

THE BORDER AFTER BREXIT

How technology can help secure Britain's borders

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BRIEFING PAPER

EXECUTIVE SUMMARY

- Britain's Border Force is not equipped to quickly, accurately and securely monitor passengers in and out of Britain. After Brexit it will become even more important for Britain's borders to be secure.
- The Warning Index and Semaphore systems the Border Force uses are years out of date, and at times 7.5% of high risk flights have not been properly screened, which if representative of the whole year would translate into over four thousand high-risk flights not being met. This has allowed known terrorists to leave the country without being detained properly.
- The Border Force operates a slow service at peak times: during the summer of 2016, an average of three out of four Heathrow Terminals every month failed their target wait times for non-EEA passengers through passport control.
- After sovereignty, polls have found control of the UK's borders to be the second-most important driver of voting for Brexit, and many voters desired sovereignty itself in order to control who comes in and out of the country.
- Public trust in the UK immigration system, and its key enforcer, the UK Border Force, is crucial in order for the UK to have a sensible immigration policy
- The Border Force is only collecting data from the Advanced Passenger Information System for 86% of passengers, making a mockery of "exporting the border" claims.
- Some past collaborations with the private sector, like the Raytheon project, have turned out badly, but these involved heavy governmental micromangement; decentralised private companies like AirBnb prove that the private sector can create high trust, heavily-vetted systems.
- The government must thoroughly modernise the force and deliver a new, real-time database and biometric scanning system, collaborating with the private sector to deliver a technological solution and paying for results, not trying to build its own system from the ground up.

INTRODUCTION

The desire to “take control” of immigration and the UK’s border was an important factor for many people in their vote to leave the European Union. Support for Brexit was strong in areas which had seen a rapid growth in the number of migrants¹, while even those who cited “sovereignty” as a reason for leaving implicitly saw the concept as inseparable from border control.² Recent polling has shown that voters believe that controlling immigration is a more important priority than retaining access to the European single market.³

Brexit is unlikely to substantially reduce immigration, let alone movement in and out of the UK,⁴ but in a globalised world in which huge numbers of people move across borders a greater level of trust is required. Increasingly, research shows the importance of trust, or social capital, in successful societies: both the smooth running of the market and of uncorrupt government rely on high levels of trust.⁵ Likewise with migration, people will accept freer movement so long as they can trust that we know and can control who is coming in – something that modern biometric technology makes achievable.

A possible analogy is the hugely popular home-sharing company Airbnb, where 640,000 people rent out their homes to complete strangers in 57,000 cities across 190 countries. The system works very effectively because the presence of online reputations mean the costs of cheating (such as stealing or damaging the host’s property) are extremely high. This international network is built on trust, and has allowed an astounding degree of co-operation generating billions of dollars a year. The weakness with UK border control is that British citizens, the “hosts”, feel that they don’t know who is coming in, and that the costs of cheating the system are small. The low trust engendered not only creates suspicion of migrants, but can act as a catalyst for more illiberal policies at home.

The Border Force’s troubles have been among the most high-profile problems facing the Home Office since 2010. A combination of rising passenger numbers, falling resources, greater immigration pressures, and a succession of terrorist attacks on Continental Europe have all driven increased salience of the importance of an effective Border Force – and the difficulty of achieving that.

Travellers experience the problems of the Border Force themselves when they’re held up in a Heathrow queue after a long flight home, and while these issues are well-known and important, many of the biggest problems facing the Border Force are unknown to most of the public. The anti-terror watch list, for example, is managed and enforced far less effectively than many people might imagine, with an unacceptable number of high-risk flights not being screened at all by an under-pressure Border Force. Although there is little systematic understanding of these challenges faced by the Border Force, sporadic news coverage of failings by the Force contribute to the predominant feeling that Britain is not secure.

The Border Force itself has been let down by successive governments. Morale is low, according to Civil Service surveys,⁶ and Border Force staff overwhelmingly feel that they do not have the resources needed to do their job properly.⁷ This is unacceptable given the importance of the Border Force's work; its staff must be highly motivated and confident in themselves.

Post-Brexit, reform is needed to solve these problems and to satisfy the public's demands for control over immigration. It is critically important that the Border Force be able to achieve its goals, both to ensure public safety and to restore the public's confidence in the government's immigration policies, and that it be able to do so cost-effectively.

