Defence and security after Brexit

Understanding the possible implications of the UK's decision to leave the EU

Compendium report

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Preface

This RAND study examines the potential defence and security implications of the United Kingdom's (UK) decision to leave the European Union ('Brexit'). Specifically, it seeks to identify those policy areas, strategic concerns or military capabilities that might be most affected, as well as to explore and define the spectrum of possible outcomes in each area. The goal is to help policymakers both inside and outside the UK to understand the key questions provoked by Brexit, and thus to inform how defence and security actors begin to plan for, mitigate and address these uncertainties as the UK begins negotiations to leave the European Union.

This RAND study comprises three publications:

- This compendium report, which provides the greatest level of detail on the analysis conducted.
- The associated overview report, which outlines the principal findings of the study.
- A standalone international perspectives report, which provides a snapshot of selected international perspectives on Brexit following the June 2016 referendum.

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Acknowledgements

Abbreviations

ARRC	Allied Rapid Reaction Corps
CAP	Common Agricultural Policy
CASD	Continuous At-Sea Deterrent
CEPOL	European Police College
CEPS	Centre for European Policy Studies
CER	Centre for European Reform
CERT	Computer Emergency Response Team
CIRT	Computer Incident Response Team
CJEF	Combined Joint Expeditionary Force
CMF	Combined Maritime Forces
CNI	Critical National Infrastructure
CONTEST	UK Counterterrorism Strategy
CPM	Civil Protection Mechanism
CPNI	Centre for the Protection of National Infrastructure
CSDP	Common Security and Defence Policy
DCDC	Development, Concepts and Doctrine Centre
DFID	Department for International Development
DSACEUR	Deputy Supreme Allied Commander Europe
DSM	Digital Single Market

DSPCR	Defence and Security Public Contracts Regulations 2011 (UK)
EAW	European Arrest Warrant
EC3	European Cybercrime Centre
ECHO	Directorate-General for European Civil Protection and Humanitarian Aid Operations
EDA	European Defence Agency
EDTIB	European Defence Technology and Industrial Base
EEA	European Economic Area
EEAS	European External Action Service
EFSI	European Fund for Strategic Investment
EFTA	European Free Trade Association
EGC	Group of European Government CERTs
EIB	European Investment Bank
EJN	European Judicial Network
ENISA	European Network and Information Security Agency
EPCIP	European Programme for Critical Infrastructure Protection
ERC	European Research Council
ERCC	Emergency Response Coordination Centre
ESA	European Space Agency
ESDP	European Security and Defence Policy
ESPAS	European Strategy and Policy Analysis System
EU	European Union
EU INTCEN	EU Intelligence and Situation Centre
EUNAVFOR	EU Naval Force

FATF	Financial Action Task Force
FCAS	Future Combat Air System
FCO	Foreign and Commonwealth Office
FDI	Foreign Direct Investment
FF2020	Future Force 2020
FPDA	Five Power Defence Arrangement
FTA	Free Trade Agreement
GCHQ	Government Communications Headquarters
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GMES	Global Monitoring for Environment and Security
GPA	Government Procurement Agreement
HQ	Headquarters
HQ IADS	Integrated Air Defence System Headquarters
IEMA	Institute of Environmental Management and Assessment
IGA	Intergovernmental Agreement on Cooperation on Criminal Justice Matters
INDC	Intended Nationally Determined Contributions
IRA	Irish Republican Army
ISIS	Islamic State
ISR	Intelligence, Surveillance, Reconnaissance
JEF	Joint Expeditionary Force
JF2025	Joint Force 2025
JSF	Joint Strike Fighter (F-35)

LoI	Letter of Intent
MI5	Security Service (UK)
MI6	Secret Intelligence Service (UK)
MOD	Ministry of Defence
NATO	North Atlantic Treaty Organisation
NCA	National Crime Agency
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
OCCAR	Organisation for Joint Armament Cooperation
OHQ	Operational Headquarters
OSCE	Organisation for Security and Co-operation in Europe
PESCO	Protocol on Permanent Structured Cooperation in Defence
PFI	Private Finance Initiative
PNR	Passenger Name Record
PPP	Public–Private Partnership
PSNI	Police Service of Northern Ireland
QA	Quality Assurance
QRA	Quick Reaction Alert
R&D	Research and Development
RAF	Royal Air Force
RAN	Radicalisation Awareness Network
RDM	Robust Decisionmaking
SABRE	Synergetic Air-Breathing Rocket Engine
SATCEN	EU Satellite Centre
SATCOM	Satellite Communications

SBA	Sovereign Base Area
SDSR	Strategic Defence and Security Review
SHAPE	Supreme Headquarters Allied Powers Europe
SIPRI	Stockholm International Peace Research Institute
SIS	Schengen Information System
SNP	Scottish National Party
SOCA	Serious and Organised Crime Agency
SSBN	Ship Submersible Ballistic, Nuclear
SSCR	Single Source Contracts Regulations (UK)
SSN(VL)	Ship Submersible Nuclear, Vertical Launch
SSTL	Surrey Satellite Technology Ltd
TE-SAT	Terrorism Situation and Trend Report
TFTP	Terrorist Finance Tracking Programme
TPP	Trans-Pacific Partnership
TTIP	Transatlantic Trade and Investment Partnership
UAV	Unmanned Aerial Vehicle
UK	United Kingdom
UKIP	UK Independence Party
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UN FICYP	United National Peacekeeping Force in Cyprus
VAT	Value Added Tax
VJTF	Very High Readiness Joint Task Force
WTO	World Trade Organisation

1. Introduction

On 23 June 2016, the United Kingdom (UK) held an historic in-out referendum on its membership of the European Union (EU). The vote followed a tense, closely fought and often fractious campaign. In February, the UK Prime Minister David Cameron had secured a renegotiated settlement with other EU leaders in Brussels. The deal promised curbs on migrant access to welfare, increased safeguards for non-euro-zone economies, a commitment to cut EU 'red tape' and a British opt-out from Europe's commitment to 'ever closer union'.[1]

On this basis, the UK Government officially joined with opposition parties – most notably Labour, the Liberal Democrats and regional parties like the Scottish Nationalists or Plaid Cymru – in campaigning to remain in a reformed EU. In reality, however, the referendum pitted government ministers, party colleagues and even family members against each other, reflecting long-standing divisions at the heart of British society over the country's identity, role and place in Europe. The Leave campaign promoted a vision of a globally oriented, sovereign Britain free to 'take back control' of borders, trade policy and domestic legislation. The Remain camp argued that any British withdrawal – or 'Brexit' – would threaten jobs, stability and the UK's influence in an increasingly interconnected world.

Figure 1.1 National results of UK referendum on membership of the EU
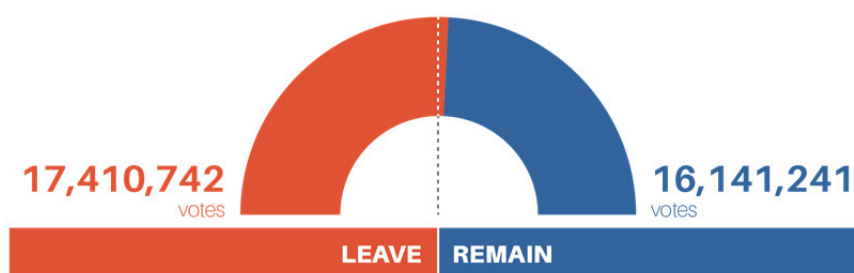
On polling day, the UK electorate defied the predictions of pollsters, financial markets and Britain's foreign allies by voting to leave the EU, with a majority of 51.9 per cent and turnout of 72.2 per cent.[2]

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[1] BBC News (2016e)

[2] Electoral Commission (2016)

The Leave campaign heralded this as Britain's 'Independence Day'. For Remain proponents, by contrast, the unexpected result represented 'the world turned upside down'.[3]

1.1. Study context

1.1.1. Britain's referendum vote has precipitated a period of deep uncertainty

The immediate aftermath of the UK's referendum vote has been one of economic and political upheaval.[4] Financial markets underwent a sharp correction, having expected a Remain win. The FTSE 100 – representing London's most valuable list companies – lost £120bn overnight, with the value of sterling dropping to a 31-year low against the US dollar.[5] The Bank of England announced a cut in interest rates to a record low of 0.25 per cent and made substantial cuts to its forecasts for the UK economy in 2017.[6] Euro-zone markets suffered similar short-term disruption, with a 6.8 per cent slide in Germany and drops of 12.5 per cent in Italy and Spain.[7] The long-term impact of any Brexit, however, remains unclear, with significant business and investor uncertainty about the future.[8]

Within the UK Government, long-serving Home Secretary Theresa May replaced David Cameron, becoming Britain's second female Prime Minister.[9] A major cabinet reshuffle has seen prominent Leave campaigners take the helm at the Foreign and Commonwealth Office and at the newly created Department for Exiting the EU and Department for International Trade.[10] The referendum outcome has also precipitated leadership contests within the opposition Labour party, and in the UK Independence Party (UKIP), which formed a prominent part of the pro-Brexit campaign.[11] Regional leaders in London, Scotland, Northern Ireland and Gibraltar – all areas which voted heavily in favour of Remain – have meanwhile called for a rerun of the vote or an early general election, or else suggested that Brexit provides grounds to revisit the debate on the break-up of the UK.[12] On the European side, the decision has prompted shock, dismay and soul-searching about the future direction of the EU, as well as fears that Britain's example could inspire other Eurosceptic movements in France, Germany, the Netherlands, Sweden and elsewhere.[13]

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[3] Staunton and Lynch (2016)

[4] Besch and Black (2016)

[5] McGeever (2016)

[6] Bank of England (2016)

[7] Chu (2016)

[8] Economist (2016a)

[9] McKenzie and McLaughlin (2016)

[10] Castle and Chan (2016)

[11] Stewart and Elgot (2016)

[12] Reuters (2016a)

[13] Rodionova (2016)

Figure 1.2 Regional results of UK referendum on membership of the EU

The sense of deep uncertainty is compounded by a lack of clarity over the form of exit from the EU the vote entails. Though the UK Government has emphasised that 'Brexit means Brexit',[14] there are a number of different extant models that the UK could in theory draw upon – for instance Norway's membership of the European Economic Area (EEA), Canada's free trade agreement (FTA), or simple World Trade Organization (WTO) rules – and the possibility that negotiations will result in a new, bespoke arrangement for Britain.[15] The negotiating positions of Britain and its European partners are still subject to change and uncertainty, and they will remain the focus of intense debate even after the UK has invoked Article 50, the mechanism that initiates a two-year period of Brexit talks.[16]

1.1.2. *Defence and security have emerged as an important dimension of the wider Brexit debate*

Polling data suggests that foreign and security policy considerations were not significant drivers of the referendum result. Rather, questions about the economy, sovereignty and immigration dominated. Some 49 per cent of Leave voters said the biggest single reason for wanting to exit the EU was 'the principle that decisions about the UK should be taken in the UK', while one-third reported that leaving 'offered the best

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[14] Cowburn (2016)

[15] Dhingra and Sampson (2016)

[16] Ruparel (2015)

chance for the UK to regain control over immigration and its own borders'.[17] Nonetheless, the potential implications of any Brexit vote for defence and security did form an important area of the campaign debate.[18] Particular attention was focused on the question of Britain's role in any potential future 'EU Army', the relationship between the EU and the North Atlantic Treaty Organization (NATO), and the impact of Brexit on intelligence sharing and counterterrorism efforts.[19] Voter responses were divided along social and generational lines – with 69 per cent of those aged 18–24 believing that the UK would be best protected against terrorism inside the EU, compared to only 42 per cent of voters aged 65 and over.[20]

