the Mediterranean to Europe illegally, there are boats, helicopters, aeroplanes and satellites on the lookout for them. In harbours and at country borders ship containers and lorry cargo space are searched using heat sensors and carbon dioxide detectors to check for the presence of human beings. Globalization is taking place but is not making travel any easier. The EU has removed its internal borders but has fortified its outer boundaries.

The abolishment of the internal borders of the EU has increased the need for controlling the borders of the Schengen area, currently covering approximately 8000 km land borders and 43,000 km sea borders. There are approximately 600 airports with extra-Schengen flights. About 250 million passengers a year pass these borders over land, about 70 million over sea and about 390 million through the air. The member states supposedly have a mutual interest in strengthening the control of the external borders. After all, 'a border is only as secure as its least well guarded area' (House of Lords 2008: 15).

In order to manage the flow of migrants and asylum seekers to Europe, governments are forced to make complicated and often controversial

choices. Migrants who, according to rules that are applied, are not entitled to settle are becoming more and more inventive in circumventing the procedures. Big risks are not avoided. However, it is doubtful whether strict border control does have the intended effect (i.e. decrease of illegal immigrants). Quite often the extraterritorial surveillance leads to the so-called 'waterbed effect' or the 'squeezed balloon syndrome', the displacement of migration flows. The fact that the safe itineraries are blocked does not imply that people abandon their plans to enter Europe. Rather, these people take more dangerous routes. Since these alternative routes expose immigrants to even greater risks, the tightening of the external borders leads to an increasing number of fatalities among irregular immigrants. Between 1993 and 2006, more than 7000 deaths have been documented of people trying to reach the European border. Moreover, the number of deaths increased significantly after controls were applied to the extended borders in 1995 (Spijkerboer 2007).

Meanwhile, governments continue looking for effective measures and even exceptional solutions to translate political decisions into a policy that limits traffic across borders. Examples are bone scans for investigating the age of minor asylum seekers, speech-recognition technology for administering civic integration examinations in the country of origin, the use of biometrics and the construction of European databanks to store data on illegal migrants. The financial costs are considerable: as well as national budgets of the member states the European Commission has reserved almost €4 billion for migration affairs in its financial programme for the period 2007–13.

Migration policy does not consist solely of laws and policy measures, but increasingly of technology. Notwithstanding, the resources that have emerged are debated only incidentally. In this context, technology in the form of a new border literally functions as an 'obligatory passage point' (Latour 1987) that works as a selection mechanism for newcomers. However, whether this selection process fulfils all the conditions that are normally taken into account when inhabitants of the state are confronted with technologies that affect their position as citizen, is doubtful. The risk is that technology in migration policy and border control is deployed in a 'state of exception' where the power of the state overrules the position of the migrants (Agamben 1998; Neal 2009). Technology, however, is not just the 'means' that allows political and administrative aims to be carried out; technology creates its own possibilities and limitations which implies that any targets that are thus achieved are always 'mediated' (Latour 1999). The border, as Salter (2005) has noticed, opens a kind

of 'rite de passage', however nowadays increasingly of a technological kind. Delegating policy and implementation tasks to technological resources easily results in a transformation of those tasks, thus changing the meaning of 'migrants', 'borders', 'bodies' and 'state control' and affecting the migrants' position as citizens.

Migration and the New Technological Borders of Europe focuses on the increasingly technological nature of borders in Europe that aim to monitor and control legal and illegal migration in particular and mobility in general. It presents a discussion of the deployment of technology in European migration policies from two perspectives: examining the nature of new forms of surveillance and evaluating these developments from a politico-administrative and legal perspective. The technological borders may increase the efficiency of immigration policies but also raise important questions concerning the correct and humane treatment of immigrants. How can we understand the creation of these technological borders? How do they process individual immigrants? How can governments find a way to implement immigrant policies in a humane manner?

The aim of this introductory chapter is to reflect on the changing meaning of both 'borders' and 'border control' and its implication for the position of migrants. Walters (2006) has noted with reference to the work of Andreas (2003) about the 'rebordering' of the state, that borders far from having disappeared in an open and transnational global space, as some theorists expected in the period between the fall of the Wall in 1989 and the 9/11 attacks in 2001, reappeared 'as spaces and instruments for the policing of a variety of actors, objects and processes whose common denominator is their "mobility" or more specifically, the forms of social and political insecurity that have come to be discursively attached to these mobilities' (Walters 2006: 188).

