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HARNESSING ENTREPRENEURSHIP TO SECURE BRITAIN'S BORDERS

THE CASE FOR PRIVATISING THE PASSPORT AND IMMIGRATION FUNCTIONS OF UK BORDER FORCE

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SUMMARY

- The UK border is becoming increasingly busy. In 2014-15 118 million passengers entered the UK; air passengers are expected to double by 2050.
- UK Border Force (UKBF) is already under strain due to its workload doubling since it has been ordered to undertake exit checks for all people leaving the country.
- UKBF has not performed well recently, and its ability to meet these new challenges is questionable. Poorly managed, understaffed, and struggling with outdated and unreliable IT systems and infrastructure, UKBF is failing to secure the UK's borders.
- Currently, most of the 90,000 general aviation flights a year entering the UK are not met by UKBF. The Chief Inspector of Borders and Immigration has criticised weak risk assessment and rising numbers of missed passengers. According to a 2013 PAC report, the Border Force missed eight out of 19 seizure and detection targets, six of which were missed by over 10%. Unless UKBF improves productivity, it will require a £1 billion/year increase in its budget (in 2015 pounds) to keep up with its workload.
- The Government's most recent attempt to digitise border security failed catastrophically, with Raytheon, the official partner, suing the Home Office – who eventually settled out of court at a cost of potentially over £1 billion to the taxpayer.
- According to the Major Projects Authority, the Digital Services at the Border programme is still facing “major risks or issues” such that “successful delivery is in doubt”.
- The efficient operation of the UK's borders is a core responsibility of the state, but the Home Office and UKBF have struggled to meet that requirement. UKBF and its predecessors have underperformed both as part of an arms-length agency and as an in-house directorate.
- The potential cost savings from contracting out the IT and non-law enforcement operations needed to secure the border are the only way border control can be made both effective and affordable for the future. The Government should therefore contract out the border control functions of UKBF and transfer all staff to a new private sector contractor.



PROPOSALS

- The Government should contract out the border control functions of UKBF and transfer all relevant staff to a new private sector contractor.
- There should be an acquisition of new front-line infrastructure and equipment that reads and verifies both digital fingerprint and biographical information from a passenger that can be cross checked instantaneously against a new Watch List.
- The new front-line infrastructure and equipment would support remote and even un-staffed border operations, enabling currently unsecured parts of the coastal border to be guarded, and this should be written into the service specification when the contract is issued.
- The Government should combine delivery of the service with responsibility for hardware and IT procurement, effectively leaving the choice of IT system (along with responsibility for maintaining it and any risk factors) to the contractor. The role of the Home Office should be focussed on setting the outcomes to be achieved, the requirements and the service standards.
- The UK should adopt the EU Passport Specification (which reflects the International Organisation for Standardization (ISO) and the International Civil Aviation Organisation (ICAO) recommendations) and begin including digital fingerprint technology in new UK passports.
- There should be a rapid replacement of the Watch List, Semaphore and potentially Centaur with a new, integrated database, which would include an Automated Fingerprint Identification System (AFIS) platform.
- The new integrated database, along with entrance and exit checks, would deliver precise and accurate real-time monitoring of who is entering and leaving the UK on a macro- and micro-level and provide ministers with comprehensive, reliable and up to date data to enable them to fulfil their functions properly and effectively.



1. INTRODUCTION

There is much talk at present about the role of the state, and whether the Government is seeking to shrink, or to redefine, it.¹ About one area, however, there is a broad consensus: the state has a responsibility to protect the liberty (including the physical security) of its citizens, and this includes the effective management of the border. Borders are not only points of separation, however, but also points of contact, and those that manage the border have a responsibility not only to exclude individuals or items that are deemed harmful but also to smooth the transit of those who are crossing legitimately. For many, border security is one of the quintessential roles of the state.

The fact that the state has a responsibility does not mean that it is necessary for it to deliver a service, however. Many government responsibilities can be delivered (more effectively) through harnessing private enterprise. The management of the border is no different.

The Government should consider privatising both the capital investment and the service delivery of a major part of the UK's border security. This is currently delivered by the UKBF, a professional law enforcement command within the Home Office. Some of its responsibilities are more susceptible to privatisation than others; privatising the enforcement aspects of its role would require primary legislation and a dramatic change regarding who can exercise legal powers. But much of UKBF's work is not in law enforcement but in the more routine administration of borders – in checking passports, monitoring flows and generating data.

The latter are of particular note because they have been areas where the Home Office has

struggled for many years. The Home Office has tried both in-house and arms-length operation of the service, while at the same time wasting £1 billion on a failed attempt to develop a new IT system. A third option – outsourcing delivery of the service to the private sector – appears to have been largely overlooked. Yet it would offer real advantages – not least that the contractor could utilise already-developed IT systems to deliver a service to standards set by the Home Office.

This novel and lateral thinking is required because UKBF faces unprecedented challenges. The Government has committed UKBF to conducting exit checks on all people leaving the UK, doubling its workload. A further doubling is expected over the next 35 years owing to predicted increases in traffic flows. Unless UKBF improves productivity, this will require a £1 billion/year increase in its budget (in 2015 pounds). A comprehensive and coherent IT solution, enabling a more efficient deployment of staff, is the only way to enable the Home Office to live within its likely future budget and would bring the delivery of the fiscal consolidation nearer. There are also increasing demands for UKBF and the Home Office to be able to produce real-time data on people entering and leaving the UK, not to mention a longstanding call to improve the quality of migration statistics (which at present are wholly unsatisfactory). The technology already exists to provide this, and acquisition of it could be part of any contract; privatisation might even help overcome the “not made here” problem whereby Government demands tailor-made IT systems rather than buying “off the shelf”.

Approximately 90,000 general aviation flights land in the UK each year and UKBF is still unable

¹ The Economist (2015a), The Daily Telegraph (2015), The Independent (2015).



to confirm that it meets the majority of these flights;² privatisation and modernisation could be accompanied by a requirement for a tightening of border coverage. Finally, UKBF has a responsibility to legitimate travellers to make their journey across the UK borders as swift and as smooth as possible, a feature that could be built into any contract.

2. UK BORDER FORCE – BACKGROUND

UKBF is responsible for securing the UK border and controlling migration at 138 ports and airports across the UK and overseas. In 2014-5 its operating costs were £517 million (3.49% of total Home Office expenditure) against a planned budget of £487 million. This overspend needs to be seen in light of a dramatic reduction in costs from £611 million in 2012-3. Around three quarters of its expenditure was staff costs for its 8,000 officers.³

The role of UKBF is summed up by its five priorities. It is notable that as of February 2016 the UK Border Force website still listed these as its 2012 to 2013 priorities.⁴ Assuming these remain the same, UKBF's priorities 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; and

- provide demonstrable effectiveness, efficiency and value for money.⁵

The scope of UKBF's operations include migration control, custom operations and border security. In practice this includes routine staffing of entry and exit points but also law enforcement operations. These are very different areas of work – the former can be undertaken by any appropriately trained official whereas the latter requires officers with a warrant or commission from the crown.