Since 23 June 2016, the impact of the UK's decision on defence and security has remained unclear. On the British side, a number of commentators have suggested that the vote invalidates the key strategic assumptions of the recent 2015 National Security Strategy and Strategic Defence and Security Review (SDSR),[21] or that the British military could struggle to implement its ambitious procurement plans if defence is not exempted from possible government spending cuts if the economy falters.[22] Others have suggested that close collaboration between Britain and European allies will endure despite Brexit, whether at a bilateral level or through NATO, given the EU's already limited defence role.[23] Some argue that the UK Government may in fact be spurred to invest more time and resources in Europe's defence as part of efforts to placate Europhile elements at home and buy goodwill abroad as Brexit negotiations unfold. This would also serve to demonstrate to other allies (not least the United States [US]) Britain's enduring – or, as Brexit proponents argue, reenergised – ambition to be a global security player.[24] Adding a further dimension of uncertainty is the threat of a repeat of the 2014 referendum on Scottish independence, which could raise questions over the future costs and basing of the UK's nuclear deterrent.[25]

On the European side, defence has emerged as a central theme in proposals by defiant EU leaders to underscore the enduring relevance and vitality of the Union, even with the loss of the UK. Many have noted that Britain has traditionally acted as a brake on further European integration in the field of defence – though it has perhaps had a more engaged and leading role in security – with various initiatives suggested by member states for renewed progress towards an EU operational headquarters (OHQ), development of common European capabilities and greater support for defence industrial consolidation and research.[26] On 14 September 2016, European Commission President Jean-Claude Juncker labelled

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[17] Ashcroft (2016)

[18] Swinford and Riley-Smith (2016)

[19] Tucker (2016)

[20] Ashcroft (2016)

[21] Norton-Taylor (2016a)

[22] Chuter (2016)

[23] De Larrinaga (2016)

[24] Rogers and Simon (2016)

[25] Devlin (2016)

[26] Connelly (2016)

such initiatives a top priority for the EU in his annual State of the Union address – with his speech tellingly entitled 'A Europe that Protects, Empowers and Defends'.[27]

1.1.3. Despite its strategic and political significance, this defence and security dimension of Brexit has seen only limited examination and research

In this context of uncertainty, there has been widespread speculation in media and policy fora about the implications of this Brexit decision in the field of security and defence.[28] However, much of this commentary has been reactive, political or else influenced by the lack of concrete evidence and objective research and analysis about what the UK's decision is likely to mean. As noted by Inkster:

> 'The debate about whether the United Kingdom will be better off in or out of the European Union is driven more by emotion than by rational analysis. To the extent that rationality has played a role, it has applied to the question of which option will leave the British people economically more prosperous. But claims have also been made, by exponents of both camps, that the UK will be more or less secure outside of the EU. As with much of the 'Brexit' debate, such claims have been made with little in the way of factual substantiation, and the issue is, like so much else about the UK, complicated by the depth and breadth of the country's global engagement.'[29]

The absence of clear, evidence-based insight into potential policy implications was exacerbated by the lack of contingency planning within UK Government – outside of limited efforts by HM Treasury and the Bank of England – due to fears that any such plans might be leaked to influence the outcome of the referendum campaign.[30]

1.1.4. This RAND study seeks to provide a more detailed understanding of the possible implications of Brexit in the defence and security field

This RAND internally funded study aims to help address the deficit of thinking in this area by providing independent, objective analysis of the following research questions:

- What might be the defence and security implications of the UK leaving the EU for the UK, Europe, or globally?
- What steps could policymakers in the UK, Europe and globally take in the short term to address, mitigate or extract the most benefit from the implications of Brexit for defence and security?
- What research questions merit closest attention by defence and security policymakers and the research community in the context of deep uncertainty about Brexit?

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[27] European Commission (2016b)

[28] Besch and Black (2016)

[29] Inkster (2016)

[30] Elliot (2016)

In doing so, the study aims to identify those specific policy areas, strategic concerns or military capabilities that might be most affected by Brexit, as well as to explore and define the spectrum of possible outcomes in each area. Rather than trying to provide predictions or claim to present firm answers about the future after Brexit, the study seeks to identify those issues most sensitive to potential change and the credible outcomes in each – as well as the drivers, challenges and interdependencies that will determine how any change unfolds. The work is intended to help policymakers both inside and outside the UK to understand the key questions provoked by Brexit, and thus to inform how defence and security actors begin to plan for, mitigate and address these uncertainties as the UK begins negotiations to leave the EU.

1.1.5. *The RAND study team used a structured methodology combining literature review, sensitivity analysis and stakeholder engagement*

To assess the potential defence and security implications of the UK's vote, the RAND study team used a structured multi-method approach, combining literature review, sensitivity analysis and wide stakeholder engagement. This approach comprised four phases, as follows:

- **Phase 1: Defining the baseline**: identifying Britain's activities and commitments as a defence and security actor, determining the sensitivity of these activities to Brexit, and considering the factors that might drive outcomes in these areas.
- **Phase 2: Sensitivity analysis**: developing a series of hypotheses for each functional area to help understand the scope of credible potential outcomes in each as a result of Brexit, and testing these hypotheses through 42 semi-structured interviews with expert stakeholders from the UK, Europe and the US.
- **Phase 3: Study workshop** with 11 additional external experts, discussing the potential outcomes in three areas: the UK and EU's international roles as defence and security actors; underpinning capabilities supporting these roles; and specific challenges facing counterterrorism and information sharing.
- **Phase 4: Synthesis:** bringing together all inputs and findings from the literature review, key informant interviews and expert workshop into this final report.

The four phases are shown in Figure 1.3.

Figure 1.3 Overview of research approach
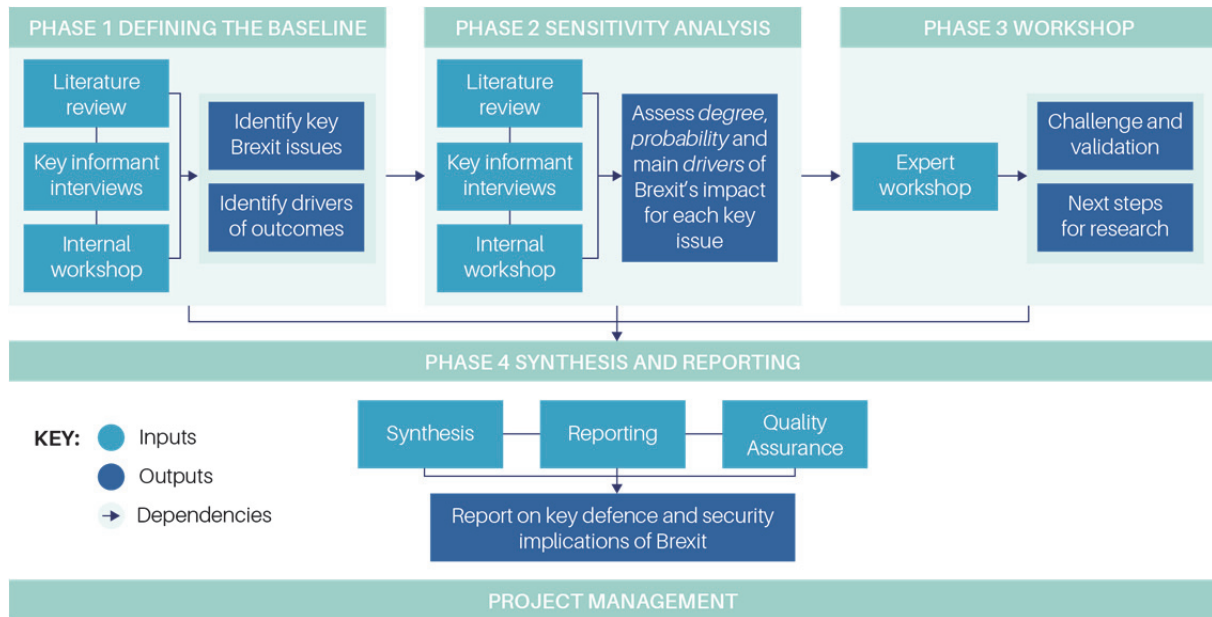
Further details on the study method may be found in Annex A.

1.1.6. This work is not intended to be exhaustive and is subject to several caveats

It is important to note that the findings presented in this short RAND study are subject to a number of constraints on both the scope and the efficacy of the research method:

- **Deep uncertainty about the future:** The future direction of policy, strategy and global affairs is inherently uncertain. The outcomes of Brexit will be shaped not only by decisionmakers in the UK, Europe and elsewhere, but also by external and as yet unforeseen events, with the potential for unpredictable interdependencies between developments in different policy areas.
- **Limited scope:** The study is confined to examining the implications of Brexit for defence and security. It does not consider directly or in detail the wider diplomatic, economic, political or social ramifications of the UK leaving the EU – all issues which are inevitably interconnected.
- **Stakeholder engagement:** While the RAND study team engaged with over 50 senior experts from a range of backgrounds, as well as open-source literature, the insights and views of these experts are likely to represent unintended individual and institutional biases.
- **Practical constraints:** This RAND internally funded study was conducted by a multinational team of diverse political, professional and academic backgrounds and subject to QA review. However, it was conducted within a tight timeframe (July–October 2016) and with finite resources.

Given these limitations, the reader is urged to consider that the findings presented in this report are not intended to define a set vision for what the future of defence and security looks like after Brexit. Rather, they are aimed at providing an independent, structured and analytical assessment of those key issues and questions that policymakers and the research community must begin to examine in more detail in order to shape the most positive outcomes from Britain's decision to leave the EU.

1.2. The US presidential election and Brexit

1.2.1. This study was completed ahead of elections in the US. The victory for Donald Trump brings an added dimension and further uncertainty to the Brexit process

The analysis presented in this report was conducted in the final run-up to voting in the US presidential and congressional elections, which produced a victory for Republican candidate Donald Trump. As of January 2017, the Republican Party now controls the White House, the House of Representatives and the Senate, and it will also be able to appoint at least one new justice to the US Supreme Court in the future. This raises the prospect of significant shifts in US policy across a wide range of areas, in sharp contrast with the domestic political constraints placed on Democratic President Barack Obama by partisan deadlock in recent years.

The election of Donald Trump has been met with shock and surprise in many capitals worldwide, with many European leaders having strongly criticised the Republican candidate's outspoken views during the presidential campaign and his initial policy choices since taking office, not least the imposition of a travel ban targeting a number of Muslim-majority countries. The new President-elect has himself drawn clear parallels between his anti-establishment platform and the UK vote to leave the EU, labelling himself 'Mr Brexit'.[31] Reflecting their close ties, former UKIP leader Nigel Farage – who supported Mr Trump on the campaign trail – became the first British politician invited to meet with Mr Trump after his victory.[32] Many political commentators have portrayed these recent upheavals at the ballot box as part of the wider 'rise of a new nationalism', sceptical of ruling elites, globalisation, free trade and open borders.[33]

Certainly, the new US President will play an important role in shaping the approach to, and outcomes from, the Brexit process for both Europe and the UK. This is especially true of foreign, defence and security policy, where the US remains the leading diplomatic, economic and military power in the Western alliance and a guarantor of European security. The uncertainties created by Mr Trump's election will only further complicate the task of planning, negotiating and implementing the UK's withdrawal from the EU, as well as the definition of new roles for Britain and Europe in a Trump-led world.

A number of important policy areas are sensitive to potential change. Examples include:

- The future of US engagement with NATO and the credibility, cohesion and effectiveness of the Alliance, with Mr Trump having previously challenged the relevance of NATO and suggested that America would only defend those allies that 'pay their fair share'.[34]
- The possibility of a US rapprochement with Russia, including reduced appetite for sanctions, with particular uncertainty in this area following the resignation of National Security Advisor Lt. Gen. Michael T. Flynn, after it was revealed that he had failed to disclose the full details of unofficial conversations with the Russian ambassador to the US.