Technologies being used for this task have a severe effect on the position of people, discriminating them at the border as citizens or aliens, thereby making use of their body as a source of information. Borders, however, as Zureik and Salter in *Global Surveillance and Policing: Borders, Security, Identity* (2005) have observed from a surveillance point of view, are important but understudied. As Pickering and Weber in *Borders, Mobility and Technologies of Control* (2006), with reference to Donnan and Wilson (1999), have stated from an anthropological and criminological point of view, borders are sites for the expression of state power. Due to the changing position of the nation-state in a globalizing world, these sites increasingly form the expression of a mixed international regime. As a consequence, the growing intensity of European

integration, not only in the economic and administrative sense, but, since the Treaty of Lisbon and the institution of the first long-term President of the European Council, also in the political sense, European countries, and especially the EU member states, find themselves back in an international political unit with border control as a common policy area.

The institution of this European political regime 'frames' the technological regime of border control in a specific way. Though technology can seldom be understood as 'neutral', in this context the specific political consequences of the technological regime deserve more study. To do so, in the next section a specification of the type of technology used in migration policy will be given. In the following sections, the context in which these technologies are deployed will be described as the interweaving of immigration, integration and security policies. The policy system is increasingly becoming a mechanism for inclusion and exclusion. The result is that migration policy is becoming a test lab of a questionable kind, both technically and politically. The consequences of this and the conditions under which legitimacy could be improved will be discussed in the final section.

Migration technology

In the highly charged political and public debate on migration, the leading role is usually granted to the objectives: what limits should be applied to the influx of migrants and asylum seekers to the EU and its member states? This issue is one of unprecedented size: complicated, cross-border and, almost by definition, tragic. As far as the public is concerned, governments can almost never get their policy right: they either do too much, or too little. The general public seems to be much less interested in knowing how the policy aims are subsequently achieved. However, in migration policy it is not only a matter of political aims, but also the resources actually used to implement this policy. National governments and the EU use a variety of instruments to curb the influx of migrants and diverse techniques to register these migrants and ascertain their identity, age or family relationships.

As we know from other areas, such as medicine and information technologies, technological societies challenge the position of citizens and their humanitarian, political, juridical and civil rights in many respects. In a formal sense the position of citizens is challenged, for instance, where new rights need to be formulated to protect the privacy of citizens in the digital era. In a more material sense this position is challenged,

for example, when people do not have the practical means to realize their rights in situations where they are confronted with the negative consequences of new technologies. In this respect, the use of technologies for border control and migration policies is of special importance because it has an immediate effect on the position of people: it supports decisions about the inclusion or exclusion of people from the state and defines them as citizens or as aliens.

The modern state controls 'the legitimate means of movement' (Torpey 2000), with the border discriminating between citizens and aliens. The result of the application of these kinds of technology is that the borders of Europe are slowly but surely changing into 'technological borders'. The use of technology for border control is at least as old as the Chinese Wall, with many recent successors such as the Great Wall of Tijuana, also known as the Great Wall of Capital, dividing Mexico from the United States to control illegal migration from the South to the North. For the use of more refined technologies in Europe, historically we can point at the invention of the passport and the introduction of identity documents that have accompanied the process of state-formation in Europe and the state's attempts to obtain control over the movements of citizens. As a result, society and the movements of its citizens have been made more 'visible' by the government (Scott 1998).

As a consequence, the mechanisms of control of the modern state are becoming more and more subtle. 'Fortress Europe' is changing into a surveillance area that makes use of quite innovative techniques. For that reason, this book does not so much consider the vessels, aeroplanes and helicopters of the EU agency Frontex, the 'brute force technology' used to survey the outer borders of the Schengen area. Rather it considers the way in which technology helps to control the outer borders of the EU and the member states, but also within country borders, with the help of very refined means that are deeply integrated into the administrative systems of the state.