There are also some enforcement operations that are not based at points of entry. For example, UKBF operates five Customs Cutters to protect UK waters and coastline, respond to intelligence-led information or patrol high-risk areas.⁶ Their primary function is to intercept drug shipments and other restricted or prohibited goods being trafficked by sea. Though not armed, they have stop and search powers and represent a law enforcement capacity that ministers will surely want to keep under direct control.

Border law enforcement functions are not considered in detail in this paper. It is arguable that UKBF has its enforcement role less as a legacy of any positive decisions about the synergy between those functions and migration control, and more as a simple residual of the need to find a home for the former Customs and Excise enforcement functions when a single tax department was created under the last Labour Government. The National Audit Office (NAO) has remarked that demand on UKBF has resulted in under-manning of customs enforcement, and

² PAC (2013), p10; PAC (2015), p16-17.

³ Home Office (2015).

⁴ <https://www.gov.uk/government/organisations/border-force/about#what-we-do>

⁵ <https://www.gov.uk/government/organisations/border-force/about#what-we-do>

⁶ They can also be deployed internationally. In 2015, for example, two vessels were deployed to the Mediterranean to assist with the interdiction of refugees from North Africa.



recent media reports have highlighted the need for active intervention to engage with clandestine people smuggling involving remote coasts and islands.⁷ While the details are beyond the scope of this report, a powerful argument can be developed for separating law enforcement functions carried out under Crown authority from the operational tasks of immigration control which are suitable for contracting out, resourcing that enforcement capability properly in its own right, and establishing a distinct and active, intelligence-led, Border Police force with a remit focused on intervention and interdiction.

3. UNDERSTANDING BORDER SECURITY

Frontiers are both places of separation and of connection; the forces of globalisation are driving an increase in cross-border movement of goods and persons *pari passu* with an increase in global terrorism, inter-state refugees⁸ and international crime. As such, borders need to be seen not as a “security-identity nexus” but a place for “sorting and sifting goods and people.”⁹

The ideal border is utterly seamless for the legitimate migrant and utterly impermeable to the illegitimate. But this is unrealisable and also unhelpful insofar as it creates unrealistic expectations. Border security can never be absolute; “there is no such thing as an impermeable border”, as the Director General of UKBF was at pains to remind the Home Affairs Select Committee.¹⁰ What was arguably the world’s most heavily guarded frontier – the Berlin Wall – was nonetheless breached on average every

couple of days.¹¹ The 9/11 terrorists entered the US through legal channels from friendly nations.

Security needs to be understood in terms of risk management,¹² and the interdiction of illegal goods or persons as something that can happen at or on either side of the border. Furthermore, what counts as “illegal” is itself subjective and context-specific, with the border often acting as a filter that changes the nature of an item. A carton of cigarettes, for example, is not inherently (il)legal; its legality depends upon the way it passes the frontier, whether it is declared, whether duty paid etc. Similarly, the (il)legality of individuals depends upon their intentions and actions rather than their persons.¹³

This understanding of the nature of border security is important for at least two reasons. Firstly, since 2003, the Government has aimed to identify individuals of interest as early as possible, so that they can either be prevented from travelling, or intercepted upon arrival. The Government describes this as “exporting the border”.¹⁴

Secondly, the efficacy of any border security regime is a function not merely of its ability to exclude the undesirable and the illegitimate, but also of its ability to smooth the flow of people and things that are crossing the frontier legitimately

⁷ Daily Mail online (2016).

⁸ By the UNHCR definition, “inter-state refugees” is a tautology, the intra-state equivalent being “internally displaced persons”.

⁹ Comments by John Agnew, Johnson (2008).

¹⁰ Parliament (2015), 14.15.00.

¹¹ This smooths a very uneven flow of illegal migrants, but over its 30 year span more than 5,000 people managed to pass over, through or under the barrier.

¹² This is a common theme. See, for example, comments by Mathias Albert in Johnson (2008); Congressional Research Service (2013).

¹³ Congressional Research Service (2013).

¹⁴ Home Office (2006).



and for good reason. Lengthy queues are not a sign that security is tight but that it is being managed poorly, and may represent a net loss of welfare if the cost to those crossing the border is greater than the cost that would have been borne by those within the border had security been looser. Queues of two or three hours at the Mexico-US border are the quintessential example,¹⁵ but the UK border is also inefficient: in September 2015 UK Border Force missed its target for processing 95% of non-EEA migrants within 45 minutes at Heathrow Terminals 3 and 5 by nearly 10%.¹⁶

4. THE CHALLENGES FACING UK BORDER PROTECTION

4.1 Increased demand and constrained resources

The UK border is becoming increasingly busy. In 2014-15 some 118 million passengers entered the UK and a similar number exited. Air passengers are expected to nearly double between 2008 and 2050.¹⁷ Over £700 billion of international trade crosses the UK border each year.¹⁸ Air freight is expected to increase by 28% from 2.4 million tonnes in 2010 to 3 million in 2015. Over

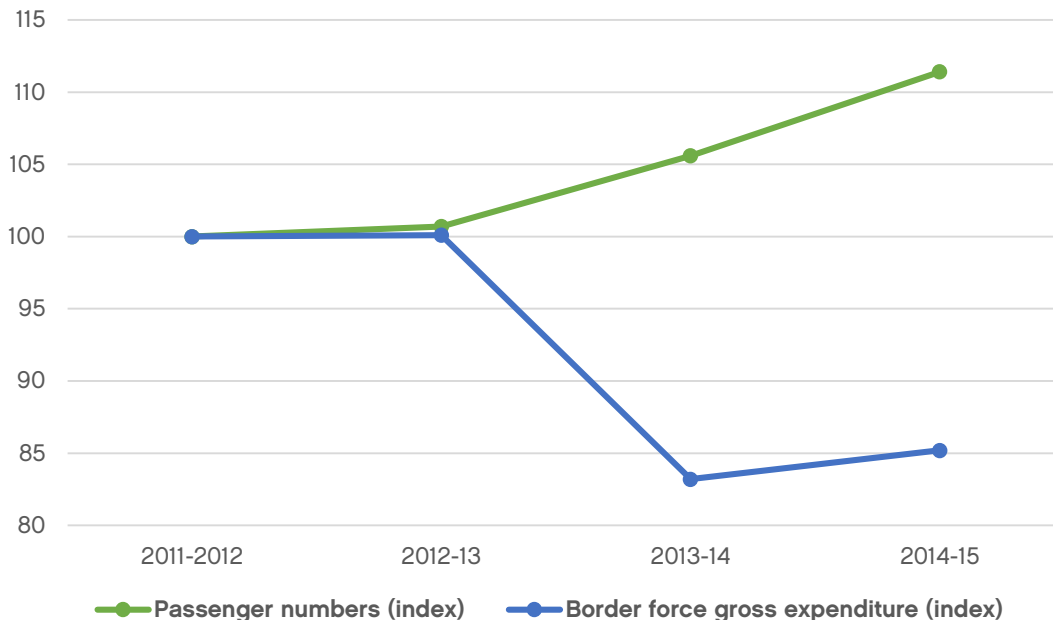
¹⁵ Financial Times (2013); Latin News (2015).