In this report we outline the key challenges facing the Border Force after Brexit and suggest how real reform can make it more effective at securing Britain's borders. A full-scale replacement of the Border Force's existing databases with an integrated, real-time system, combined with the equipment necessary to perform biometric scanning of all passengers coming in and out of Britain, even at small ports and airports, is needed.

CHALLENGES

The Border Force has five priorities, according to its website. These are to:

- Deter and prevent individuals and goods that would harm the national interests from entering the UK
- Facilitate the legitimate movement of individuals and trade to and from the UK
- Protect and collect customs revenues for trade crossing the border
- Provide excellent service to customers
- Provide demonstrable effectiveness, efficiency and value for money

This paper will concern itself primarily with the Border Force's role in managing flows of people, not goods, since this is such an important issue after Brexit.

Passenger traffic

In 2015, 251 million passengers travelled in and out of Britain's airports.⁸ Combined with 21 million seabound passengers (excluding those travelling by cruise liner or long sea journey – 1.8 million in 2014) and 21 million Eurotunnel passengers,⁹ that makes approximately 294 million total passengers. Of these, an estimated 225 million are international travellers, liable for inspection by the Border Force. On top of this are around 90,000 inbound passengers on private carrier, many of whom land at small private ports and airports and are not checked by the Border Force. There are no reliable estimates about entry from the Republic of Ireland over the land border.

Passenger numbers have risen by about 20% since 2010 and are expected to rise by about 43% by 2030.¹⁰ Since 2010, the Border Force's funding has also been cut by about 15% in absolute terms, which against the passenger rise implies a 25% cut

in per-passenger spending. Although some of the Force's costs are fixed, a large percentage is variable depending on passenger numbers, such as staffing costs.¹¹ These cuts were in line with other Home Office budget cuts, but they are a reminder that throwing more money at the issue is simply not an option, even if it was viable practically.

Queues are the most public problem facing the Force. At 45 minutes for non-EEA arrivals and 25 minutes for EEA arrivals, the target wait times are much longer than many people would consider acceptable. But at times of high pressure the Force has failed even to meet these generous targets, even when that pressure is seasonal and predictable.

During the summer of 2016 at Heathrow (May-July inclusive), every single international terminal failed to achieve its target of 95% of passengers cleared within their target wait time, except Terminal 5 in May. In July 2016, 23% and 26% of non-EEA passengers inbound to Terminals 3 and 4 respectively had to wait longer than the target wait time.¹²

To cope with the summer holiday influx, staff have had to be brought in from sea-ports and, according to one Border Force staff member, "There is a high percentage of long-term sickness due to stress", and staff are not given enough time to examine passports properly.¹³ In 2011, the head of the Border Force was forced to step down after scaling back checks on passengers to cope with passenger pressures, according to the then-Home Secretary Theresa May.¹⁴

This problem will undoubtedly grow, potentially dramatically, as Britain leaves the European Union. Assuming some change to freedom of movement rules, even a very limited one that gives full access to EEA immigrants with a job offer in the UK, EEA passengers will be subject to much more scrutiny than they currently are when entering the UK. Something along these lines appears to be what the government wants to implement and it requires a border control system that monitors people in real time as they enter and exit the country.

Indeed, assuming the rules are modified to some extent, the more open the UK's deal with Europe is the greater the burden may be. Passenger numbers would remain high but the Border Force would be given a substantially greater task of sorting legitimate travellers from illegitimate ones.

Since 2010 the government has also committed to reintroducing exit checks on passengers leaving the UK. In theory, these are useful for enforcing immigration laws – for example, to see if people have overstayed on entry visas – as well as to track the movements of suspected criminals. But though these are not as rigorous as entry checks, exit checks require additional manpower and infrastructure – further draining Border Force's limited resources, or imposing extra costs on carriers.

This is about more than mere inconvenience – though there are economic costs to be borne by delays and hold-ups. Britain cannot afford to be a difficult place to visit when it leaves the EU, as it will need more than ever to present itself as an

attractive and pleasant destination for overseas investors and visitors. And, as this is most people's main experience with the Border Force, it is critical that it be a pleasant, efficient and clearly-secure one if the public is to trust that the Border Force is doing its job effectively.