The raison d'être of the modern government is mainly the management of a bureaucratic apparatus that helps to support the proper treatment of citizens. The use of information technology to achieve this task is a logical step, certainly in a modern and complex society. It is almost impossible to imagine how, for instance, the Register of Births, Deaths and Marriages could be updated or taxes collected, two classic government tasks, without using some form of technology. Undeniably, there is a certain logic in the use of technology in migration policy. Applying technological and computerized methods can help to ensure

that borders are better monitored, that applications are dealt with more quickly and that procedures are used more efficiently.

However, technology is sometimes an unreliable ally, leading to undesirable side effects. If information files are unreliable, impossible to adequately check or correct, migrants may unjustly be refused entry. Biometry can violate the integrity of the body or lead to the body being regarded as an instrument. Fingerprints can be difficult to read; perhaps data has been recorded incorrectly in another country. Or someone's age is difficult to determine by means of a bone scan. Too much use of technology can put a disproportionate emphasis on the need to carry out checks.

The instruments used by the government to implement its migration policy could be called 'migration technology' – a new concept in this context. Originating in the ICT world, the concept stands for technology involved in transferring digital material from one software or hardware configuration to another, or from one generation of computing technology to the next. However, the term can also be used to refer to the many forms of technological systems used to register illegal residents, to check people crossing the border and to automate the applications for asylum and migration. Two aspects typify the use of migration technology.

In the first place, migration technology does not so much affect native citizens, but mainly foreign nationals who would like to obtain entry to the territory; in other words, migrants who apply for legal residence status with all the rights and obligations that go with it. Migration technology is thus used for people who would like to become European citizens, unlike many other forms of computerization and technology the government employs. This means the technology is employed during a decision procedure, the outcome of which is decisive: someone can be refused entry to a country or the possibility of settling here.

In the second place, not only ICT is involved in this process but also a range of other techniques. Migration technology does not only consist of the whirring computers that enhance every government building these days, but also of techniques that involve the human body, such as DNA tests (saliva, hair), age testing (X-rays) and biometric data (fingerprints and iris scans). Unlike in other government departments, the application of technology to migration policy is many-faceted, as well as focusing on countless forms of information that are not usually found in the classic weaponry of bureaucracy.

The result is that migration technology has come to occupy a special position in government policy, as it affects people who find themselves in a highly vulnerable position. Moreover, these people are confronted

with forms of technology and computerization that are not just related to processing information, but which are used to identify and verify, by intervening in the human body. Control of citizens, travellers, migrants and illegal aliens is coming closer to their bodies. This kind of control of the body (Rose 2007; Foucault 1978) deserves special attention because of the increasing interweaving of immigration, integration and security policies, which puts citizens in a vulnerable position towards the state.

The interweaving of immigration, integration and security policies

The use of 'migration technology' nowadays takes place in a highly politicized and polarized context. In all European countries migration policy has become one of the most controversial issues on the political agenda over the past 15 years. Discussions about desirable and undesirable migrants; the separation of migrants who apply for asylum for humanitarian reasons from those who, in common parlance, are somewhat disparagingly called 'economic refugees' or 'fortune-seekers'; fear of an overwhelming influx of people from the poorer South to the rich West. These are just a few of the many vexed questions that have dominated public and political debate during the past few years.

The movement of people follows on logically from globalization: the creation of a world economy with the accompanying social and technological networks such as international air traffic, but also the Internet. For a considerable part, this is sustained by the increase in the international transport of capital, goods, services and information (Sassen 1998). The border historically serves as a place for commerce itself, differentiating between social, economic and juridical regimes (Pellerin 2005). But globalization came up against a development in the opposite direction: in addition to the opening up of national borders for economic reasons, an increasing number of restrictions was imposed on the free movement of people, especially the influx of migrants from less prosperous areas to Western countries. This tension between economic globalization on the one hand and a stricter national migration policy on the other has turned migration policies into a controversial topic. From that moment onwards, most European governments began to implement a much more restrictive entry policy.

During the past few decades, many European governments' policies have consisted of measures to limit the immigration influx and, at the same time, to counter illegality. In order to achieve this, more and more measures have been developed to check people who come into a country

(external control), but also those already in a country (internal control). In addition, the policy is not only becoming more restrictive, but also more selective. Not only are the numbers of migrants allowed to enter into a country being reduced, migrants are also examined more carefully according to the particular needs of those countries.