¹⁷ NAO (2013); DoT (2015b).

¹⁶ Heathrow (2015).

¹⁸ HMG (2015), para 4.23.

Figure 1: Changes in UKBF budget and passengers arriving at the UK



	2011-12	2012-13	2013-14	2014-15
Passenger numbers (index)	100	101	106	111
Passenger numbers (million)	106	107	112	118
Border force gross expenditure (index)	100	100	83	85
Border force gross expenditure (£m)	616	617	513	525

Source: NAO 2015



141,000 ships arrived at UK ports in 2014,¹⁹ carrying 325.5 million tonnes of freight²⁰ and over 10 million passengers; a similar number of passengers arrive via the Channel Tunnel.²¹

This underestimates the pressure on UKBF because, alongside its creation as a discrete directorate, the Government dramatically doubled its workload by ordering it to begin exit checks for all people leaving the country. Between 1994 and 1998 Governments ordered border officials to cease exit checks at the UK border for EEA and non-EEA citizens respectively. At the time the Home Office described exit checks as “an inefficient use of resources.. that... contribute little to the integrity of... immigration control”.²² These decisions can be seen as being “of their time”; they were taken in an era when migration flows were in the tens of thousands (the 1994 decision was taken in the wake of two years where net migration was at or below zero),²³ terrorism was on the wane²⁴ and the talk was of unstoppable globalisation. Today, border policy is dominated by Islamist terror

and high levels of inward migration. As a result, the 2010 Coalition Agreement committed the Government to “reintroduce exit checks,”²⁵ a promise that has been repeated annually since.²⁶ Accurately counting people entering and leaving the country was one of the main planks of the e-borders business case.²⁷

Moving in the opposite direction, UKBF’s budget has fallen by 15% since 2011 in spite of an 11% increase in passengers over the same period (Figure 1).

As of December 2015, UKBF claimed to be conducting exit checks on 100% of those leaving the country “with some well-publicised exceptions” including “the common travel area, elements of general maritime and... coach traffic.”²⁸

In 2014/5 the cost of processing each of the 118.4 million inbound passengers was £2.80, creating a total bill of £331,989,000.²⁹ Table 1 provides an estimate of the cost pressures facing UKBF owing

¹⁹ DoT (2014).

²⁰ DoT (2015c),

²¹ Assuming broadly equal numbers of inbound and outbound journeys. DoT (2015a).

²² Hansard (1998).

²³ House of Commons Library (2015).

²⁴ The IRA announced a ceasefire in 1994 and in 1998 the Good Friday Agreement was signed. Islamist terrorism was generally viewed as a minor and distant

threat. The years from 1995-2000 saw dramatically fewer terrorist deaths in Europe than the bloody quarter century from 1970.

²⁵ Coalition Agreement (2010).

²⁶ Full Fact (2015).

²⁷ Home Office (2007).

²⁸ Parliament (2015), 14.15.45.

²⁹ Home Office (2015).

Table 1: Cost and staff requirement for unreformed UKBF going forward

	2014/15	2030	2050
Number of passengers	118.4 million (arrival only)	315 million (enter & exit)	445 million (enter & exit)
Cost per passenger*	£2.80	£2.80	£2.80
Total cost	£332 million	£882 million	£1,246 million
UKBF staff	5,000	7,459	10,538

* Constant 2015 pounds.



to rising numbers of passengers and the requirement to undertake exit checks.³⁰ Without productivity improvements, UKBF would need a dramatic and unaffordable increase in staff numbers and costs.

4.2 IT infrastructure

Alongside rising numbers of customers, tightening resources and the need to undertake exit checks, UKBF struggles with unreliable IT systems. The most worrying is the Warnings Index, the common link between passport scanners, border control gates, and the systems used by border authorities.³¹ It was developed in 1995 and was expected to last for seven years. It has so far been operating for twice that time and is not expected to be retired until 2018. The 2013 report by the House of Commons Public Accounts Committee found that the Warnings Index is “outdated and the quality of data is poor.”³² NAO (2015) described the Warnings Index as “highly vulnerable... with the system suffering from an average of two high-priority incidents a week,”³³ including situations where a component of the system was not available or at least 30% of border control points at a port or airport were unavailable.³⁴ For example, on 30 April 2014 there was an outage of the Warnings Index,³⁵ leaving UKBF unable to check arrivals against the database.

Alongside the Warnings Index, two other systems are also showing signs of strain. The Centaur system that logs customs offences frequently generates low-quality data, which clog up the system. In or around 2013, UKBF block-deleted

649,000 matches relating to possible drugs and tobacco smuggling without first checking them. It is estimated that three in 10,000 of these, approximately 200 cases, would have led to seizures.³⁶ The Semaphore system, which is supposed to receive and analyse advance passenger data, faces difficulties because it relies on airlines and shipping firms. Ideally, UKBF would wish to receive data on all those travelling to the UK in advance of their arrival,³⁷ and ideally before they have left their point of origin. However, in September 2015 UKBF received advanced passenger information (API) on just 86% of inbound travellers. At an annual rate, this represents some 16 million travellers for whom no advance data are available. UKBF’s evidence to the PAC meeting on 16 December 2015 stated that API was being carried out manually and was an inefficient process.³⁸ Semaphore is expected to be retired in 2019.³⁹

A contract was put in place with Raytheon in 2007, which was intended to replace the Warning Index and the Semaphore system with one integrated system to improve the efficiency and effectiveness of the border operations. By 2010 Raytheon had delivered a new centre, staffed by officials from the Home Office, police and National Crime Agency, to analyse passenger data received in advance, and issue notifications to frontline border staff. However, the contract with Raytheon was terminated around nine months before the two older systems were due to be fully replaced, and in 2015 the Home Office was still using the two older systems.⁴⁰

³⁰ DoT (2013).

³¹ Computer Weekly (2014).

³² PAC (2013), p12.

³³ NAO (2015), paragraph 1.20.

³⁴ NAO (2015), fn 5.

³⁵ Home Office (2015), p80.

³⁶ PAC (2013), p13.