National Security

Apart from the problems to do with queuing times, the Border Force appears from official inquiries to face significant challenges in carrying out its security responsibilities. High-profile terrorist attacks in Continental Europe have so far largely been avoided in Britain, thanks to a combination of good security enforcement and good luck. Indeed the commissioner of the Metropolitan Police warned in the summer of 2016 that "it is a case of when, not if" another terror attack takes place on British soil.¹⁵ The Border Force's role in the country's security apparatus is central: it can alert the security services to persons of interest entering the UK and deny access as well.

The main watch list ("Warning Index"), set up in 1995 and intended to last for seven years (making it now fourteen years out of date),¹⁶ was deemed by the Public Accounts Committee to be "outdated and the quality of data poor" with occasional outages.¹⁷ The National Audit Office concluded that the Warnings Index is "unstable and at risk of collapsing" and needs to be replaced, but currently there is no clear strategy about how to do it.¹⁸

Surprisingly, there is no formal record by the border force of just how many people who come into the UK are screened. Entry into Britain's small sea and airports often goes unchecked, as do travellers passing into the UK (including the mainland) from the Republic of Ireland through Northern Ireland.

The case of small ports and airports is particularly noteworthy. In a 2016 inspection report the Chief Inspector of Borders and Immigration concluded that there is "no reliable data for the number of general maritime arrivals in the UK" and "no systematic collection of information about any aspect of general maritime" – indeed just 177 out of tens of thousands of small vessels notified officials of their arrival that year.¹⁹

In August 2016, Charlie Elphicke, MP for Dover, highlighted "a rising threat from people-trafficking by yachts and small boats", saying that the case of human traffickers being caught bringing Albanians onshore was "just the tip of a very large iceberg."²⁰ According to the Home Affairs Select Committee's report on countering extremism, known terrorists like Islamic State's Siddhartha Dhar have been able to leave Britain by going through small ports, airports and Eurotunnel where security is known to be less strict.²¹ The report suggested that exit checks were not being carried out at the 100% level claimed by the government and urged the government to publish its review into security at small ports and airports.

The Advance Passenger Information System (APIS) is an international standard that exists to give advance notice to border agencies of all passengers en route to

their destination, giving those agencies time to check and decide on how to treat questionable passengers before they arrive. As of September 2015 the UK was only collecting APIS from 86% of inbound passengers and, according to the National Audit Office, the UK's current system does not check "in sufficient time to prevent high-risk travellers from starting their journey to or from the UK."²²

This is deeply concerning. There is a clear and present danger to the UK of terrorist attacks by non-residents and, as effective as the security forces might be, without a system in place to monitor who enters the country, Britain is exposed.

Around 25% of General Aviation flights (civil aviation other than scheduled air services) are defined as 'high-risk', for example because passenger information has not been submitted by the flight in advance.²³ Though the Border Force claims to process 99% of 'high-risk' flights, the Chief Inspector of Borders's sample of 306 high-risk flights found that 23, or 7.5%, were missed but were not identified as having been missed, "of which Border Force was unaware until our inspection".²⁴

This has been underreported. The ICIBI's report states that:

Border Force guidance states "A GA flight is considered a "missed flight" when it is a known flight and has not been physically met [ie, met at the airplane by Border Force staff] nor cleared remotely (i.e. it has not been risk assessed using the GARAT or everybody onboard has not undergone a WI [Warning Index] person search)." Border Force provided data on the number of known 'missed' high-risk flights (found as a result of retrospective checks of CATS) between 2012/13 and 2014/15 - Figure 4 refers.²⁵

If the ICIBI's sample, carried out on two dates (4/12/14 and 18/1/15), is representative of the year as a whole then potentially thousands of high-risk flights are not being screened properly by the Force. 23 missed flights over two dates would imply as many as 4,197 high-risk flights annually are not being physically met by Border Force agents, risk assessed or remotely checked against a security database, as is supposed to happen. It should be stressed that these numbers are a simple extrapolation of the ICIBI's data.

Earlier this year the Metropolitan Police assistant commissioner warned that ISIS planned a "spectacular attack" on Great Britain, and that 800 British citizens have travelled to Syria to fight for the Islamic State.²⁶ Britain's terror alert rating is unlikely to go down for some time, while the situation in France and Belgium remains even more acute. In political terms, the Border Force can succeed one hundred times but only needs to lose once. Perceived failings in the Border Force has eroded public trust in the organisation, but a terrorist attack that succeeded by breaching the border would be even more disastrous for the government.