As well as becoming more restrictive and selective, migration policy has also become more and more entangled in issues relating to integration policy and – since the 9/11 attacks, the War on Terror and increasing concerns about the position of Muslims in Europe – security policy. Migration and integration policies have both been 'securitized' (Lindahl 2008). As a result, three discussions have become increasingly interrelated. The first discussion concerns migration policy and is mainly concerned with the issues mentioned above, namely, the influx of migrants and the separation of 'desirable' and 'undesirable' aliens. The second discussion is about integration policy and is dominated in the media and politics by questions and problems related to social cohesion and civic integration among newcomers (varying from the obligation to assimilate culturally to the rights to participate economically). The third discussion is about security policy, especially on border control in the countries of Europe and the outer limits of the Schengen area, and the screening and refusal of people who are suspected of being a threat to society.

Responses to 9/11 by the European Commission, suggesting a direct link between the issues of migration, asylum and security, illustrate this. In less than two weeks after 9/11 the Justice and Home Affairs (JHA) Council of the EU organized an Extraordinary Meeting which called for 'the Commission to examine urgently the relationship between safeguarding internal security and complying with international protection obligations and instruments' (Neal 2009: 338). On 15 November 2001 the European Commission announced that border control must respond to the challenges 'of an efficient fight against criminal networks, of trustworthy action against terrorist risks and of creating mutual confidence between those member States which have abandoned border controls at their internal frontiers' (Commission of the European Communities 2001).

This interweaving of immigration, integration and security policies is illustrated, for example, in the agenda produced in 2006 by the European Security Research Advisory Board which places under the heading 'border security', illegal migration in the same category as weapon and drug smuggling (European Security Research Advisory Board 2006). Even so-called knowledge migrants are checked. Because

of the fear of spying or the misuse of knowledge they might acquire (it may, for example, be deployed for atomic programmes or bioterrorism) the screening of this category of migrants has become a permanent element of the policy. Also the fact that migrants have to do a civic integration examination in their own country before leaving for some of the member states is one component of the integration policy. Undeniably, the cost and effort this examination involves for the potential migrant will also affect migration policy.

The policy on security is finding its way into immigration policy. Risk analyses, based on the risk profiles of various target groups, are increasingly performed as part of migration and integration policy. Migration, integration and security all come to be regarded as part of the same problem.

The border as a mechanism for inclusion and exclusion

The policy system that is being developed today is increasingly taking on the character of a 'machine' (Morgan 1997; Barry 2001). This machine combines social and technical reality: it is a construction that not only consists of high-tech, but also of politicians, policy-makers, civil servants, customs officers and military police. The result is a gigantic, cross-border, technology-influenced policy machine that aims to regulate the movement of aliens in Europe.

The machine metaphor offers possibilities to evaluate the role of technology, and creates space to argue both the positive and negative aspects. If the use of migration technology works as it should, one may speak of a well-oiled machine that fairly deals with the vast numbers of applications and border crossings in the EU every year. Waiting times for visas and residential permits can be reduced when policies are implemented efficiently. But there may also be less favourable scenarios. The metaphor of the machine is not only reserved for appliances (machines in the classic sense of the word), but also for people who exhibit mechanical behaviour. This can lead to an undesirable functioning of the machine in two ways.

Firstly, there is a danger that the migration policy will be unjustly regarded as a machine which can be used with ease by both politicians and civil servants. Just press a button and the policy has been amended. This, however, is a dangerous illusion. Instruments of implementation do not allow themselves to be directed mechanically, and it is also questionable whether this would be desirable. Too much emphasis on the technical deployment of tasks creates

a bureaucracy which is difficult to hold responsible and accountable for its actions.

Secondly, the migration machine at its most extreme is a faceless, impersonal policy machine which, without any human intervention, performs its work with the minimum of empathy for those concerned. That, too, is undesirable. The machine then takes over the human aspect. These two scenarios represent the reverse of a well-oiled machine. Policy which is influenced by technology and computerization and which increasingly acquires the character of a machine has both advantages and disadvantages, therefore. With the help of the machine metaphor, it should be possible to detect them.