³⁷ This was in fact the Home Office specification for e-borders. NAO (2015), p7.

³⁸ PAC (2015) p16.

³⁹ NAO (2015), paragraph 1.21.

⁴⁰ NAO (2015) 1.17.



4.3 Management and operations

Faced with these challenges, UKBF has not performed well. PAC (2013) expressed concern that UKBF was failing adequately to secure the UK's borders, highlighting "insufficient and inflexible resources... leading to weakening of security at some ports of entry and neglecting of some duties." They noted that, at the time, "The Border Force missed eight out of 19 seizure and detection targets, six of which were missed by over 10%."⁴¹ Some of the blame was attributed to ministers: "The decision by the Home Secretary to prioritise the target to check 100% of passengers from domestic flights means that resources are diverted from other activities, including customs."⁴²

This was echoed by the Chief Inspector of Borders and Immigration,⁴³ who found in 2014 that "the absence of a visible Border Force presence in the customs channels affected its ability to both deter and detect smugglers". Revenue was being lost and prosecutions missed because of a breakdown of communication between UKBF and HMRC. UKBF failed to examine freight shipments highlighted by HMRC and parcel traffic was not being checked as often as it should be.⁴⁴

While some of these failures are the result of UKBF's poor IT systems, the Border Force is also struggling with poor management practices and the results of bad policy choices. PAC (2013) noted that Border Force does not meet the

majority of up to 90,000 private planes that arrive at the UK's 138 entry ports each year.⁴⁵ Instead it targets those it deems a high risk; this amounts to only a proportion of these private vehicles, and the Chief Inspector of Borders and Immigration has highlighted weak risk assessment and rising numbers of missed passengers in his latest report.⁴⁶ It is therefore impossible for UKBF to know who or what is entering the UK on the balance of those boats and planes. This is partly, but not solely, due to poor quality and incomplete data.⁴⁷ The UKBF's oral evidence to the PAC meeting on 16 December 2015 confirmed that it was still possible for someone to get into the country without being checked through the general aviation route.⁴⁸ UKBF missed 20 high risk flights in 2014/15 and its risk assessment for maritime traffic is still at the pilot stage.⁴⁹

Moreover, the programme to modernise UKBF's IT systems is deemed by the Major Projects Authority to be facing "major risks or issues" such that "successful delivery is in doubt".⁵⁰ The NAO's most recent report highlights slippage against programme milestones, and problems recruiting and retaining sufficient experienced staff.

Worryingly, the NAO has also observed that the Border Force directorate does not have a Target Operating Model for how it should operate in future.⁵¹ This is a weakness previously identified as long as two years ago. It is far from obvious how the right systems can be developed in the

⁴¹ PAC (2013), p5.

⁴² PAC (2013), p9.

⁴³ Strictly, the "Independent Chief Inspector of Borders and Immigration and Independent Monitor for Entry Clearance Refusals without the Right of Appeal".

⁴⁴ Chief Inspector (2014).

⁴⁵ PAC (2013), p10.

⁴⁶ PAC (2013), ev33; Chief Inspector (2016), paras. 5.32 and 5.34 – 43.

⁴⁷ PAC (2013), p12.

⁴⁸ PAC (2015) p17.

⁴⁹ Chief Inspector (2016), para. 6.33.

⁵⁰ This is the meaning of an "amber/red" rating in an MPA review; the programme's status remained "amber/red" at December 2015 (PAC oral evidence, 16 December 2015, p21).

⁵¹ NAO (2015), p49.



absence of an overall vision and plan that starts from the nature of the threat faced at the border and sets out a systemic and sustainable model for the roles IT, passports, and human agents are intended to play in tackling it.

Perhaps unsurprisingly, staff morale in the Border Force is among the lowest in the public sector. In the 2015 Civil Service People Survey, only 20% of UKBF staff responded that “I feel that [my organisation] as a whole is managed well” or that “Overall, I have confidence in the decisions made by [my organisation's senior managers]”, against civil service average scores of 46% in each case.⁵² This is undoubtedly exacerbated by some of the other issues referred to here and in the PAC report.

The Home Office gave oral evidence to the PAC meeting on 9 October 2013 that “over the next decade, assuming it is funded in a future parliament that programme will consume more than £2 billion worth of investment in order to deliver the technological changes that we need”.⁵³

The NAO (2015) in addition reported that:

- There have been eight programme directors on e-border and successor programmes between 2003 and 2015.⁵⁴
- 10 of 13 external reviews of e-borders and its successor programmes by the Major Projects Authority or predecessor bodies rated them red or amber/red.⁵⁵
- Since April 2015, all ferry and rail companies have started providing outbound data as a result of the exit-checks programme, but the

Home Office does not receive inbound passport data from a majority of ferry and rail passengers.⁵⁶

There are also significant weaknesses in the way in which the Home Office manages data. For example:⁵⁷

- The advance passenger data is not used to confirm whether specific passengers notified to Border Force as travelling on a particular flight actually presented themselves at the UK border.
- Little attention is given to measuring the quality of booking data or the data on the Warning Index against which passport data is compared.
- The Home Office does not receive routine information out of the Warning Index about the number of people who have their passports checked at the border, and has no reliable estimate of the number of people crossing the border who require a visa.

The above weaknesses were also highlighted in the oral evidence given to the PAC in December 2015 by British Airways and P&O Ferries.⁵⁸ It is unsatisfactory that private sector carriers should be put to the expense and inconvenience of acting as collectors of data for Government when the data is not then put to effective use. A more efficient system, with the appropriate technological digital platform, is needed.

⁵² PAC (2013), p11; 2015 Civil Service People Survey Data (available at www.gov.uk)

⁵³ PAC (2013), Ev16.

⁵⁴ NAO (2015), p4.

⁵⁵ NAO (2015), p4.

⁵⁶ NAO (2015), 1.15.

⁵⁷ NAO (2015), 3.20.

⁵⁸ PAC (2015) p5, p6, p9-10.



4.4 The inadequacy of UK migration statistics

Migration frequently ranks among the most important political issues cited by the public, and the Conservative Government has made migration one of its key policy platforms. Yet the UK's migration statistics are worryingly imprecise and inaccurate.

For decades the approach to calculating migration statistics was to make estimates based upon the International Passenger Survey, a survey of about 5,000 people travelling through UK air and sea ports. These statistics are subject to a margin of error which (owing to the small sample size relative to the number of actual movements) is so large as to make migration statistics virtually meaningless. Papworth (2013) cited the example of the June 2012 statistic of 163,000 migrants, which was widely reported in the press:

the net migration figure for the year to June 2012 was notionally 163,000. In reality, all the ONS and the Home Office can say is that they can be 95% certain that the level of net migration to the UK was somewhere between 128,000 and 198,000, while there is a 5% probability that it is not even within that range.