Immigration

One of the main causes of distrust is a belief that those who break the rules by overstaying their visas are not punished, a perception that is not inaccurate. It is

difficult to say precisely how many non-EEA students remain in the UK after their visas run out, because the data collection is so poor.²⁷ As of 2014 there were over 170,000 visa overstayers against whom no action had been taken.²⁸

Many, perhaps even most, may be contributing to the economy and society, but the very existence of such widespread cheating has a negative effect on trust in the system. If AirBnB guests broke the trust of their hosts at this level the whole system would collapse, to the detriment of everyone.

Modernisation efforts

Alongside the Warning Index, designed for identifying potential criminals and terrorists, is Centaur, an HMRC-run anti-smuggling system, and Semaphore, the pilot 'biometric' passport system. Neither are perfect: Centaur seems to have major data quality problems, with bulk deletions of hundreds of thousands of data entries to try to clean it up.²⁹

Semaphore, the pilot e-Borders system started in 2003, has failed to deliver the benefits that people had hoped for. The aim was that Britain could 'export the border', preventing threatening passengers from ever reaching the UK by catching them at exit points from other countries, using Advance Passenger Information relayed to the UK, as well as speeding up entry and exit checks for passengers travelling in and out of the country.

In 2007 an effort to merge the Warnings Index with Semaphore was set up in collaboration with the US firm Raytheon, with a view to a full roll-out of e-Borders across the UK. This project was a failure and was eventually abandoned at an estimated cost of £1bn to the taxpayer.

According to the Chief Inspector of Borders and Immigration, this project "failed to deliver the planned increases in API and this had a detrimental impact on the delivery of all anticipated benefits". Furthermore, the data is of low quality and not sufficient for compiling migration statistics, which also raises the question of how useful it is for other, more sensitive, data collection efforts.

Ultimately the programme was cancelled with provisional successor programmes introduced pending a permanent replacement. These are rife with problems: of eight reviews since 2010 by the Major Projects Authority, a (negative) red or amber-red rating was given in seven, with serious concerns about the deliverability of the programmes.³⁰

The reasons for this failure appear to be that the Border Force and the Home Office brought much of the decision-making in-house: rather than set Raytheon a goal and tie payment to delivery, government agencies attempted to micromanage the development process.³¹

The list of failed government IT projects is long, and as well as e-Borders it includes £10bn spent on the NHS's national IT programme, which was eventually shelved, £56m spent by the Ministry of Justice on a back-office project that had to be abandoned when it transpired that the Cabinet Office had a system for doing the same thing already,³² and of course the Universal Credit roll-out, the cost of which has now risen to £15.8bn from an initial projection of £2.2bn. To put it mildly, the government cannot be expected to develop a successful, technologically advanced biometric scanning system by itself, even if the money for large up-front capital expenditure were available.

PROPOSALS

A successful Border Force needs to do two things: keep people out of the country who should not be allowed in, and do so without causing unnecessary disruption to other passengers. In both these respects the Border Force is not succeeding. Its security systems are out of date, overstretched and failing to cover all passengers adequately. Its target times for vetting inbound passengers are extremely generous, and even then they are regularly not met. With the technology available it should be possible for regular visitors from low-risk countries such as the United States and Japan to walk through British customs like a visitor walks in and out of the Underground network. Furthermore, with increasing numbers of people from China, India and the Gulf States projected to visit western Europe as tourists or investors, it is vital Britain does not lose business and tourism to its European neighbours.

The Border Force cannot continue on its current business model for long. Not only will existing problems continue (and with it the unnecessary risk of a catastrophic security failure), costs will balloon as entry checks are made. Not only are these problems in their own right, in the wake of the Brexit vote there is now a clear public demand for secure borders.

The UK needs a fully computerised system that is at least as good as those of our nearest neighbours, and ideally future-proof to foreseeable advances in international standards.

The Watch List, Sempahore and Centaur should be replaced with a single, new database that is accessible by verified Border Force staff. This should give Border Force agents a real-time database against which to check passenger information.