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[31] Diamond (2016)

[32] Wallis and MacLellan (2016)

[33] Economist (2016h)

[34] Jacobs (2016)

- Uncertainty in the dynamics of US-China relations, with fears of a possible trade war, or conversely a 'great power concert' to agree new deals on issues such as the disputed South China Seas outside of wider international institutions.

- Prospects for renegotiation of the Iran nuclear deal, reduced US interest in removing President Bashar al-Assad from power in Syria, and an increased tempo of operations against Islamic State.

- The potential for reduced US efforts to discourage proliferation of nuclear weapons to countries such as Japan, South Korea and Saudi Arabia, challenging the balance of power in contested regions.

- Uncertainty over plans for US border security, deportation of undocumented aliens, and blocks on new Muslim immigrants and refugees.

- Possible impact on US approaches to privacy and surveillance (including through Five Eyes alliance), as well as the use of torture and targeted killings as part of global counterterrorism efforts.

- The affordability of planned increases in the US military. Mr Trump has pledged to grow the US Army by 60,000 active-duty soldiers (to 540,000), add 100 fighter aircraft to the US Air Force (to 1,200), build a 350-ship Navy (compared to 272 today) and create a US Marine Corps of 36 battalions (compared to the current structure of 24 infantry, 2 armoured battalions).[35]

- Impact on the defence industry, with estimates for an increase in US defence spending of up to $300bn over four years,[36] potentially also with growth in European budgets to reinforce NATO.

- Wider knock-on effects for politics (e.g. Marine Le Pen's campaign to be French President) and economic performance around the world, especially the future of free trade agreements such as the Transatlantic Trade and Investment Partnership (TTIP) or Trans-Pacific Partnership (TPP).

However, the implications of the recent election results are not yet fully understood and the substance of future US policy will become clearer over time as the new administration establishes itself, rolls out its policy agenda and dynamically responds to new developments and crises. As outlined above, this Brexit study took place in the final months of the presidential election and focuses on implications of the June referendum for the UK and EU. It therefore does not consider the added dimension presented by the US election result, except where this was considered by interviewees reflecting on possible future outcomes and interdependencies ahead of the US ballot.

Further analysis is thus required to understand the combined effect of Brexit and a Trump victory on the NATO Alliance, for instance; as it is for EU defence ambitions in the event of US disengagement, or for the UK's place as a 'bridge' between the US and Europe.[37] What is clear is that the difficult timing of managing Brexit alongside an unpredictable and potentially disengaged US administration will only add to the pressure on UK and EU leaders trying to conduct effective strategy-making in the face of deep uncertainty (see Chapter 9).

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[35] Shane and Tilghman (2016)

[36] Berger and Eaglen (2016)

[37] Chalmers (2016)

1.3. Structure of the report

This **compendium** report is one of three publications produced in support of this study. It provides the greatest level of detail on the analysis conducted to generate RAND's findings and conclusions, presented as follows:

- **Chapter 2:** a brief overview of the UK's pre-Brexit role as a defence and security actor.
- **Chapter 3:** implications for defence spending, research and industry.
- **Chapter 4:** implications for multinational defence formations, the EU Common Security and Defence Policy (CSDP) and NATO.
- **Chapter 5:** implications for Scotland and the UK nuclear deterrent.
- **Chapter 6:** implications for migration, border security and overseas territories.
- **Chapter 7:** implications for counterterrorism, organised crime, cyber and resilience.
- **Chapter 8:** reflections on emerging themes and key areas of concern.
- **Chapter 9:** consideration of future directions for policymakers and the research community.
- **Annexes** providing: a more detailed description of the study method (Annex A); an illustrative description of how structured methods such as assumption-based planning may be used to support robust decisionmaking in the face of uncertainty (Annex B); and a list of experts consulted in support of this study (Annex C).

For a shorter synthesis of the principal findings of the study, please see the associated **overview** report.[38] The standalone **international perspectives** report provides a snapshot of selected international perspectives (e.g. French, German, US) on Brexit following the June 2016 referendum.[39]

Further information is also available on the RAND website.

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[38] Black, James, Alex Hall, Kate Cox, Marta Kepe and Erik Silfversten. 2017. *Defence and Security After Brexit: Understanding the Possible Implications of the UK's Decision to Leave the EU – Overview Report*. Santa Monica, CA: RAND Corporation, RR-1786-RC/1.

[39] Ghez, Jeremy, Magdalena Kirchner, Michael Shurkin, Anna Knack, Alexandra Hall and James Black. 2017. *Defence and Security After Brexit: A Snapshot of International Perspectives on the Implications of the UK's Decision to Leave the EU*. Santa Monica, CA: RAND Corporation. PE-225-RC.

2. Britain's role in defence and security

The following provides a summary of Britain's defence and security role and responsibilities as expressed in a range of policy documents including the 2015 SDSR. For the purposes of this study, this appreciation of the UK's role and responsibilities represents the baseline from which the possible ways in which the UK's role in defence and security might be affected by Brexit may be examined.

2.1. The UK as a defence and security power

2.1.1. The UK has long been an active and influential actor in international defence and security

The UK has long ranked among the world's most capable and influential nations in the area of defence and security, bringing its defence capabilities to bear in a wide range of conflicts, crises and operations both close to home and further afield. Following the Second World War, Britain continued to spend a significant proportion of GDP on defence and although this figure has dropped by approximately 1 per cent every decade since 1960, the UK still ranks in the top five countries for defence expenditure globally.[40] Periodic defence reviews set the direction for the prioritisation of defence funding and the capabilities appropriate to the operational needs of the time.

2.1.2. The 2010 SDSR was driven by the requirement for financial austerity, the 2015 Review by shifts in the wider geopolitical context

Financial austerity shaped defence and security decisionmaking in the years prior to the 2015 SDSR. The 2010 SDSR (the first formal strategy review within the Ministry of Defence [MOD] for over a decade) was driven by fiscal realities and the Treasury's focus on rebalancing the defence budget. It resulted in a reduction of 8 per cent in defence spending which, in turn, led to an estimated 20 per cent reduction of the UK's conventional military combat capabilities.[41] The subsequent SDSR, conducted in 2015, reflected a substantial shift in the national and global context: operations in Afghanistan were drawing to a close; Russia had increased its aggressive manoeuvring at NATO's borders; and the so-called Islamic State (ISIS) group had gained in strength and prominence. At home, the UK had pulled out of recession

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[40] Stockholm International Peace Research Institute (2016)

[41] UK Parliament (2016a)

and economic performance was improving. The UK Government had committed to meeting the NATO target of 2 per cent spend on defence for the rest of the decade and increased the defence budget by 0.5 per cent (above inflation) each year until the financial year 2020–21 (see Chapter 3).

The 2015 SDSR set out the UK government's vision for a 'secure and prosperous United Kingdom, with global reach and influence'.[42] It emphasised the close relationship between economic security and national security and underlined the UK's current and planned investment in projecting power, influence and values. The government undertook to protect armed forces manning, making modest increases (700 personnel apiece) to the Royal Navy and Royal Air Force (RAF) and maintaining the size of the Army at 82,000 personnel. Under 'Joint Force 2025' (JF2025) an expeditionary force of 50,000 was planned (an increase on the 30,000 planned under Future Force 2020).[43]

In total £178bn was committed to spending on equipment and equipment support over the next decade. This includes: 138 F-35 fighter aircraft; nine maritime patrol aircraft; 20 Protector remotely piloted aircraft; the Type 26 Global Combat Ship; two Offshore Patrol Vessels; three new logistics ships; new armoured vehicles; and a range of new special forces equipment.[44]

2.2. UK roles and responsibilities

The 2015 SDSR envisaged three overarching objectives for UK defence and security:

- **Objective 1: Protect our people**, at home, in the Overseas Territories and abroad, as well as the UK's territory, economic security, infrastructure and way of life.
- **Objective 2: Project our global influence**, reducing the likelihood of threats materialising and affecting UK interests and those of partners and allies.
- **Objective 3: Promote our prosperity**, taking opportunities, working innovatively and supporting UK industry.

This study focuses in particular on the areas encapsulated within the first of these objectives: 'protect our people'. The following paragraphs summarise the UK's commitments in this area. This is an indicative rather than exhaustive list.

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[42] HM Government (2015)

[43] UK Ministry of Defence (2016a)

[44] HM Government (2016a)

2.2.1. Defence spending

The UK Government has committed to:

- Spend 2 per cent of UK GDP on defence to the end of the current parliament, increasing the defence budget by 0.5 per cent a year in real terms until 2020–2021.[45]

- Increase the equipment budget by 1 per cent in real terms annually and meet the NATO target of allocating 20 per cent of the defence budget to equipment and research and development (R&D).[46]

- Channel funding into a Joint Security Fund, with this fund reaching £1.5bn by the end of the parliament.[47]

- Direct additional funding and staffing (over 1,900 additional personnel) to UK intelligence and security agencies.

2.2.2. Defence capabilities

The UK, through the 2015 SDSR, also committed to the JF2025 programme. JF2025 follows on from the Future Force 2020 (FF2020) programme launched in the 2010 SDSR. It is designed to deliver a range of new and enhanced capabilities for delivering against a broader mission set in a range of challenging operational contexts. Its level of ambition exceeds that of FF2020, envisaging the potential deployment of a force of around 50,000, drawn from:

- A Maritime Task Group of between 10 and 25 ships and 4,000 to 10,000 personnel.

- An Army Division of three brigades (optimised for high-intensity operations) and supporting functions of between 30,000 and 40,000 personnel.

- An Expeditionary Air Group of between 4–9 combat aircraft squadrons, 6–20 surveillance platforms, 5–15 transport aircraft and 4,000 to 10,000 personnel.

- Joint Forces, including enablers and HQ, of around 2,000 to 6,000 personnel.

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[45] UK Ministry of Defence (2016b)

[46] HM Government (2015)

[47] Joint Security Fund was set up in 2015. The fund will reach its full annual funding of £1.5bn by 2020. The funds are shared by the FCO, the MOD, the Department for International Development (DFID) and the three intelligence agencies, MI5, MI6 and GCHQ.