The inadequacy of the UK's migration statistics prevents the Government planning effectively. While a market economy is quick to respond to changes in demand and supply (the ability of markets to facilitate the flow of tacit and dispersed information being perhaps their greatest strength),⁵⁹ many large areas of the UK economy are unable to take advantage of that knowledge because markets are prevented from working properly. The supply of developable land (and thus of housing) remains a bastion of

post-war central planning,⁶⁰ as does the provision of health and education; the myriad of public services provided by local authorities came under enormous strain because local Government funding (largely via central Government grants rather than local tax-raising) did not respond to the influx of migrants in the 2000s.⁶¹

In addition, imprecise and inaccurate migration statistics foster among the public a lack of confidence and distrust in those claiming to be managing immigration. It is concerning that the Government cannot produce decent migration statistics. As will be discussed in section 6, there is no reason why this should be the case.

5. THE FAILURE OF STRUCTURAL REFORM

The standard public sector response to institutional failure is restructuring. Consider the following two descriptions by Home Secretaries of the UK's borders and immigration service:

I believe that... our system is not fit for purpose. It is inadequate in terms of its scope; it is inadequate in terms of its information technology, leadership, management, systems and processes; and we have tried to cope with this new age, if you like, with a system that has been inherited from an age that came before it.

– John Reid, Home Secretary, 23 May 2006.⁶²

[T]he UK Border Agency... has been a troubled organisation since it was formed in 2008, and its performance is not good enough... UKBA was given agency status in order to keep its work at an arm's length from Ministers – that was wrong. It created a closed, secretive and defensive culture. So I can tell the House that

⁵⁹ Hayek (1945); Kiesling (2014).

⁶⁰ For a further discussion of this, see Papworth (2012); Papworth (2015).

⁶¹ This last would not be wholly solved by accurate migration figures as the issue is where migrants live once they are within the borders.

⁶² House of Commons (2006).



the new entities will not have agency status and will sit in the Home Office, reporting to Ministers

– Theresa May, Home Secretary, 26 March 2013.⁶³

Between John Reid's declaration that the Immigration and Nationality Directorate was "not fit for purpose", and Theresa May's description of the UK Border Agency (UKBA) as "not good enough", management of the UK border was both taken out of, and brought back into, the Home Office. Neither Reid nor May were referring solely to the 'front line' of UK border protection; their comments related at least as much to immigration control and enforcement. The UK Border Force was established in 2008 as part of UKBA and remained part of UKBA until March 2012, when it was transferred to the Home Office; a year later, UKBA was dissolved and its remaining functions were also brought in house. The re-absorption of the Border Force was supposed to strengthen management oversight⁶⁴ and help avoid earlier crises, such as the relaxation of border controls without ministerial consent.⁶⁵ However, in late 2013 the Public Accounts Committee reported that:

*The separation of the Border Force from the former UK Border Agency was expected to strengthen its capability. But there is little evidence, some 18 months later, of progress in tackling the legacy issues.*⁶⁶

There is no reason to believe that restructuring UKBF will result in improved management practices or help it meet the challenges of rising demand, constrained budgets, and creaking infrastructure.

6. IT IMPROVEMENTS

The UK's electronic passports ("ePassports") include a microchip, known as the "facial biometric", which stores a digitised image of the holder's passport photograph (in line with International Civil Aviation Organization recommendations) as well as the biographical details printed on the passport.⁶⁷

Though certain features (e.g. the distances between eyes, nose, mouth and ears) are digitally coded, today's UK system does not rely on digital facial recognition software. Instead it relies on a person at the border recognising a discrepancy between one of the digital photograph, the physical photograph and the person presenting; therefore the full benefits of the ePassport are not currently being utilised. Although UKBF has been trialling facial recognition software at its e-gates,⁶⁸ these are not yet universal across all 138 ports operated by UKBF. As mentioned, the additional biographical information stored is a digital copy of the data printed on the passport which, in principle, can be cross-checked with records held by the Identity and Passport Service (IPS), but this is not routine.

There is some confusion over whether the UK's ePassports are fully biometric. This is not entirely the case as they only hold a digital photograph and biographical details. The UK Borders Act 2007 clearly states at Section 15 (meaning of "biometric information") that biometric information means "information about a person's external physical characteristics (including in particular fingerprints...)"⁶⁹

⁶³ Hansard (2013), p1500-1501.

⁶⁴ PAC (2014).

⁶⁵ ICIBI (2012).

⁶⁶ PAC (2013).

⁶⁷ Gower, M (2012), Biometric passports, Standard Note: SN/HA/4126, Home Affairs Section, House of Commons Library, Last updated: 10 February 2012.

⁶⁸ House of Commons Library (2012), p3.

⁶⁹ UK Borders Act 2007 section 15(4)



By comparison, the EU Passport Specification further requires that an EU passport carry the digital fingerprints of the left and right index figures in addition to the digital photograph and biographical details. However, the UK and Ireland have opted out of this measure.⁷⁰ Fingerprints are also not included in ePassports in Australia, Canada, New Zealand and the US. However, in December 2015, the US Senate voted to tighten Electronic System for Travel Authorisation (i.e. visa waiver) rules including requiring applications to submit fingerprints and photographs.⁷¹ Including fingerprints in biometric passports for visitors to (and citizens of) the USA would be a logical next step.

The UK should adopt the kind of modern global standard reflected in the EU Passport Specification, which itself reflects the standard provided for by the ISO and recommendations by ICAO, and begin including digital fingerprint technology in new UK passports, making them genuinely biometric. Fingerprint readers, if installed both at border counters and e-gates both at the entry and exit of the ports, would allow the comparison of remotely-held biographical and biometric data on the traveller with the information embedded on the passport's chip. Such a system would eliminate the human judgements on which most identity checks still depend. The technology to do this exists: it is a source of concern that it is not being taken advantage of. In addition, this would enable

carriers to be relieved of the burden of collecting data for Government.⁷²

The inclusion of fingerprint technology should be combined with the rapid replacement of the Watch List and Semaphore with a new, integrated database. This would make the UK's borders far more secure. A replacement Watch List would help UKBF intercept people whom the Government wish to exclude and who are travelling on their own, genuine passports. A proper biometric passport would prevent people travelling on either a fake passport or on another person's passport, increasing security and preventing illegal migration.

Faking passports would be significantly harder because the passport would no longer be simply a document in the hands of the traveller. Rather, the "passport" would consist of two elements which need to be combined to achieve transit: a passbook and an associated computer record. The individual's passbook (what we think of as the passport) would be the "key" but, unless there was a corresponding "socket" in the form of a matching passport record on Border Force database, the "key" would be worthless. To fake a passport, one would need to create a passbook (a relatively easy task) and add a record to the Government database.⁷³ Not only would this be a huge challenge but, if successful, the perpetrator would (literally) leave their fingerprints – and indeed face – all over the crime scene.