If migration policy can be compared with a machine, what sort of machine is it? The dominant theoretical viewpoint in the social and political science literature devoted to the use of technology for border controls in general and migration policy in particular, is the viewpoint of 'surveillance society' (Walters 2006; Lyon 2007). The classic example of surveillance according to Foucault (1995) is Jeremy Bentham's invention of the panopticon. Latin for 'all-seeing', this represents the idea of constant and total observation. The domed prisons were constructed according to this principle. Prison warders could check the prisoners by keeping a lookout from one specific point, without the prisoners being able to see the warder.

As a consequence, these days a wider form of surveillance is part of the repertoire used by governments to keep an eye on the population, with three important aspects.

Firstly, surveillance does not occur from a central point (a control room), but consists instead of a proliferation of procedures and practices. Such a migration machine is not, in this case, a machine that can be traced to a particular location or an all-seeing eye that keeps everybody in view from one particular point. Surveillance and control refers in this sense to the distribution of tasks and functions that focus on monitoring, registering and checking. These can be found in the clearly indicated points for border traffic (customs posts), but have also extended right into the capillaries of society; for example, the illegality checks done via personal data registration.

Secondly, surveillance is not only carried out by governments; it is also the task of other organizations (governance) such as medical institutes and welfare organizations that discipline citizens in a particular manner (take, for example, the implementation of digital files on children). Migration policy offices work together with various partners in a 'chain' and the responsibility for screening certain types of migrants

(education, work, knowledge and talent) is being delegated to universities and companies. As a result, the machine is not only in public, but also in private and in professional hands.

Thirdly, border control is increasingly targeting the human body. Bones, voices, DNA and fingerprints service as the new identity documents. The fact that a person's body is increasingly being used to deploy technology and computerization is a particularly significant and worrying aspect that deserves special attention. The migration machine reaches the bodies of the people it aims to control and subjects them to a surveillance regime.

Remote control and the readable body

These three aspects have a severe impact on the meaning and the function of 'borders' and 'border control'. Traditionally, a border is a demarcation line between two countries, thus marking and protecting the territory and sovereignty of each one. The notion of 'border' originates from the French word *bordure*, meaning 'edge'. However, the formation of the Schengen area in Europe and the strong emphasis on controls have led to a change of meaning for these demarcation lines belonging to national states.

Border checks are changing their location; they do not always take place at the border, but now form part of a much wider area of surveillance, monitoring, admission requirements and administrative processes. Actually, the border is everywhere as it is both portable (ID card) and virtual (databases) (Lyon 2005). According to Walters (2006) there is a modulation in the way that the EU renders the border controls of its members and neighbouring states into calculable, comparable data and makes them subject to continuous adjustment. As a consequence, the migration machine is more than just a wall erected to protect 'Fortress Europe' from advancing migrants. Border controls are becoming more ingenious: in the form of a 'smart border' (Lyon 2005; Côté-Boucher 2008).

In a volume with the meaningful title *In Search of Europe's Borders*, this development is described as a form of 'remote control' (Guiraudon 2003). Not only are the surveillance activities being transferred more and more from the strict border-control function at the exterior of a territorial area to the interior, for example by the coupling and interoperability of databases in the country of arrival; they are also being moved further to the exterior, for instance by taking civic integration exams in the country of origin.

Governments are also increasingly outsourcing border-control activities to non-governmental organizations. As far as the analysis of migration technology is concerned, this means that this particular technology is becoming much more than a system for guarding borders. It is also a system that distinguishes between different kinds of migrants in a subtle manner by a process of 'social sorting' (Lyon 2002). The border becomes a 'refined sieve', and migration technology is accelerating that process (Broeders 2009). This 'sieving border' is of a special kind. In the case of migration technology, the border sieves information, originating from a very special source: the migrant. And to an increasing degree, the *body* of the migrant.

The external characteristics of migrants are not only presented in terms of descriptions (height, colour of eyes) in government data files; actual imprints of the body are increasingly finding their way into bureaucracy. It becomes a 'machine-readable body' (Van der Ploeg 2002). The body is regarded as a source of information, the code of which can be read by a machine. To a certain extent, the body thus becomes a component of the machine: it is being interpreted and formatted as if it were an information storage device that simply has to be scanned in order to be registered. The body becomes 'the universal ID card of the future' (Van der Ploeg 1999: 301).