Figure 2.1 Overview of UK strategic plans for JF2025
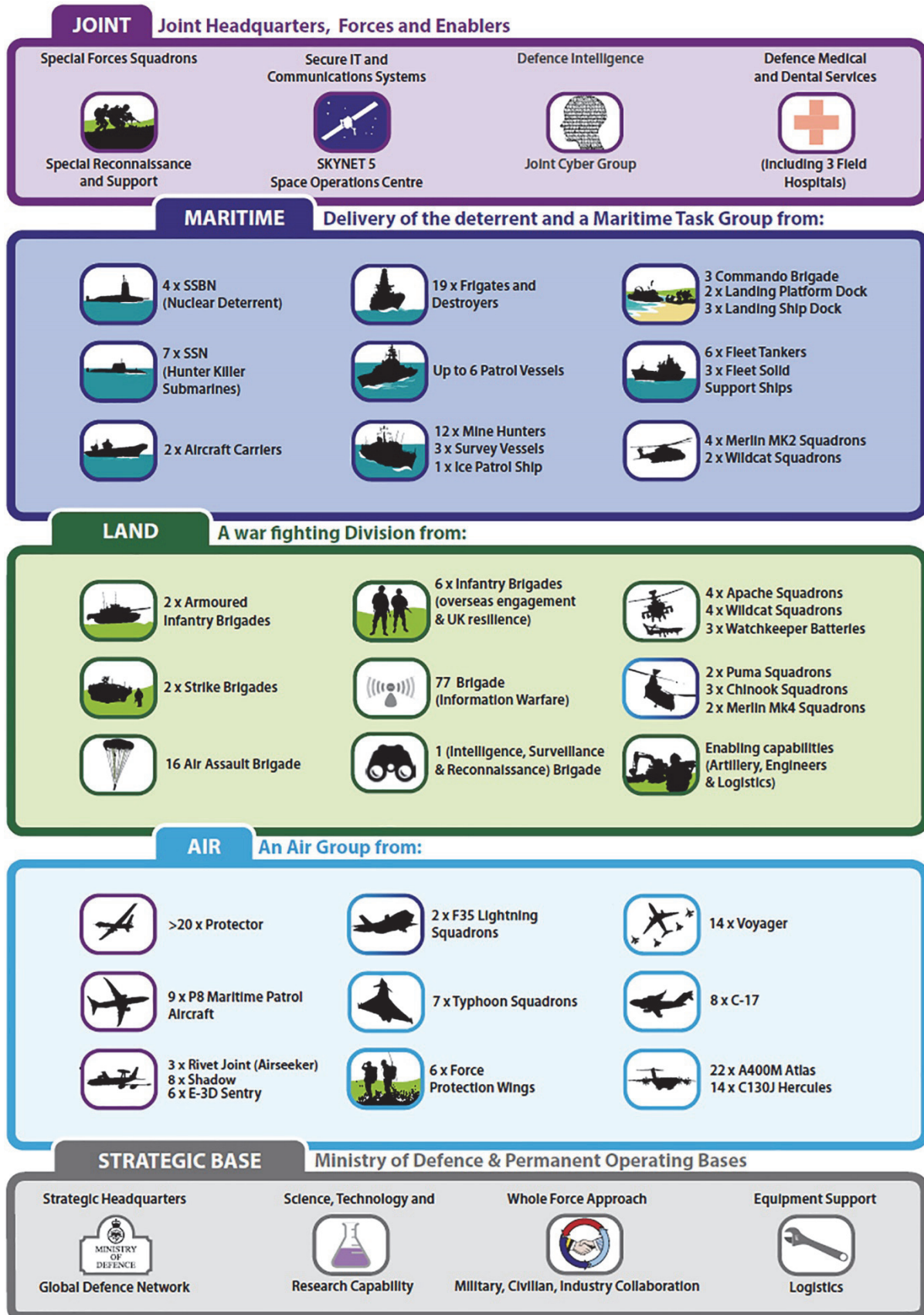
Source: UK Ministry of Defence (2016b).

JF2025 is configured to enhance flexibility and adaptability to allow the UK to respond to a diverse array of challenges:

- **In the joint sphere:** the focus is on intelligence capabilities, cyber, Special Forces and interoperability.

- **In the maritime domain:** the focus is on the delivery of the independent nuclear deterrent (replacing the Trident fleet with new 'Successor' or *Dreadnought*-class submarines) and envisages the creation of a Maritime Task Group, centred on the new carrier capability. The Fleet will include seven *Astute*-class submarines, two *Queen Elizabeth*-class aircraft carriers, 19 frigates and destroyers, up to six Offshore Patrol Vessels, three new Fleet Solid Support ships and two Fast Fleet Tankers. Enhanced amphibious capability is intended to incorporate the very high readiness forces of the Royal Marines Commando Brigade. The UK is also investing in cutting-edge technologies such as new directed-energy (laser) weapons being developed to help protect Royal Navy ships, as well as testing new unmanned systems.

- **In the land domain:** JF2025 makes provision for an increase in the number of manoeuvre brigades at readiness to allow for the deployment of a warfighting division of up to three combat brigades. Four manoeuvre brigades will be created, two of which will be armoured infantry and the other two the new Strike Brigades. One of each will be held at readiness at any given time. Counter-hybrid and battlefield intelligence techniques will be improved through the development of new capabilities in 77 Brigade and 1(ISR) Brigade. A number of infantry battalions will be reconfigured to provide expert training and mentoring to partners overseas, with new Defence Staffs created for overseas regions. The helicopter fleet will be upgraded, while 16 Air Assault Brigade will continue to provide a rapid land intervention capability.

- **In the air domain:** another F-35B Lightning squadron and two more Typhoon squadrons will be established, increasing the fast jet squadrons from the planned six to nine. Investments will be made in the ISR aircraft fleet including the acquisition of nine Boeing Maritime Patrol Aircraft, improvements in the availability of the Rivet Joint and Sentry airframes and increases to the Shadow surveillance aircraft fleet size. The size of the armed remotely piloted aircraft fleet will be doubled. The air transport and air refuelling fleet will be extensively modernised. There will be investment in the future of combat air systems, including unmanned systems, working collaboratively with key allies including France and the US. The UK is also experimenting with unique new capabilities such as the solar-powered Zephyr unmanned aerial vehicle (UAV), referred to by the UK military as a High-Altitude Pseudo-Satellite for its unparalleled endurance.

2.2.3. Defence international commitments

The UK currently has:

- **Commitments to NATO including:**
  - Provision of personnel to NATO standing commands and force structures (for example senior posts including Deputy Supreme Allied Commander Europe [DSACEUR] at Supreme Headquarters Allied Powers Europe [SHAPE], Maritime Commander

[MARCOM] at NATO Northwood in Hertfordshire, and personnel and funding for the Headquarters Allied Rapid Reaction Corps [HQ ARRC] based in Innsworth).[48]

- Capabilities and personnel to support NATO-led operations and exercises. Current examples include the provision of a framework battalion located in Estonia for NATO enhanced forward presence, the deployment of the Offshore Patrol Vessel HMS Mersey supporting NATO counter-migration activity in the Aegean and rotational participation in the NATO-led air policing of the Baltic States and Iceland.[49]

- Commitment of troops and equipment to Alliance High Readiness Forces. Examples include NATO's Very High Readiness Joint Task Force (VJTF) (with the UK to be the lead nation in 2017), the NATO Maritime High Readiness Force and the NATO Response Force, as well as standing forces such as the NATO Standing Maritime and Mine Countermeasures Groups.

- **Commitments to the EU including:**
  - Support to the EU Battlegroups concept through the provision of troops and equipment.
  - Contributions to EU operations including: EUFOR Operation Althea, the European Union Force in Bosnia and Herzegovina (31 personnel);[50] the EU Training Mission in Mali (26 personnel); and the EU Naval Force Mediterranean (EUNAVFOR MED), also known as Operation Sophia, which is working to counter migrant-trafficking in the southern Mediterranean.[51] The UK also continues to run EUNAVFOR Operation Atalanta's operational HQ out of Northwood.[52]

- **Other bilateral and multilateral commitments including:**
  - As part of the Joint Expeditionary Force (JEF) with Norway, the Netherlands, Denmark, Estonia, Latvia and Lithuania.[53]
  - The development of a Combined Joint Expeditionary Force (CJEF) with France, under the Anglo-French Lancaster House Treaty signed in November 2010.[54,55]
  - The UK–Netherlands Amphibious Force for joint training and operation.

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[48] UK Ministry of Defence (2015b)

[49] HM Government (2016b)

[50] International Institute for Strategic Studies (2015)

[51] European External Action Service (2016)

[52] UK Ministry of Defence (2016c)

[53] The JEF is envisaged as a pool of high-readiness, adaptable forces that is designed to enhance the UK's ability to respond rapidly, anywhere in the world, with like-minded allies, or on behalf of international organisations such as the UN or NATO. The UK's contribution will include the lead commando, airborne, armoured, aviation, air and maritime task groups.

[54] The UK and France committed jointly to the development of a CJEF as a non-standing bilateral capability for use in a variety of operational contexts and through different institutional arrangements (bilaterally, NATO, EU or coalition).

[55] The CJEF was validated in April 2016. See: HM Government (2016c)

- Participation in the US-led Operation Inherent Resolve against ISIS in Iraq and Syria, whereby the UK has deployed combat, surveillance, reconnaissance and refuelling/transport aircraft.[56]

- Contribution to the Combined Maritime Forces (CMF) organisation, a 31-nation naval partnership. The UK has committed capabilities to task forces operating in the Red Sea, Gulf of Aden, Indian Ocean and Gulf of Oman, as well as in the Persian Gulf.[57]

- Deployment of one infantry company to the United National Peacekeeping Force in Cyprus (UN FICYP) (see Chapter 6 on UK Sovereign Base Areas in the country).

- Support to allies in South East Asia through the Five Power Defence Arrangement (FPDA) with Australia, New Zealand, Malaysia and Singapore, designed to help deter and defend against any armed attack on the latter two states, including through preparations in regular multilateral training exercises and the contribution of UK personnel to the Integrated Area Defence System Headquarters (HQ IADS) in Penang.

In addition, UK military personnel are present (albeit in small numbers) in locations around the world including Brunei (2,000), Cyprus (2,800) and Overseas Territories including the Falkland Islands (1,000). Training teams are deployed in Iraq, Kenya, Kuwait, Nigeria, Somalia and Ukraine. British forces are in the process of withdrawing from bases in Germany (<9,000 personnel remaining with withdrawal to be complete by 2020).

2.2.4. Counterterrorism

In the area of counterterrorism, the UK is committed to:

- Protecting annual cross-government counterterrorism spending of more than £2bn.[58]

- Investing in counterterrorism capabilities, providing additional funding to the intelligence services (MI5, MI6 and GCHQ) via the joint Security Fund.

- Establishing cross-governmental teams to improve international counterterrorism strategy and intelligence fusion between intelligence agencies and the armed forces. Examples include the Euro-Atlantic Security Policy Unit within the Foreign and Commonwealth Office (FCO) and a new joint unit in the Home Office for international counterterrorism strategy.

- Strengthening its counterterrorism expert networks in the Middle East, North Africa, South Asia and Sub-Saharan Africa.[59]

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[56] In July the MOD confirmed that the UK had taken part in more than 2,800 operations including 915 airstrikes against ISIS targets in both Iraq and more recently Syria. See: Mills et al. (2016)

[57] HM Government (2016d)

[58] HM Treasury (2015)

[59] HM Government (2015a)

2.2.5. Combating serious and organised crime

The UK has a range of commitments in relation to combating serious and organised crime, including:

- Continuing to build domestic capabilities such as police regional organised crime units and improved information sharing.
- Protecting the funding for the National Crime Agency (NCA), which has been earmarked for a £200m investment to support its transformation.[60]
- Enhanced international collaboration including plans to invest in a National Cyber Crime Unit and Joint Money Laundering taskforce.[61]
- Participation in Europol, Interpol and Eurojust.
- Use of the European Arrest Warrant (EAW) scheme that allows the UK to extradite offenders to face judicial proceedings in the UK.

2.2.6. Cybersecurity and defence

The UK is investing in cybersecurity, £1.9bn being pledged under the SDSR to cyber defence capabilities (spanning detection, defence and response).[62] The UK has declared its intent to treat its response to a cyber-attack as seriously as it would a conventional attack. It is active in international efforts to establish robust cybersecurity measures and considers cyber defence a core task of NATO's collective defence.[63]

2.2.7. Increasing resilience of critical infrastructure

The UK is committed to strengthening the resilience of critical national infrastructure (CNI) through work with industry, the creation of a cyber training centre and the better integration of infrastructure policing.[64] It also aims at integrating the protection of CNI into future security planning.

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[60] HM Treasury (2015b)

[61] HM Government (2015)

[62] Ibid.

[63] Ibid.

[64] Ibid.