⁷⁰ European Commission (2006), "Biometrics Deployment of EU-Passports", EU – Passport Specification, Working document (EN), 28 June 2006.

⁷¹ The Economist (2015b).

⁷² Evidence given to the PAC December 2015 by both P&O Ferries and British Airways was that they were not sure how all the data collected is being used or what benefits there were from the collection of such data, as they do not receive adequate feedback from

the Home Office in relation to the data collected through exit checks. PAC (2015), p9.

⁷³ On a field visit to a company that makes border control systems, the author had a full biometric passport made for him, from scratch, in fewer than five minutes. His hosts were at pains to point out that they could not add the record to the government database, however, meaning that it would be impossible to use the newly-issued passport at the airport.



Travelling on another person's passport would also be difficult. Humans are fallible; an individual who resembles another could probably use their passport if they only had to pass a (bored) Border Force official. Biometric facial recognition combined with fingerprint technology makes this next to impossible. The only way to bypass this security would be to alter the database record, with all the caveats discussed above.

The existence of a central database raises a further complication for those wishing to travel on another person's, or a false, passport. The system would be able to identify easily if the person presenting at the border with an apparently-legitimate biometric passport had previously crossed the border on a different biometric passport. Were Governments to elect to pool data, they could tell if the person had ever travelled anywhere on another passport. This is not automatically evidence of criminality (it would include people with dual citizenship, those with more than one live passport in their own name, etc.)⁷⁴ but would warrant a longer conversation with border control officials. Such a system would be particularly effective at identifying individuals who were trying to skip the country under a false identity.

The benefits would not be limited to security, however. Combining second generation ePassports, exit checks, real-time interface between the border and the Home Office database, and comprehensive coverage of all the UK's entry and exit points, would give the Government a better picture of who was, and who was not, in the UK at any time, on both a macro and a micro level.

On a macro-level, exit checks would enable accurate counting of migrants both in and out,

and thus accurate migration figures. However, unless designed properly the systems in place will still not give perfect figures. Firstly, unless there is a cross-reference with visa status, the Home Office will know how many have come and gone but not how many were tourists and how many immigrants; passport and visa data needs to be integrated. Secondly, with sufficiently advanced border control infrastructure, data can be updated in real time. It is possible to (indeed, other countries already do) have live monitoring of the numbers entering and leaving the country, their visa and immigration status, country of origin, etc. With this technology the Home Office could produce a minute-by-minute count of the numbers entering and leaving the UK through normal points of entry.

On a micro-level, it would enable much easier and more efficient management of those who had entered the UK. The Home Office would know immediately when a person overstayed their visa; UK Immigration Enforcement could receive a daily list of people whose visa had expired the previous day and who had not left the country. In addition, migrants and asylum seekers could be issued visa/ID cards upon arrival that would enable them to access services and also give those who dealt with them (e.g. employers; landlords) confidence that they were acting within the law.

⁷⁴ A common practice among frequent flyers in some countries owing to the fact that visa officials frequently hold passports on which visa applications are pending for several weeks, making it useful to

have a duplicate passport to facilitate visa-free international travel in the meantime.



7. THE CASE FOR PRIVATISATION

7.1 IT design and procurement

The Government is committed to moving towards a more automated, more data-driven solution to the challenges of UK border security – one that requires the delivery and management of complex IT systems. In the 2015 Spending Review and Autumn Statement the Chancellor of the Exchequer announced additional funding for improved intelligence and threat detection at the UK’s borders:

The Spending Review invests over £130 million in border technology, to increase the availability of intelligence and data for frontline services to accurately target criminals, illegal migrants and illicit freight. The Government will also invest more than £250 million to overhaul the passport and

immigration system... [to] enable customers to apply and pay for their passport and visa applications entirely online...⁷⁵

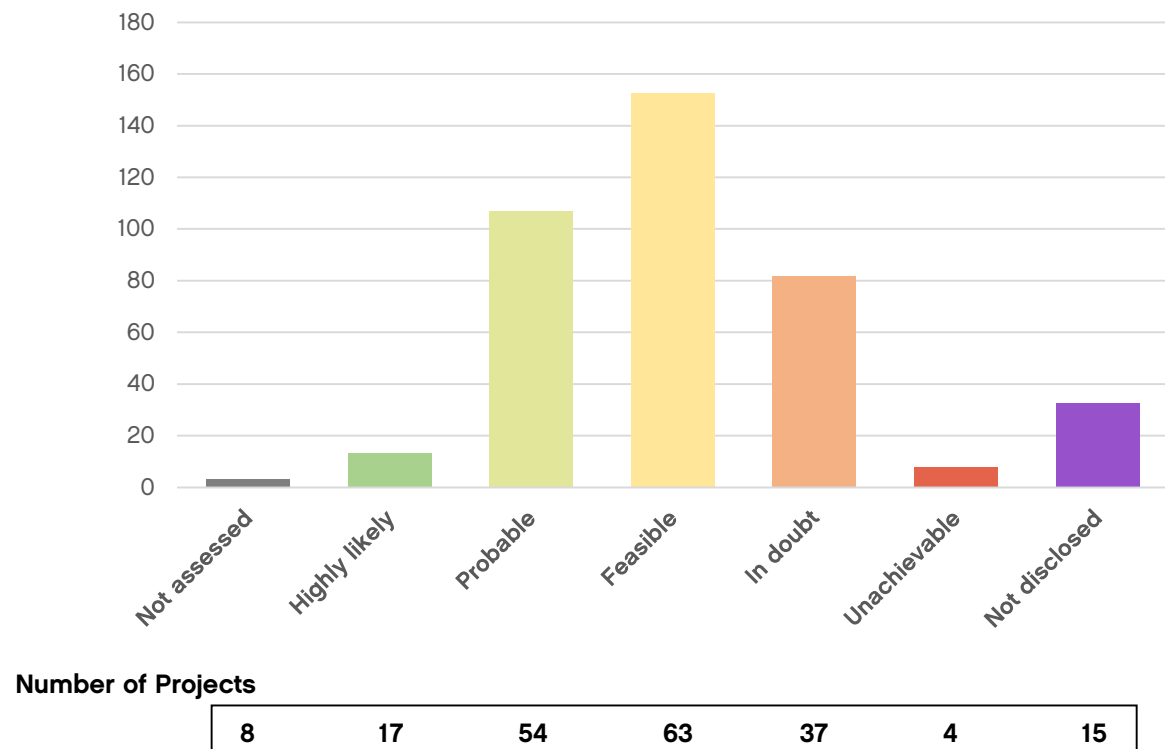
The Home Office settlement included:

- £500 million increased funding for the counter terrorism budget, to protect the UK from the ongoing threat posed by terrorism;
- over £1.3 billion of capital investment by 2019-20, to deliver state-of-the-art security at the border; and
- resource savings of 5% by 2019-20 through a fully self-funded borders and immigration system and total reductions of 30% in the department’s administration budget compared to 2015-16.⁷⁶

⁷⁵ HMT (2015), paras 1.284 and 1.286.