There are crude examples of this to be seen in border controls at several locations, for example the use of the LifeGuard technology in Zeebrugge harbour (Verstraete 2001). LifeGuard is a remote-sensing device that registers ultra-low frequency signals emanating from the electromagnetic field around a beating heart. Originally developed by the American army for rescue operations and for searching buildings for the presence of criminals, this technique has been deployed in Zeebrugge by a company to detect refugees and illegal migrants who had hidden themselves in the cargo space of lorries and containers on their way to the United Kingdom.

Examples of a more subtle, but not less invasive, application can be seen in the unprecedented advance in the use of biometry. Whereas illegal entrants usually find themselves being asked to give their fingerprints, travellers arriving at Schiphol Airport in Amsterdam can now have their irises scanned (using the so-called Privium programme, 'a seamless travel programme designed to offer priority, speed and comfort to the airport's most loyal users'). If the scanner does not read the correct code, the person is refused entry. Biometry thus enables the process of authentication to take place; identity claims can be checked for authenticity. Only in the case of recognition does the system open the

doors for a person (Ceyhan 2005). In a society that focuses on control, the body gradually becomes a 'password' (Deleuze 1995).

Migration policy as a test lab: questionable technical and political legitimacy

The similarity between the different forms of migration technology is that they all treat the human body as if it were an information storage device. Policy instruments used for border control and the governance of the movements of people can be increasingly compared to a machine that aims to 'read' the required information and then use it to make a judgment on which status a migrant should be given. The social, ethical, legal and administrative results of such a sorting process add another dimension to the already highly charged debate on migration policy.

Because discussions on the political aims of migration policy demand everyone's attention, the spotlight is much less often focused on what happens during implementation, let alone the specific role of the type of technology used. More and more forms of technology are being applied in a policy setting in which the political wish is for limitations to be placed on the movements of aliens and, more specifically, for selections to be made. This makes the question *how* these restrictions and selections should be carried out, which resources should be used to do so and how they should function, even more urgent. The risk is that migration policy starts to function as a kind of test lab for all kinds of new technologies, with the migrant as a test subject.

This risk results from the increasing emphasis on control by the interweaving of immigration, integration and security policies. Because of a lack of attention amongst the public and in the media for the ins and outs of the technical aspects of migration policy and its consequences, and the weak position of migrants to give voice to the consequences, this test lab is not only of a doubtful technical legitimacy but also of a questionable political legitimacy.

With regard to the technical legitimacy, some examples may illustrate the precarious character of the 'migration machine'. Experts cannot agree about the reliability of bone scans in, for instance, the Netherlands where X-ray technology is used on minor asylum seekers. Speech-recognition technology, deployed abroad in civic integration examinations, has far-reaching consequences for the person using it. It is questionable whether this technology is sufficiently developed for use in this context. Speech-recognition technology has not previously been used where the outcome is so crucial as, for example, in the case

of the civic integration examination in one's country of origin. Little experience has so far been acquired in this field. It is doubtful whether we know enough about the teething problems that are undoubtedly present at some examination locations. Biometrics, another example, is also not completely error-free. Not every fingerprint is read correctly and not every fingerprint can be read correctly. Fingerprints are also subject to change, as for instance people suffering from cancer may experience. In other words, every form of identification is fundamentally unstable.

In the present Schengen Information System (SIS), personal data is not always removed within the statutory period or according to the conditions of use, which can lead to a wrongful refusal of entry. Small errors in a system can have enormous consequences. Crucial decisions depend on it. For example: may someone enter a particular country or not? Furthermore, these are decisions that can have repercussions for a long time, and not just in one country. It is also true to say that migrants have less chance of obtaining rectification, compared to native citizens of a country. In short, migrants have a weak position in the everyday practice of migration policies with little means to check or to correct data that are gathered from them.

With regard to political legitimacy, it is unclear how effective the various technological systems are. There are no clear statistics and evaluations, and a new version of the SIS is being produced, even though the present system has not yet been sufficiently well evaluated. Next to that, there is the danger that the objectives will change, just as they did with the civic integration examination. Although this examination is formally part of integration policy, it has been subject to change (in a political sense) and is now part of migration policy. Here it functions as a means of making migration more difficult and more selective by raising the required language levels.