3. Defence spending, research and industry

The extent to which the UK and Europe would be able to maintain or potentially increase defence expenditure after Brexit was a point of consistent concern for interviewees, as indeed it was during the academic and public debate running up to the referendum. This reflects the wider tenor of the UK's Brexit debate, with its focus on the potential benefits or risks to the economy, as well as on the related questions of free movement.[65] However, significant uncertainty abounds.

This chapter considers the following areas of potential change due to Brexit:

- Defence budgets in the UK and EU.
- R&D and innovation, including the future of the EDA.
- Procurement and defence industrial strategy.
- Defence industrial base issues, exports and international collaboration.

Firstly, however – and though the full economic implications of the UK's decision to leave the EU fall outside the scope of this study – a short overview of those issues influencing the financial and industrial dimension of defence and security is outlined below.

3.1. Economic uncertainty after the UK's Brexit vote

3.1.1. Long-term economic effects of Brexit are unclear, and will be shaped by future negotiations as to how the UK accesses the European single market

The immediate impact of Brexit on the UK, EU and global economy has been to exacerbate uncertainty in the financial markets and provoke a sharp devaluation of sterling (and, to a lesser degree, of the euro). As noted in Chapter 1, the value of the FTSE 100 fell by £120bn overnight when the referendum result was announced, with sterling falling to a 31-year low against the dollar.[66] More recently, the currency experienced another 'flash crash' on Asian markets, falling to a five-year low against the euro in response to media reports of a possible 'hard Brexit'.[67] Some have cautioned that this short-term volatility may merely reflect post-referendum uncertainty that should dissipate as Brexit negotiations progress. Leave

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[65] Ashcroft (2016)

[66] Besch and Black (2016)

[67] Hunter (2016)

campaigners, of course, argue that the UK will be able to achieve faster economic growth once outside of the EU, returning confidence to the pound. Others have however predicted that the recent devaluation could presage a more long-term readjustment, particularly if, after Brexit is actually completed, the UK Government seeks to keep the value of the pound low to offset any tariffs and make exports competitive until free trade deals can be agreed. HSBC has predicted that the pound could fall to €1 and $1.10 by the end of 2017, with the bank also describing the sterling as now a 'political currency', as European and other investors sell off the pound to express their disapproval of the UK Government's Brexit policies.[68] The euro has experienced similar difficulties, with a 4.7 per cent drop in value the day after the referendum and continuing concern about the knock-on effects the UK's decision could have for other financial problems in the euro zone.[69] Some analysts have been particularly concerned about Germany's struggling Deutsche Bank,[70] or the systemic issues with Italy's banking sector.[71]

Projecting long-term economic trends with any accuracy is difficult enough in the most controlled of circumstances; Brexit, with its many unanswered questions, makes this task essentially impossible. What is certain is that economic outcomes from the UK's decision to leave the EU will be shaped by a range of complex and interconnected variables, some of them outside of direct government control (whether policymakers are in London, Brussels or elsewhere).

Drivers include the:

- Degree to which, in the short term at least, post-referendum uncertainty affects business confidence, consumer spending and investment decisions to improve productivity.
- Timing of the invocation of Article 50 and the length of Brexit negotiations, determining the window during which economic uncertainty is likely to be most acute.
- Nature of the arrangement agreed for the UK leaving the EU, and the extent to which any new economic relationship includes freedom of movement, 'passporting rights' for UK financial firms, tariffs and non-tariff barriers to trade.[72]
- Speed and effectiveness with which the UK is able to negotiate new trade deals outside the EU, including updating its arrangements with the WTO.
- Impact of currency fluctuations and a potential reduction in the need to meet EU regulations on the exports and competitiveness of UK businesses, as well as costs of imports.

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[68] Rodionova (2016)

[69] Blitz (2016)

[70] Germany's biggest bank has struggled with mounting losses and legal issues in recent years, with concerns about whether it can afford to pay a penalty of $14bn from the US Department of Justice for mis-selling mortgage bonds given its highly leveraged position and deteriorating shares position, with ratings agencies and investors expressing alarm over the threat of default. Mahmudova and Kollmeyer (2016)

[71] Italian banks are reported to have around €360bn of non-performing loans on their books, accounting for around one-third of all such toxic loans in the European banking sector. Garber (2016)

[72] 'Passporting' refers to the right of banks and other financial companies authorised to do business in one EU or EEA nation to trade and provide services in other member states without having to be separately authorised in each country. This applies only to EEA members, so applies to banks based in the City of London but does not currently include the Channel Islands or the Isle of Man.

- Government policy choices, including investments in infrastructure, labour market rules, inflation and interest rates policy.
- Effect of pre-existing structural challenges, such as youth unemployment or the euro zone crisis, and of any major new developments in the global economy not directly related to Brexit.

Against this uncertain backdrop, UK and EU policymakers will have to decide whether to try to insulate defence and security spending from wider economic trends. Defence budgets in the UK and EU could grow despite falling GDP, for instance, as part of a wider Keynesian strategy eschewing government austerity, or if defence were to be ring-fenced and take on a larger share of falling government spending. Interviews suggest however that, given the historical trends for European leaders and voters to prioritise spending in areas such as education and health, it would require a radical change in the political narrative on defence spending for the UK or EU to completely decouple defence budgets from the economic agenda.

Box 1. Possible models for UK–EU economic relations after Brexit

A number of different models for the future UK–EU relationship have been suggested, with public and academic debate having focused in particular on several precedents for other third countries:

- **Membership of the EEA ('the Norwegian model'):** Seen by many economists as the least damaging option, this model would keep the UK in the single market, but outside of EU agricultural and fisheries policies and the customs union. The UK would follow single market laws but no longer have a vote on them, and would have to pay into the EU budget and accept free movement. Prominent Leave campaigner David Hannan MEP has suggested EEA membership could also serve as an 'interim arrangement' while the UK negotiated a more long-term deal.
- **Membership of the European Free Trade Association (EFTA), but not the EEA ('the Swiss model'):** In this model, the UK would have access to the single market for most industries, but not banking or other services. It would also have to accept the continuation of free movement. Switzerland has signed over 120 bilateral arrangements with Brussels to regulate economic relations, but is currently facing potential reprisals following a 2014 Swiss referendum to limit immigration of EU citizens.
- **Free trade agreement ('the Canadian model'):** This option would involve an FTA removing many but not all tariffs on industrial and agricultural goods. UK Foreign Secretary Boris Johnson has praised the example of the recent FTA negotiated (though not yet ratified) by the EU with Canada, while arguing that the UK could potentially negotiate a better deal given its economic clout. In the Canadian case, significant non-tariff barriers remain and the deal excludes most financial services.
- **Customs union ('the Turkish model'):** Under this model, the UK would sit outside of the EEA and EFTA, but in the customs union. While this union does not cover agricultural goods or services, the UK would face no tariffs on industrial exports to the EU but would adopt the EU's external tariffs. As this would deprive the UK of the freedom to negotiate its own trade deals, EU leaders reportedly assume the UK would not want such an arrangement.

- **Reliance on World Trade Organisation (WTO) rules ('the Singaporean model'):** Finally, the UK could eschew the EU, EEA and customs union, reverting to reliance on WTO rules. Some city-states such as Singapore and Hong Kong do so while unilaterally dropping all tariffs. However, the UK is currently a WTO member through the EU. After Brexit, it would therefore need to negotiate approval of its own 'schedules' of tariffs, quotas and subsidies, which could prove time-consuming and politically challenging as all decisions require consensus among the 163 WTO member states.

It is also possible that none of these options will meet the unique needs of the UK, a substantially larger economy (and more important diplomatic and security ally) than Norway or Canada. Brexit is an unprecedented situation and may not conform readily to extant models. Indeed, the UK Prime Minister has indicated she will seek a 'bespoke model', ideally combining single market access with limitations on immigration to the UK. Some European leaders have acknowledged that Brexit may indeed require some sort of 'custom-fit' deal, but the suggestion that the UK might 'cherry-pick' its terms, particularly on the principle of freedom of movement, has been strongly criticised in many EU member states.[73] The extent to which the UK is able to negotiate a 'bespoke' arrangement will thus depend in large part on the goodwill London maintains in Brussels and other European capitals as negotiations unfold.[74]

3.2. Defence budgets in the UK and EU

Against this uncertain economic backdrop, the implications of Brexit for defence spending in the UK and EU has emerged as one of the key concerns most frequently reported in literature and by interviewees.

3.2.1. Despite cuts in recent years, the UK remains Europe's largest defence spender and had planned before Brexit to further increase spending in coming years

The UK spends more on defence than any EU member state. At around £35bn, the UK's defence budget is also the second largest in NATO (behind only the US) and fifth largest in the world.[75] Even before the Brexit vote, however, levels of UK defence expenditure had emerged as a topic of considerable political debate in recent years, in particular following the 2008 financial crisis. The 2010 SDSR reduced military spending by around 8 per cent over four years, resulting in cuts of 17,000 personnel and the loss or delayed introduction of key capabilities, including maritime patrol aircraft and aircraft carriers. These cuts were the subject of considerable criticism, though the UK Government argued for the need for the UK MOD to address 'spending black holes' in its budget and contribute through retrenchment to Britain's wider economic security. In the run-up to the 2015 SDSR, there was speculation that the UK would fall below the NATO target of spending 2 per cent of GDP on defence, in part due to faster-than-expected growth. Following a period of pressure from MPs at home and allies abroad (most notably the US), however, the 2015 Review recommitted the UK to fulfilling this NATO pledge, albeit with the inclusion of military pensions and intelligence-gathering in its calculations. The UK MOD budget was also ring-

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[73] Sims (2016)

[74] Besch and Black (2016)

[75] HM Government (2016a)

fenced, meaning it joined other departments for education, health and international development in being exempt from any further government spending cuts.[76]

Perhaps most significantly, the SDSR also announced a commitment to increase defence expenditure by 0.5 per cent annually through to 2020–21. This includes a 1 per cent yearly rise in the MOD's equipment budget, with procurement spending expected to total £178bn over ten years.[77] At the same time, the UK Government committed to increase investment in the security and intelligence services by £2.5bn. This funding will allow for the recruitment and training of 1,900 additional staff for the UK's intelligence agencies, with half of the investment going towards boosting counterterrorism capabilities.

3.2.2. The immediate and potential long-term economic disruption of Brexit raises new challenges for an already-ambitious UK Defence Equipment Plan

With the economic uncertainty of Brexit, many interviewees expressed strong concern about whether the UK would be able to deliver on these already-ambitious spending plans. Many felt that the UK was highly likely to retain its NATO pledge to spend 2 per cent of GDP on defence. This reflects both the military need to deliver on important, costly procurements – some of which have already been delayed or cut back (e.g. Type 26 frigates) – and political concerns. Considering the domestic and international controversy that occurred when the UK appeared to waiver on the NATO pledge before the 2015 SDSR, the vocal calls London has made for European allies to increase their own spending, and the potential need to invest more political (and thus financial) capital in the Alliance after Brexit, failing to meet the 2 per cent target could give the appearance that the UK was retreating from the world and its obligations (see Chapter 4 for more on the UK, EU and NATO).