⁷⁶ HMT (2015), paragraph 2.7.

Figure 2: Number and cost of projects by likelihood that they will be delivered successfully



Source: Major Projects Authority/Guardian



The Government further announced that

Around £600 million of overall border, immigration and citizenship system costs are currently funded by the Exchequer (in addition to customs and asylum support costs). By investing in streamlined and automated processes, saving time for immigration officials and border officers, this funding requirement will be more than halved... [N]ew investments such as £130 million more for automated passport E-gates, watch-list and intelligence technology, will tighten security while keeping queuing times to a minimum.”⁷⁷

However, complex IT systems are an area where Government has often demonstrated a disappointing lack of capacity. The NHS IT programme is the quintessential example of Government failure, costing the taxpayer upward of £10 billion,⁷⁸ but it is not an isolated example. A 2003 report to parliament noted that “over the past five years, IT difficulties have affected, among others, the Criminal Records Bureau, Inland Revenue, National Air Traffic Services and the Department for Work and Pensions.”⁷⁹

A decade later, Computer Weekly produced a “Pull out and keep... guide to UK gov IT failures”. The introduction of Universal Credit is another example: PAC (2013) found that DWP would probably have to write off £140m, and had already written off £41.1m of Universal Credit-related IT costs, while a further £91m had been spent on IT assets that would support

the service for only the first five years.⁸⁰ The “Immigration Case Work” system, commissioned in 2010 and heralded as a “flagship IT programme”, was abandoned two years later at a cost of £350 million.⁸¹ This forced staff to revert to using an earlier system that regularly froze.⁸²

Figure 2 provides a snapshot of the Major Projects Authority’s assessment of the number of Government projects, their overall value and the likelihood that they will be delivered successfully. Of 195 projects assessed, just 17 – with a value of less than 4% of the total monitored – were defined as having “the lowest risks to success”, while over a fifth (including more than a third by value) were either in doubt or unachievable.⁸³

It is within this context that one needs to consider the collapse of e-borders. E-borders began in 2003 with a realisation that officials need not rely on checks solely at the border, but could collect and sift information about travellers in advance. In 2007 the Home Office entered a contract with Raytheon Systems Ltd. to deliver e-borders, but in 2010 the Department cancelled the programme, claiming Raytheon had missed important milestones. Raytheon subsequently sued the Government, which eventually settled out of court.⁸⁴ NAO (2015) found that the total cost to the taxpayer was at least £830 million, but as the Home Office had erased data relating to costs prior to 2006, the actual bill may well have exceeded £1 billion.⁸⁵

⁷⁷ HMT (2015), paragraph 2.14.

⁷⁸ The Guardian, “Abandoned NHS IT system has cost £10bn so far”, 18 September 2013.

⁷⁹ POST (2003), Government IT projects, Parliamentary Office of Science and Technology, Report 200, July 2003.

⁸⁰ PAC (2013), Universal Credit: early progress – Thirtieth Report of Session 2013–14, House of Commons Committee of Public Accounts Report, 4 November 2013.

⁸¹ NAO (2014), Reforming the UK border and immigration system, National Audit Office, HC 445 Session 2014-15 22 July 2014.

⁸² The Daily Telegraph, “Why do all government IT projects seem to fail?”, 22 July 2014.

⁸³ The Guardian, “UK taxpayer faces £220m bill over e-borders contract termination”, 19 August 2014.

⁸⁴ NAO (2015).

⁸⁵ The Guardian (2015).



The 'Digital Services at the Border' (DSAB) programme has been launched to deliver a digitally-driven border security IT system and new processes that will support Border Force, law enforcement, immigration, customs and security and counter-terrorism agencies in the discharge of their responsibilities. DSAB has adopted a different approach to large-scale technology build that will introduce technology in smaller, incremental packages. Nonetheless, the Government's record of IT delivery does not bode well. This is in part due to Government's tendency to want systems to be bespoke/purpose built, rather than accepting off-the-shelf IT systems. It is also a function of the separation of procurement from delivery.

As discussed above, the DSAB programme is currently rated "amber/red", has got through a succession of senior officials, and is deemed by the NAO to be suffering capacity constraints and milestone slippage.

The Government should combine delivery of the service with responsibility for IT procurement, effectively leaving the choice of IT system (along with responsibility for maintaining it and any risk factors) to the contractor. The role of the Home Office should be limited to setting the requirements and the service standards. These should include:

- second generation biometric passports compliant with the EU Passport Specification;
- a new system to replace the Watch List, Semaphore and Centaur;
- the introduction of an Automated Fingerprint Identification System (AFIS) which will analyse fingerprint data;

- built in levels of multiple redundancy to ensure that any failure of the main system does not prevent the front line from checking information; and
- a secure back-up to ensure that data cannot be corrupted or lost.

7.2 Front-line infrastructure and equipment

Building a replacement system for the Watch List, Semaphore and Centaur is not the only area where technological change can deliver an improved service. The other major opportunity for change is in the delivery of new infrastructure and equipment at the border itself. This would comprise not only new e-gates (which should become universal and be the standard point of entry and exit for all ePassport holders) but also mobile technology to enable border officers to carry out their functions at remote sites and along unsecured coastline where people traffickers are effectively rendering unguarded UK borders porous and vulnerable.⁸⁶

It was noted above on page 9 that UKBF currently fails to meet many of the 90,000 general aviation flights each year.⁸⁷ This is a substantial failing. At the very least it makes it impossible to know who has entered or left the country if every day nearly 200 private planes and boats enter or leave the UK without their passengers registering with immigration control. Many of these will be legitimate travellers who simply have no opportunity to register with UKBF. The first innovation would be to provide unstaffed, remote processing booths at which individuals would be required to present themselves and have their ePassport read. These would be checked against the bearer's fingerprints and facial data.

This would eliminate the situation where travellers were perfectly willing to pass through

⁸⁶ Daily Mail online (2016).

⁸⁷ PAC (2013), p10.



border control but had no practical opportunity to do so. It would also prevent people using a counterfeit, or another person's, passport. UKBF could remotely monitor these sites using CCTV and use a fence-and-turnstile system to make the gates hard to evade. It would also mean that any person who was subsequently stopped by law enforcement officers and who had not registered to enter the country would have no excuse for not having scanned their passport. It is important to note that the aim here is not to replace existing staff but to provide a service where currently there is none – by using the existing budget more effectively.