Another problem is the danger of stigmatization; exclusion of people due to race, skin colour, ethnic or social background or religion. Of course, this is against the law, but databases and biometry make it increasingly easy to use such characteristics to distinguish between people. This may lead to categorical surveillance and thus to discrimination of migrants who have very little chance of rectifying this or of appealing (Van der Ploeg 2002).

An overarching problem that keeps cropping up is the impenetrability of these technological systems. Two examples: the 'decision trees' migration offices use when deciding on a request for asylum, and the Information Systems they use in verifying asylum seekers' accounts of their escape. Automated decision-making is not allowed, and such

systems should not be permitted to take over the role of the civil servants. However, in practice it becomes difficult to avoid taking the smooth path laid out by information technology.

Finally, monitoring and public checking methods have their shortcomings. Supervisory bodies such as the European Data Protection Supervisor (EDPS) have not been granted authority to provide legal advice. Their recommendations are, therefore, often ignored. In addition, staffing and competence do not always go together. This results in insufficient supervision.

Turning the test lab into a public laboratory

The use of technologies brings new risks, new inequalities and unforeseen consequences. The integrity of migrants and their bodies, their privacy and the protection of their personal sphere are put to the test. It becomes harder to control, to check and to correct the collection of data. There is less room for exceptions and for making special decisions in individual cases, because the information process involved and, therefore, also the decision-making process become increasingly standardized.

The crucial question is whether those who, according to the current policy rules, have no right to an entry ticket are treated as aliens or as citizens. In theory a migrant who is turned away for the wrong reasons or because of a technological failure may obtain a lawyer and finally go to the European Court. However, his position is weaker than the citizen who always has his democratic rights: to go to the media, put an issue on the agenda, organize resistance and to vote at election time.

In order to appreciate more clearly the difference between the position of citizens and that of aliens, it is worthwhile to compare the use of technology in migration policies with another traditional area of the state; namely, the tax office: each year it faces the challenge of dealing accurately with every tax declaration. Whether this (one of the oldest and most important tasks carried out by the state) is done adequately depends almost entirely on the information technology used. The watchful eye of the general public guarantees, however, that there is continuous pressure to do so accurately.

This form of counter-surveillance is absent in migration policy. Those affected are not citizens of the desired country but come from elsewhere. The usual mechanisms for democratic control are missing. Moreover, in a technological society it cannot be assumed that all public and technological issues will find their way into the democratic arena by way

of representation, let alone to a public of non-state residents. Neither can we assume that such a diverse and fragmented group of people as migrants can participate in the design of the border and its procedures. Therefore, possible mistakes need to be brought to the authority's attention in alternative ways so as to enable real control.

To be democratically controllable, new existing technological practices with a political goal should be open for debate. The effects of technology and the changing meaning of 'borders' and 'border control' should be rendered more visible in order to strengthen public involvement. To technically and politically legitimize the role of technology in migration policy, mechanisms need to be developed to make such technologies part of a more public endeavour. The test lab should be turned into a public laboratory.

Turning the deployment of technology into a public laboratory means that techniques have to be developed to evaluate technology, by learning from mistakes and by making it a more public tool by strengthening its visibility and 'publicity'. In such a scenario, an important role must be given to migrants themselves. In theory, they may be outsiders of the democratic community; in practice, they are the most directly affected by the workings of the migration machine. As such, they form a fragmentized and excluded public. Currently, migrants are treated as the object of the migration machine. When they are treated as subjects, greater justice is done to their status as citizens.

Outline of the book

In the following chapters of this book, the questions raised in this introduction will be analysed from various disciplinary and thematic perspectives.

In Chapter 2 Alex Balch and Andrew Geddes examine the development of migration policy in Europe and provide a context for the following chapters that discuss the European 'migration machine'. In order to do so, they make use of a politico-legal perspective, and conceptualize the recent development of the EU migration regime (since Amsterdam) as constituent of an evolving and complex system. Through a survey of European integration in this area they map this system, consider its future development and, via discussion of Europeanization, identify linkages with policy at the nation-state level.

The next two chapters examine the nature of the main technological developments, large-scale information systems and biometrics. In Chapter 3 Dennis Broeders uses the concept of the 'surveillance