Of course, if Brexit negotiations or the resultant new trading arrangements were to provoke recession or economic slowdown, fulfilling the NATO pledge of 2 per cent of GDP may mean less spending in real terms.[78] Before the Brexit vote, it was already unclear how the UK would continue to meet the NATO 2 per cent pledge if it was only planning a 0.5 per cent annual increase in the defence budget for the next five years, despite projections for UK GDP to grow 2.4 per cent annually in the same period. As Parliament's Commons Defence Select Committee observed, this would imply UK defence expenditure falling from 2.08 per cent of GDP in 2015 to only 1.85 per cent in 2020–21. This would leave a growing shortfall in the MOD budget: £2.7bn in 2019–20, or £3.5bn the following year.[79] To address this deficit, the UK Government has indicated it would include a proportion of spending on the UK's intelligence agencies, as well as further sums from the new £1.5bn Joint Security Fund (assuming this accounting strategy was judged compliant with NATO guidelines).[80] Such 'creative accounting' has been a source of considerable political controversy, but might not be necessary if the core defence budget were to keep

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[76] Wright (2016)

[77] UK Ministry of Defence (2016b)

[78] Taylor (2016a)

[79] UK Parliament, House of Commons Defence Select Committee (2016)

[80] Chalmers (2015)

better pace with GDP growth, or if GDP were to in fact fall in the wake of the vote for Brexit. Alternatively, of course, a similar accounting strategy could be used to provide some obfuscation and political cover for any unexpected cuts that had to be made to the MOD budget, were post-Brexit uncertainty to prompt a renewed round of austerity and retrenchment across UK Government.

Stepping back, the focus on the NATO 2 per cent is for some interviewees and military leaders something of a 'red herring', despite its symbolic and political value as a signal of the UK's ambition. In practical terms, the more important commitment is the SDSR pledge to increase defence spending by 0.5 per cent and the equipment budget by 1 per cent annually through to 2020–21, as it is these assumptions that underpin the British military's forward plans. However, the uncertain future of the economy leaves the affordability of these plans in question. Analysts have pointed in particular to the potential challenges arising from sterling's 15 per cent slide in value against the dollar.[81] The UK relies on American suppliers for spares and other support to existing stocks of US-built equipment, such as the C-17 transport, Chinook helicopter or MQ-9 Reaper UAV. In addition, many of the largest upcoming acquisitions in the Defence Equipment Plan are from US manufacturers. These include 138 F-35 Joint Strike Fighters, 20 new Protector UAVs and 50 Apache attack helicopters, as well as Trident ballistic missile renewal.[82] Taylor has estimated that the drop in the pound could leave the UK MOD with additional costs of £700m per year, prompting a 'budget black hole' that could either reduce or delay planned acquisitions, with one former head of the Royal Navy describing the situation as a 'perfect storm' for MOD budget planners.[83] Similar difficulties exist in relation to the euro, though the UK is less reliant on European suppliers. Approximately 26 per cent of MOD equipment expenditure is nonetheless allocated to multinational European programmes such as the A400M transport or Eurofighter Typhoon (though some contracts are in sterling).[84] In total, around £18.6bn of the defence equipment plan will be paid in US dollars and £2.6bn in euros over the next ten years. The National Audit Office has thus warned that the affordability of the plan is at greater risk than at any point since reporting began in 2012, with the MOD needing to find an additional £6bn of efficiency savings above what was already planned in 2015.[85] Increased costs could otherwise, even without falling GDP, necessitate delays to major procurements or cut-backs in the numbers of systems to be acquired.[86]

Other commentators have criticised the estimated £700m figure, however. Importantly, this does not account for the falling costs of exported UK components used in US kit; British-built parts from BAE Systems and others make up around 15 per cent of the value of the F-35, for instance.[87] This could not only directly drive down future costs to the UK, but also potentially lead eventually to more global sales which would in turn further impact unit costs due to increased economies of scale. Furthermore, the

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[81] Taylor (2016)

[82] UK Ministry of Defence (2015a)

[83] Vallance (2016)

[84] Uttley and Wilkinson (2016)

[85] National Audit Office (2017)

[86] Taylor (2016b)

[87] Lockheed Martin (2016)

estimates do not include contracting and other provisions through which the UK MOD already hedges against currency fluctuations. In some instances, the fall in the pound could hurt industry's profit margins, rather than the MOD, if deals are signed with UK-based subsidiaries in sterling as opposed to euros or dollars. Indeed, the UK announced a £3bn contract for nine US-built P-8 Poseidon maritime patrol aircraft at the Farnborough Airshow, shortly after the referendum, with Prime Minister David Cameron arguing this showed the UK remained 'open for business' despite the uncertainties of Brexit.[88] The UK has indicated it will also accelerate its F-35 plans, with defence procurement minister Philip Dunne arguing that the MOD is 'well-hedged against the dollar in the short term, and who knows what will happen in the long term'.[89]

Whether the £700m estimate is accurate or not, however, it is certainly true that foreign exchange considerations could place additional pressure on the defence budget if sterling's recent devaluation proves part of a more long-term trend. If this were the case, this could also have major defence industrial implications if home-grown development were to become markedly more affordable compared to imported 'off-the-shelf' equipment. However, it is certainly far too early to tell what the long-term direction of sterling will be. Furthermore, non-price factors remain important drivers of UK procurement decisions, including access to cutting-edge technology, political ties and interoperability with foreign allies – above all, the US military.

3.2.3. Brexit could present an opportunity – or a need – to reconsider the UK's global ambitions and whether its defence budget adequately matches its goals

Other interviewees and commentators (not least, the Leave campaign) take a much more positive view. Brexit proponents such as the new International Trade Secretary suggest that leaving the EU is in fact likely to allow for more rapid and sustained long-term economic growth, noting that the UK economy has outperformed other EU states in recent years and arguing that it would only be better placed to do so outside the EU – freed of 'red tape', less exposed to contagion from crises in the euro zone, and able to pursue new trade deals with other global economies.[90] Supporters of Brexit also observe that predictions of a recession after the Leave vote appear to have been overly pessimistic, with the UK on track to be the fastest-growing G7 economy in 2017.[91]

A number of interviewees argued that Brexit also provides a potential opportunity and catalyst for a new national debate about the UK's place in the world, its level of ambition, and the financial means made available for pursuing its strategic ends, particularly at a time of complex threats such as terrorism, ISIS or a resurgent Russia. Various political figures and former military leaders have called for the UK to increase its defence spending in the wake of Brexit as a means of demonstrating the UK's enduring or – as the Leave supporters among them argue – reenergised role as a major security actor and capable ally. Julian

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[88] Hotten (2016)

[89] Pocock (2016a)

[90] Ross (2016)

[91] Chan (2016)

Lewis MP, chair of the House of Commons Defence Select Committee and an advocate of Brexit, has for instance argued that defence has 'fallen too far down the scale of national priorities', calling for spending to increase to around 3 per cent of GDP.[92] Indeed, if the UK were to pursue a more globalist foreign policy after Brexit, then this could require additional investments in power projection capabilities as a means of protecting lines of communication for trade and assisting Britain's allies further afield, for instance in Asia-Pacific. This would likely imply greater spending on maritime assets, with knock-on effects for the balance between the four Front Line Commands – the Royal Navy is already lined up to receive the lion's share of planned defence investments – as well as for the UK's naval shipbuilding industry.[93]

3.2.4. European defence budgets are also affected by Brexit, losing the UK as a vocal proponent of increased spending but gaining an opening for more EU defence

Much of the post-Brexit debate on defence expenditure has inevitably focused on the UK, which is both a larger defence spender than other EU states, and is also potentially more exposed to economic difficulties as it negotiates its exit from the EU bloc and new trading relations with the world.

However, the UK's withdrawal from the EU could also have significant implications for levels of defence spending elsewhere in Europe. Even before the UK referendum, European defence expenditure was a matter of considerable political controversy, as well as a source of tension within the EU and between NATO allies. Though 2014 saw European defence expenditure increase for the first time in six years, growing by 2.3 per cent (or 0.6 per cent in real terms) to a total of €195bn,[94] currently only Estonia, Greece and Poland meet the NATO target to spend 2 per cent of GDP (alongside the US and UK).[95] This disparity between the US (and to lesser extent the UK) and continental European allies has been a subject of criticism from both Republican and Democratic candidates in the US presidential campaign, with the US calling on EU and NATO partners to contribute their 'fair share'.[96]

Furthermore, the composition of European defence spending is important. The UK is for instance one of only seven NATO countries to meet guidelines for spending at least 20 per cent of the budget on procurement and R&D – with many EU member states forced to spend limited budgets on personnel and maintenance costs, rather than acquiring new capabilities.[97] The EDA notes that personnel now account for 51.2 per cent of Europe's total defence spend, despite declining numbers of military personnel in service and a recent 46 per cent drop in those deployed overseas. Funding for defence R&D is also at its lowest level for a decade, down to only €2bn or 1.04 per cent of total expenditure, a dramatic fall of around 32 per cent from (already very low, by US standards) spending levels in 2006.[98] The lack of

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[92] Vallance (2016)

[93] Gray (2016)

[94] European Defence Agency (2016)

[95] Bendavid (2015)

[96] Kottasova (2016)

[97] UK Parliament, House of Commons Defence Select Committee (2016)

[98] European Defence Agency (2016a)

investments or R&D spending is particularly challenging at a time when new military equipment is becoming more complex and costly, and while the EU faces significant potential threats on its eastern and southern borders.

In the wake of Brexit, commentators have predicted a range of different outcomes for European defence budgets. Some analysts argue that with the UK's vote, 'the EU is suddenly worried about funding military defence', observing that the EU has lost its largest single defence spender, experienced a fall in the value of the euro and major uncertainty in the financial markets, and become exposed to potential further economic slowdown depending on the timing, duration and success of Brexit negotiations.[99] As is the case for the UK and sterling, the recent devaluation of the euro could hurt imports of defence equipment from the US, UK or elsewhere.[100] Some member states could also seek to delay national acquisition until the wider implications of Brexit for EU defence collaboration and joint procurements become more apparent, given the recent spate of proposals for new political initiatives in that area (see Chapter 4). Interviewees noted that with the UK leaving the EU, Europe will have also lost one of its most vocal proponents of increased defence spending, potentially resulting in diminished diplomatic pressure for increased European expenditure, or a growing divide between internal debates within the EU and an increasingly 'Anglo-Saxon' NATO over this issue. Some have expressed concern that without the UK, moves towards greater EU defence collaboration may thus become an excuse to further reduce national budgets by pooling funds or capabilities at the EU level (under the political cover of moving post-Brexit towards defence union), rather than being an opportunity to do more with the same money.

Others however predict a more positive scenario. Even if the EU were to undergo a period of economic slowdown as a result of Brexit, this may or may not translate into meaningful gaps in spending plans, of course, as 'defence may well be prioritised given wider geopolitical conditions', such as concerns over a resurgent Russia.[101] Defence has also emerged as a central element of Europe's political response to Brexit (see Chapter 4). The UK's referendum coincided with the publication of the EU's first Global Strategy, which sets out the EU's strategic goals and ambitions, while the EDA and European Commission were already moving ahead with proposals for a European defence research fund (see below).[102] In his State of the Union address soon after the Brexit vote, President Juncker made clear that 'Europe can no longer afford to piggy-back on the military might of others', though he stopped short of calling for member states to increase their defence spending, focusing instead on the potential benefits of 'between €25bn and €100bn' from increased collaboration.[103] Some EU leaders have thus argued that Europe must use the challenge and opportunity of Brexit to demonstrate that the EU can remain relevant in the sphere of defence and security even after losing its largest military and intelligence power.