Biometric passports should contain, or link to, more than just the information visible on the passport itself. There should be a collection of biometric data other than faces as standard when passengers travel internationally. This must be accurate, fast and non-invasive. Facial recognition technology is less accurate than fingerprint or iris scans, and has been prone to failure in the e-Borders system.³³ Academic research also suggests that a failure rate of as high as 15% is possible when trained border staff compare a person to their passport photo, highlighting the need for something less prone to human error.³⁴ Fingerprint verification technology, if accurate enough, would be preferable to iris scanning given the relative invasiveness of the latter.³⁵

A successful system should give the Border Force:

- Advance notice of all passengers entering the UK;
- A database against which these passengers' details are kept, to notify them of anyone who should be turned away or subject to further questioning;
- An automatic, biometric system that confirms passengers' identity;
- A system that is deployable by small teams of Border Force agents (or approved surrogates) at small ports and airports. That is to say, it should be mobile, secure and inexpensive;
- A system that can perform and record comprehensive exit checks to detect overstayers and others of interest to the Border Force.

All of this is particularly desirable in the wake of the Brexit vote. Having control over the border is not merely a phrase – it may mean different things to different people but fundamental to any version of this goal must be actually knowing who is coming into the country, and having the ability to block them from doing so if the law requires it.

If EEA passengers whose target wait time is currently 25 minutes are now subject to non-EEA levels of scrutiny (with longer 45-minute waiting times), the Border Force will be stretched past breaking point. The need for an upgrade has been obvious for a long time, but Brexit has made it a matter of urgency.

Delivery

That a new, technologically advanced system along these lines is needed is clear. But the government will, rightly, be cautious about how it implements this in the wake of the Raytheon fiasco. Lessons learned from other contracting experiences suggest that the key is to pay for successful outputs rather than inputs and to specify what kind of system is desired instead of how it should be delivered.³⁶

Although this need not entail a full-scale contracting out or privatization, private sector involvement seems like the obvious route. The intellectual property needed to deliver such a system is already in existence in the hands of private firms, and if they can demonstrate an already-working model and system it will avoid an expensive, risky and time-consuming project to design one in-house. The Home Office has enough on its plate already.

CONCLUSIONS

After years of queues, delays, security failures and waste it is tempting to say that the Border Force has failed us. This would be wrong: the Border Force has been failed by successive governments which, thanks to financial constraints and Whitehall's hapless management of past IT projects, have not given it the tools it needs to do its job properly.

That's a job that has become increasingly difficult. International terrorism and the migrant crisis both require extreme vigilance on the part of the Border Force, as

well as an effective database to check passengers against. At the same time, legitimate international travel into and out of Britain has been rising. It may even be necessary, as has been suggested, that manpower needs to be significantly increased to take into account its expanded role.

On top of this there are changes in cultural attitudes that could help raise the status and morale of Border Force staff. Under New Labour, internationalism became something of an article of faith among high-status people, while concern about immigration and borders became seen as low-status. Controlling the borders, in essence the primary function of a nation-state, lost prestige. Yet the people who protect us from terrorism, and at the same time act as the friendly face of Britain to guests, should enjoy the same esteem as the military, which remains one of few British institutions trusted by the public.³⁷ The Border Force should be lauded as public servants protecting the realm from those who would do us harm.

Starved of funds and neglected, it's no wonder that the Border Force has been stretched so thin. Its tools are out of date and, by everybody's judgement, not fit for purpose. It must consult three separate databases that are all administered differently, and each with significant flaws. Comprehensive data collection, which would allow the government to administer the immigration systems on a micro level (checking entry and exit visas to prevent overstaying), and a macro level (with reliable real-time data about who and how many people are coming in), does not happen and cannot happen with the current system.

More issues pressures will arise in the wake of Brexit. Improvements to long-distance international business travel will be of particular importance so that any loss in business with the EU is offset by more dealings with non-EU passengers; EEA passengers will need to be subjected to more rigorous checks; and the public dissatisfaction with Britain's existing border system needs to be addressed.

Remedying public dissatisfaction might be, ultimately, the most important priority. The public must have faith in the country's borders. The alternative is a much blunter policy that restricts immigration of legitimate, productive migrants even more, and creates a sense of fear and suspicion of foreigners in Britain.

A technological solution is needed to give the Border Force the resources it needs in a cost-effective way. This need not be an enormous government white elephant – it is a challenge of technical sophistication, not brute size or funding. Finding the correct provider for that system must be the Home Office's top priority, because delivering it is the public's.

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