Secondly, mobile devices linked wirelessly to the central database would allow UKBF officers to operate remotely, thus making it easier for them to intercept suspect planes and boats and check the credentials of passengers and sometimes their manifests. With second generation ePassports and mobile devices that are able to take facial and fingerprint scans, this would represent a substantial improvement to existing border security operations.

Finally, additional “pop up” e-gates could be deployed. At the UK's main points of entry and exit, these could be on standby to be brought out during peak times. At less heavily used ports, UKBF officials could effectively create a border post at short notice when conducting spot-checks. This would help meet UKBF's objective to “facilitate the legitimate movement of individuals and trade to and from the UK” by ensuring that, whenever passenger processing times began to lengthen, additional resources could be deployed to ensure that targets were met and passengers smoothed through the system.

Crucially, all this technology already exists. It does not need to be created especially for the

Home Office. Rather, it could be bought “off the shelf”. The acquisition of new front-line infrastructure and equipment that allows for remote and even un-staffed border operations should be written into the service specification when the contract is issued.

7.3 Management and delivery

Against this background, it is not obvious why past options reviews of e-borders and its successor programmes have taken management further into the traditional public sector structures when all the evidence is that public sector management is the problem. The same civil servants are now simultaneously charged with developing a vision for the future operating model, delivering new projects, and managing recovery from past slippage and unwinding historic problems. It is entirely unsurprising that the NAO observes that these tasks are straining the capacity of the programme and its staff.⁸⁸

A more natural approach would focus the Home Office on its primary role in designing the Target Operating Model, specifying its needs, and acting as future user and intelligent customer. It is clear that many of the issues faced by the Digital Services at the Border programme stem from competing and conflicting pressures created by the most senior decision-makers being held to account for delivery against deadlines and targets which are not themselves public policy outcomes. Past failures, both with the UKBA as an arms' length agency, and with the Raytheon contract, are most plausibly explained by the centre's over-involvement in, and second-guessing of, delivery issues, and the consequent syndrome of allowing delivery caution to constrain policy. It is hard to argue that major in-house IT projects run into trouble because Government takes too strategic an approach.

⁸⁸ NAO (2015), p50.



There is a cogent, in fact compelling, case for the wholesale transfer to the private sector both of the IT procurement, delivery and the operation of new systems as part of the border control functions of UKBF; and to transfer all staff to a new private sector contractor which would also supply and manage the IT infrastructure. The Home Office and its Border Force directorate would, under such an arrangement, not only be responsible for holding the contractor to account against stringent targets, but, crucially, would also be free to concentrate on Government's proper job of setting and delivering policy outcomes. Success, for senior Home Office civil servants, should be measured in terms of concrete improvements to national security; saving the taxpayer money; and minimising the nuisance to legitimate travellers created by border controls. Hitting IT project delivery milestones is, as a function of Government properly considered, a distraction.

Alongside improving contract arrangements, such an arrangement would ensure that staff training and technological change went hand-in-hand. Crucially, it would again transfer risk from the public to the private sector. This would avoid confusion about where fault lay in the event of error or where a service standard was missed. For example, in the event that the successor to UKBF missed its target for processing migrants within a Home Office-defined timescale, it would be immaterial whether the fault lay with IT, equipment or staff; the contractor would be accountable and sanctions could be applied in line with the contract.

In line with European and UK employment law, the Transfer of Undertakings (Protection of Employment) Regulations 2006 and the Collective Redundancies and Transfer of Undertakings (Protection of Employment) (Amendment) Regulations 2014 would apply, ensuring that staff retained their jobs and their terms and conditions were at a minimum

maintained if not in fact significantly improved. The private contractor should consider providing incentives to staff to move from restrictive contracts on to flexible contracts that provide for more efficient deployment.

Staff – whose morale has suffered badly from past decisions – are potentially among the biggest winners from a successful privatisation. This is because, as with all jobs, the wages of UKBF staff are ultimately driven by productivity. If staff are able to process passengers more quickly (e.g. where a border officer were able to monitor a dozen e-gates, where previously officers had to staff each gate individually) then UKBF would be able to pay them more generously.

8. CONCLUSION AND RECOMMENDATIONS

The efficient and effective operation of the UK's borders is a core responsibility for the state, but the Home Office and UKBF have struggled to meet that requirement. UKBF has underperformed both as part of an arms-length agency and as an in-house directorate. It is now under increased pressure: it has to check departures as well as arrivals, it faces a doubling of demand over the next 35 years, and its budget is constrained. The Home Office has proven unable to improve the vital IT infrastructure that a modern sovereign border requires and has been guilty of meddling with operational decisions for political ends. Morale in UKBF is low and its management practices and contracts outdated.

The public sector has shown that it cannot manage these functions effectively. The Government should now draw the obvious conclusion from the evidence before it and contract out the passport and immigration control functions of UKBF. Customs-related enforcement should be demerged and established as a distinct and active, intelligence-



led, border police force with a remit focussed on intervention and interdiction.

The future of passport and immigration control should represent the contracting out both of service delivery and of the procurement and management of IT systems. The contractor would be charged with introducing second generation ePassports and linking them to a new IT database that would replace the Watch List, Semaphore and potentially Centaur, as well as providing real-time macro- and micro-level data on who is in the country. The contractor would also be required to roll out new front-line technology and systems so that UKBF staff could work remotely, so that areas that were not currently covered by UKBF could be covered, and so that backlogs at major transit points could be dealt with swiftly and the British public were safer and more confident that people coming to Britain were entitled to do so and were not overstaying.

The contractor would be held to account by clear service standards set by the contracting party (the Home Office). Ministers would remain fully accountable to Parliament for the successful operation of the border. A private sector solution would make it easier for them to do that, freeing them from the obligation that loyal and conscientious Ministers naturally feel to defend their civil servants when things go wrong, and thus making it easier to tackle problems at source, swiftly and decisively.

Public concern over the security of Britain's borders, from illegal immigration, people trafficking, and terror are growing. The wider framework of border control is destabilised by a global crisis of migration. Europe's long-standing border cooperation within the Schengen agreement is breaking down, so that barbed wire is once again rolling out across the EU's external frontier and internal border control points are being put back in place at internal Member State

borders. Yet Britain's response remains mired in established civil service business-as-usual.

A new contracted out solution can be delivered that harnesses private capital investment, deploys the latest biometric technology in an integrated and systemic way with real private sector project management expertise and know how, improves targeting and deploys staff in more effective and satisfying ways.

Such a model would not only be more secure, but would create a better traveller experience, quicker passage across the UK border, a better presentation and experience of Britain to visitors arriving for the first time, and to business travellers coming to Britain to invest in this country and fuel its economic growth. The question is surely not why the Government should go down this road, but rather what is stopping it.



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