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[99] Whitman (2016)

[100] Weisberger (2016)

[101] De Larrinaga (2016)

[102] Connelly (2016)

[103] European Commission (2016b)

Some interviewees believe that the withdrawal of the UK – often seen as a 'blocker' in EU defence – will at the same time remove the political 'alibi' behind which other member states justify poor progress on issues like defence cooperation or budgets. Certainly, a number of EU members have indicated a desire to do more after the Brexit vote. With its recent defence White Book, for instance, Germany has outlined plans for a more proactive role in European defence – a goal that will require considerably greater spending if Germany is to achieve greater military parity with France, substituting for the UK as Paris' key partner on defence issues within the EU (see Chapter 4).[104]

EU leaders and individual member states have also issued proposals for new measures and incentives for financing European defence (see Chapter 4). The European Commissioner for Internal Market, Industry, Entrepreneurship and SMEs, Elzbieta Bienkowska, has proposed that EU members pool defence budgets and also jointly issue EU 'defence bonds', as well as increasing direct EU funding for defence projects through the European Fund for Strategic Investment (EFSI) and the European Investment Bank (EIB).[105] Italy has echoed these calls for the EIB to open up financing to defence firms and ministries, while also proposing that some defence expenditure be exempted from EU caps on government spending deficits, as well as from value-added taxes for purchases.[106] Of course, the future introduction or effectiveness of any such initiatives is uncertain.

Critics counter, however, that EU leaders and Brexit supporters in the UK alike may be reading the wrong lessons from the referendum result if defence (and particularly defence spending) were to become the focus of reform efforts. A number of interviewees argued that the Brexit vote showed, above all, the need for the EU and national governments to reengage better with people's everyday concerns about issues such as job security, immigration or housing. In this context, they reiterated that 'there are no votes in defence', which is consistently shown to be a lesser priority for most taxpayers than domestic policy areas such as education or health.[107] As Duke argues, it is unclear therefore that increased defence spending 'is the grand gesture that the EU's citizens want or need when their main concerns lie with immigration, terrorism and the economic situation'.[108] An argument could thus be made that EU states and the UK need to balance their need to secure against external or terrorist threats (through security and defence) with the risk of further strategic shocks like Brexit due to the disengagement of normal voters from policy elites. Workshop participants did note however that it may be more politically and economically affordable to increase spending on related activities, such as the UK's FCO or the European External Action Service (EEAS), as these also serve to promote influence around the world and build new trading arrangements, while costing considerably less than defence (the core FCO budget is only about 0.08 per cent of British GDP).[109]

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[104] Guéhenno (2016)

[105] Baczynska and Emmott (2016)

[106] Katz and Migliaccio (2016)

[107] Jenkin (2015)

[108] Duke (2016)

[109] McDermott (2015)

Outstanding questions:

- To what extent does Brexit alter the goals and role of the UK or Europe? Are existing budgetary means sufficient to achieve these new strategic ends?
- If Brexit does provoke defence spending cuts, which capabilities or acquisitions should be prioritised? How best to adjust to potential long-term shifts in the value of the euro or sterling?
- Which existing or new instruments (e.g. defence bonds) would be most effective in incentivising increased defence spending at either national or European level?
- How can governments win support for increased defence budgets from often sceptical or indifferent electorates, especially at a time of post-Brexit economic uncertainty?

3.3. R&D and innovation, including the future of the EDA

3.3.1. The UK has been one of the most successful competitors for European research funding, prompting concerns about access to skills and collaborators after Brexit

The UK's decision to leave the EU also has potentially significant consequences for defence R&D and innovation, with knock-on effects for defence industrial competitiveness, the degree to which new technologies are 'spun off' into civil or dual use, and military access to cutting-edge weaponry. Particular concerns relate to:

- Access to European research funding and collaboration opportunities.
- Potential impact of restrictions on freedom of movement on availability of skills and talent.
- Future of EU research initiatives, including through the EDA and the new European Commission defence research fund.

Financial concerns are important for both the UK and the EU. The UK MOD allocates 2.9 per cent of its budget to R&D, equivalent to around £1bn, of which approximately £0.4bn goes on science and technology.[110] This compares to total European defence R&D of only €2bn, with some 92 per cent of that R&D occurring in France, Germany and the UK.[111] Looking more widely beyond defence, the UK possesses a prestigious and successful academic sector, along with innovative private-sector firms and SMEs. The UK is dependent on the EU for a quarter of all public research funding: some £967m in 2015, or over £8.04bn in the past decade, exceeded only by the £8.34bn allocated to Germany. This includes some 62 per cent of funding for UK nanotechnology research, for instance.[112] The UK also received €95m (12.5 per cent) of the €790m on offer for security funding in 2011–13, as well as €116m of grants for aerospace research in 2007–12.[113] Indeed, the UK has overall been the most successful member of the European Research Council (ERC) by number of grants awarded, winning around a fifth

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[110] UK Parliament, House of Commons Defence Select Committee (2016)

[111] Knutsen, (2016, 2)

[112] Ward (2016)

[113] ADS (2016, 22)

of grants since 2007, some 636 compared to 441 in Germany.[114] Where Germany spends 2.85 per cent of its GDP on research, however, the UK only spends 1.63 per cent, meaning that its research institutes are more reliant on EU funding than German equivalents.[115]

Box 2. Potential models for UK–EU research collaboration after Brexit

There are a range of potential models for the UK when engaging with EU-funded research programmes, such as Horizon 2020, after Brexit:

- **Associated country status for EU research programmes:** The UK could apply for associated country status with the ERC after leaving the EU. This would entitle UK organisations to bid for EU programme funding, as is currently the case for non-EU countries such as Norway, Switzerland and Israel. In exchange the UK would pay a share of GDP and lose its current vote on the EU research agenda. It may also have to accept freedom of movement, the EU having demanded that Switzerland do so if it wishes to continue as an associated country in Horizon 2020 beyond February 2017.[116]
- **Non-associated third-country status:** In this scenario, the UK would no longer be a member of the ERC and British universities and organisations would no longer be eligible for funding. This arrangement would however allow for restrictions on freedom of movement to the UK.
- **Substitution of UK grants for EU funding:** To reduce uncertainty in the wake of the Leave vote, the UK government has confirmed it will guarantee post-Brexit funding for UK organisations taking part in EU research programmes such as Horizon 2020. It is not yet known whether it would also be able and willing to increase domestic research funding for the long term.[117] This would be one option to mitigate some of the funding challenges of leaving the ERC. However, innovation is also about international and interdisciplinary collaboration, not just funding, so diminished opportunities to work with European partners could still have negative effects on UK research output.[118]

Alongside the ERC, there are a number of important intergovernmental research organisations that should not be directly affected by Brexit. The UK's membership of the European Space Agency (ESA) is not contingent on being part of the EU, for instance (see Section 7.4. below); nor is the UK's role at Cern's Large Hadron Collider or at the European Southern Observatory.[119]

Access to people, talent and skills are also important concerns post-Brexit. As shown in the models outlined above, there may exist a direct trade-off between UK access to ERC funding and acceptance of continued freedom of movement for EU citizens. In total, some 32,000 non-British EU academics work in UK universities, making up 17 per cent of research and teaching posts, with figures often higher at some of the highest-ranking institutions.[120] Interviewees also suggested that even without formal constraints – the UK is likely to want to continue attracting high-skilled scientists even if restrictions were

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[114] Gannon (2016)

[115] Ward (2016)

[116] Morgan (2016a)

[117] Morgan (2016b)

[118] Freeman et al. (2015)

[119] Amos (2016)

[120] Henley et al. (2016)

placed on low-skilled EU labour – the psychological and political effects of Brexit could provide a 'soft' disincentive for European researchers to collaborate with UK partners. Others dismiss these fears, however, noting that UK–EU research collaboration is built on strong extant institutional and personal ties, as well as a common interest in working with the most prestigious partners to generate solutions to important societal and technical problems that often transcend national boundaries.

Box 3. Potential models for the UK's relationship with the EDA after Brexit

Related to the question of R&D, but also European defence and industrial cooperation more widely, is the nature of the UK's post-Brexit relationship with the EDA.

Established in 2004, the EDA supports the EU's CSDP through three main functions: supporting the development of European defence capabilities and cooperation; stimulating defence research and technology and strengthening the defence industry; and acting as a military interface to EU policies.[121] Though the first chief executive of the EDA, Nick Witney, was British, the UK has more recently been accused of blocking major EDA initiatives out of concerns that they might infringe on national competences or else duplicate (and thus undermine) NATO.[122] This includes vetoing increases to the EDA's modest budget, which has been frozen at €30.5m for the past five years.[123]

Different models for the UK's post-Brexit engagement have been proposed:

- **Exit from the EDA:** With Brexit, the UK could take the simple choice of also leaving the EDA, an institution of which it has been critical in the past. However, with its contributions to the EDA only amounting to around £3.5m a year, interviewees suggested that the UK may deem this good value for money for both access to EDA projects and a window into wider EU thinking on defence.

- **Associate status with the EDA:** Perhaps the most likely outcome would be for the UK to become an associate of the EDA. The EDA has previously signed Administrative Arrangements with Norway (2006), Switzerland (2012), Serbia (2013) and Ukraine (2015). These enable them to contribute to EDA projects and attend some EDA committees, though invitations are subject to veto by EU member states and associate countries do not have a vote in EDA decisionmaking.

- **Full membership of the EDA:** It is also possible that the UK might negotiate some bespoke arrangement to keep it in the EDA as a full member, or at least allow it greater input to EU decisionmaking on defence. However, interviewees noted that this is unlikely so long as the UK looks set to veto further attempts at European defence integration, including an enhanced EDA budget, and would be dependent on goodwill and a successful resolution of the wider Brexit negotiations.

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[121] European Defence Agency (2016b)

[122] Dumoulin (2016, 3)

[123] Angelini (2016)

In immediate practical terms, a UK exit from the EDA would affect London's contributions to the EDA budget, as well as the positions of British experts among its 130-strong staff. However, this financial impact could be very short term, if felt at all. Many experts think increases to the EDA budget highly likely with the threat of a UK veto removed, with Menon suggesting this could, despite the UK's past hostility to the idea, in fact leave the UK with a more effective European partner and thus be a net gain to UK defence.[124] The loss of a UK veto will also affect the types of projects the EDA works on; London has long worked to block the CIVILEX programme, for instance, which would help define the command and control systems needed for a possible EU operational HQ. It has also long blocked the EDA from working more on 'hard defence', instead pushing for it to focus on more low-intensity military missions to avoid overlap with NATO or areas of national reserve. To some extent, indeed, the UK has already sat outside of EDA programmes, having abstained from involvement in the EDA's largest 'Category A' projects.

Interviewees noted that diminished UK input would be a loss to the EDA in many respects, however: the UK's military and technical expertise and typically pragmatic approach have meant it has made useful contributions to EDA decisionmaking to the benefit of all member states. The disruption of the current political balance within the EDA – with France, Germany and the UK particularly influential – will also require smaller EU member states to overhaul their diplomatic strategies for how they pursue alliances and alignments within EDA committees and play off larger countries. Indeed, some interviewees also expressed concern that the direction of the EDA could, like wider European defence, suffer if overly politicised as a response to Brexit, rather than being treated as a means of building genuine military capability; they also noted that the removal of a UK veto did not diminish the other structural obstacles, such as limited appetite in many EU member states for defence spending and continued protectionist instincts. Given these concerns, some expressed hope that in the long term Brexit might catalyse a wider discussion of how the UK and other non-EU powers might engage with intergovernmental EU bodies like the EDA.

3.3.2. Brexit comes at a turning point for EU defence R&D, with the Commission and EDA planning a more ambitious research agenda for the future

The nature of future UK relations with the ERC and EDA will also influence the direction of the EU's ambitious plans for a new European research fund for defence. This marks a major departure for the European Commission, with defence R&D having hitherto been handled at the intergovernmental level coordinated by the EDA, rather than organised directly out of EU funds. This process began with a recent €1.5m EDA pilot; in 2017–19, the Commission will launch a €90m Preparatory Action, with a view to a potential follow-on programme of €500m annually thereafter. This figure would make the EU itself one of the top four defence research funders in Europe, ahead of many national MODs.[125] Notably, in late 2015 the UK vetoed proposals for the pilot to include both grants (for research) and a contracting element (for procurement); Brexit could therefore allow remaining EU member states to pursue a

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[124] Menon (2016)
[125] EDA (2017)

Preparatory Action with greater emphasis on acquisition and research at higher technology readiness levels, linking the EDA's research work more directly to capability development. The UK has also, with Sweden and others, been pushing for a small number of research projects to be opened to non-EU participation, specifically from the US. The future of this diplomatic initiative now appears uncertain, given the UK's newly diminished EU influence, though of course depending on the UK's own future relationship with the EDA it could provide added incentive for a review of how the organisation engages with NATO and non-EU member states such as the US. Similarly, London has also pushed the EU to allow more bilateral projects (which typically qualify as 'European' with three of more members). This may become less of a priority after Brexit, if the political priority becomes demonstrating renewed progress towards European defence (see Chapter 4).

Interviewees noted that Brexit thus implied a loss of UK influence over EU decisions at a critical juncture of significant policy change for defence R&D. Indeed, since the vote other EU member states have been quick to suggest new directions for EDA collaboration, with France and Germany pushing for defence to be included in the next common budget for 2021–27, including proposals for €5bn a year of joint financing on development and procurement through an EU 'capability window'.[126] This shift in the UK role also has potential implications for the relationship and division of labour between the EU and NATO – the latter organisation potentially benefiting from enhanced UK engagement, while being less well placed to influence members' R&D agenda without the range of industrial, financing and regulatory tools at the disposal of EU institutions, especially if they proceed to more integration without a UK veto. Unless it is able to negotiate a bespoke arrangement with more formal involvement and consultation than EDA associate countries, the UK may lose control of the European research agenda at an important moment for defence, while the EU would no longer benefit from the input of one its most experienced and technically capable military actors.

Outstanding questions:

- What trade-offs are the UK government and electorate willing to accept between controls on free movement and access to European research funding?
- Where might UK and EU defence research priorities be most likely to diverge after Brexit, and with what effect on defence industrial and military capability?
- How can the EU and individual member states derive the most benefit from a post-Brexit EDA, considering the removal of the UK veto but also enduring challenges and lost UK capabilities?
- Can existing models for non-EU members to engage with the ERC or EDA satisfy the unique demands of post-Brexit relations? Which new institutional frameworks might emerge, if not?

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[126] EDA (2017)

3.4. Procurement strategy and the EU Defence Directives

Also potentially subject to change after Brexit are governmental approaches to defence procurement, representing a legal question with important political and economic ramifications for UK and European defence.

UK law has been shaped by decades of EU membership, incorporating EU law requirements into national legislation across a wide range of policy areas, including defence. The extent to which this legislation will need to be amended or repealed is of course dependent on what sort of post-Brexit relationship is negotiated between the UK Government and EU. This includes all public procurement legislation, including the UK's 2011 Defence and Security Public Contracts Regulations (DSPCR). These govern the purchase of military or otherwise sensitive equipment and services, incorporating EU rules into UK law.

Possible scenarios for post-Brexit public procurement include:[127]

- **Continued membership of single market:** Full access to the European single market – for instance, through membership of the EEA – is predicated on compliance with relevant EU legislation, including rules on public procurement. This would imply maintenance of the status quo, though with the UK's ability to influence the direction of new EU legislation much more constrained.
- **Exit from single market:** If the UK were to leave the single market, it would have a subsequent decision on whether to remain a party to the Government Procurement Agreement (GPA). The GPA is a non-obligatory agreement between members of the WTO regulating the basis on which GPA members give foreign suppliers access to their governmental procurement markets.

Kotsonis suggests the UK would likely wish to retain GPA membership to ensure UK suppliers could continue to have some access to markets in the EU as well as other GPA signatories such as the US or Japan. (China is currently negotiating accession.) In practice, GPA provisions are 'in many respects substantively the same' as EU procurement legislation, which itself complies with GPA rules.[128]

Importantly, however, this does not extend to defence and security procurement, which falls outside the GPA. Indeed, the UK Government has already signed bilateral deals outside of EU or GPA frameworks, most notably the Reciprocal Defence Procurement Memoranda of Understanding with the US.[129] As such, in this second scenario the UK could scrap the DSPCR and adopt a more flexible approach to defence procurement, for instance implementing a simpler, more flexible regime, with knock-on effects for the level of industry support, competition and value for money. This would remain a policy choice for Westminster; while the current UK Government may not seek to change its current stance (having been an advocate of defence market liberalisation within the EU), future governments would have greater scope to adopt different approaches as part of any UK defence industrial strategy outside the EU.

Butler argues that this legal change could have profound political and industrial consequences, coming at a time when the UK's defence acquisition as a whole is already undergoing 'unprecedented domestic

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[127] Kotsonis (2016)

[128] Ibid.

[129] Butler (2015)

reform'. For example, the UK has recently adopted the Single Source Contracts Regulations (SSCR) as part of a wider institutional overhaul of defence acquisition through the Defence Reform Act 2014. This seeks to improve oversight and costing of defence contracts to reduce overruns and control contractor profits. Depending on the extent to which UK legislation remains compliant with or inspired by EU law after Brexit, the need for the UK to at least revisit its regulatory approach to defence could have knock-on effects for the relationship between government and the defence industry, which is already politically complex in the UK (combining as it does elements of both monopoly and monopsony).[130]

3.4.1. Depending on Brexit talks, the UK could be free to pursue a more flexible procurement policy, though it already retains considerable freedom within the EU

In particular, there has been debate over the possible ramifications of Brexit for the future of the EU Defence Directives, both in Europe and in the UK. The Directives represent the EU's attempt to address the persistent fragmentation of the European defence technology and industrial base (EDTIB). As recognised in a recent European Parliament report, the EDTIB is marked by duplication, protectionism and only limited steps towards industrial consolidation or international collaboration, with many defence ministries procuring the large majority of equipment from local 'national champions' as a means of promoting employment or protecting sovereign industrial capability.[131]

Specifically, the two Directives are:

- **EU Directive 2009/81/EC on defence and sensitive security procurement:** Sets out EU rules for defence procurement, aimed at enhancing transparency and open competition in defence markets between EU countries while still safeguarding appropriate national interests. The procurement Directive seeks to combat protectionism and the use of 'offsets', for instance, whereby ministries award contracts to suppliers in return for investments in local industry, sometimes in civilian sectors unrelated to defence (e.g. automotive, electrical).[132]
- **EU Directive 2009/43/EC on intra-EU transfers of defence-related products:** This transfer Directive seeks to make it easier to move defence goods between EU member states, defining a common European licence system.[133]

The UK transposed the EU Defence Directives into UK law in 2011. It is not yet clear what substantive effect they have had, if any. In 2015 a European Parliament report found evidence of 'a limited or even non-existent impact on the DTIB', noting that the Directives were often incompletely or incorrectly applied by member states, which, like the UK, continued to procure equipment primarily from national suppliers to support local defence industries. (The Parliament did stress, however, that it would be 'too hasty and premature to draw conclusions from such a short period'.)[134]

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[130] Ibid.

[131] European Parliament (2015)

[132] Edwards (2011)

[133] Besch (2016)

[134] European Parliament (2015, 6)

It is therefore difficult to ascertain what the likely impact of a UK withdrawal from EU provisions would be, if any. If the UK were to become a member of the EEA after Brexit, its domestic defence procurement regime 'would very likely remain the same, and continue to evolve as the EU regime does, including continuing to be influenced by the case law of the European Courts and the requirement of the EU treaty principles'.[135] The UK MOD could thus continue to choose from UK, European and US suppliers, take part in collaborative programmes and buy off-the-shelf as so desired.[136]

On the one hand, it is not clear that the UK would want to diverge radically from (current) EU policy in this area, even after a 'hard' Brexit. The Blair government's Defence Industrial Strategy committed the UK to procuring, wherever possible, through competition as a means of promoting value for money. This approach was reiterated by the Conservative-led coalition in the more recent White Paper, *National Security Through Technology* (2012), which set out the aim to fulfil 'defence and security requirements though open competition on the domestic and global market' while still retaining sovereignty in key areas of procurement. This mixed approach aims to secure the 'operational advantage' and 'freedom of action', giving the UK the best technology to defeat or deter adversaries, while still maximising security of supply and national independence.[137] In 2012, the UK Government conducted a review of the 'balance of competences' between the UK and EU, which reaffirmed the UK's support for EU efforts to open the European defence market to more competition and combat protectionism while respecting national sovereignty in key technology areas.[138]

Indeed, the UK already retains considerable 'liberty of action' even within the EU Defence Directives. By invoking Article 346 TFEU, a member state is free to exempt itself from EU procurement rules in cases of (ill-defined) 'essential interests of its security'. R&D contracts and government-to-government sales are also exempted from the Directives' provisions. While the UK would thus not have to tender contracts across the EU, for instance, its broad approach could remain similar to the status quo, combining the general promotion of open, fair competition with occasional insistence on a more protectionist approach to ensure security of supply or retain domestic defence industrial capabilities in key technology areas (e.g. nuclear, cryptography, shipbuilding).[139] The tensions inherent in this approach reflect a broader trend among other EU member states, where implementation of the Directives has been similarly mixed; Article 346 TFEU has been used to justify spending the 'majority of any investment in defence domestically to protect the industry from any competition and to sustain what has long been seen as a manufacturing sector of strategic significance nationally'.[140] Indeed, the Commission was forced to 'remind' 13 EU members firmly of the provisions in March 2016 following a number of national defence procurements that appeared to ignore the Directives.[141]

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[135] Moorcroft (2016)

[136] Uttley and Wilkinson (forthcoming)

[137] UK Ministry of Defence (2012, 12–13)

[138] UK Parliament, House of Commons Defence Select Committee (2013)

[139] Miller (2013)

[140] Edwards (2011)

[141] Besch (2016)

For the rest of the EU, the implications of the UK's exit for the Defence Directives are contingent on the direction taken by European defence more broadly after Brexit (see Chapter 4 for detailed discussion). Certainly, a number of interviewees expressed concern that the Commission's attempts to promote greater competition and openness in defence procurement could suffer without the liberalising instincts of the UK, with market-leaning Sweden and others potentially finding themselves increasingly out-voted by more protectionist member states or those seeking a 'Europeanisation' of defence procurement. As the Centre for European Reform argues, it appears unlikely that without the UK in the EU any other major arms-producing country 'would continue to push for competition and efficiency in the defence industry'.[142] France and Spain have been vocal advocates of a 'buy European' policy, for instance, by which the EDTIB would be protected from non-EU competition (including firms in the US and potentially, after Brexit, the UK). However, this would all depend on the extent to which the EU as a whole was able to agree on a new direction for defence industrial consolidation and procurement; some argue that Brexit may in fact 'reveal deep cleavages in approach that other member states have been able to hide behind Britain's blanket veto'.[143] If the EU were to become more protectionist, the absence of external market competition could mean that equipment capability would over time tend towards the average, with Europe falling further behind the cutting edge of military technology produced in the US and compounding the need to pool and share to maintain effective fighting forces, due to the increased costs and inefficiencies associated with national duplication of procurement and industrial efforts.

Outstanding questions:

- How might Brexit undermine or reinforce the preference for competitive defence procurement in the UK and EU? What diplomatic strategies should remaining EU members such as Sweden pursue after the loss of the UK as their strongest ally in debates over market liberalisation?
- How best to balance competing urges to minimise costs, maximise military capability and promote national security of supply?

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[142] Bond et al. (2016)

[143] Ibid.

Box 4. Arms export controls after Brexit

Given their violent potential, exports of military equipment and dual-use goods (e.g. those used for both military and civilian purposes) are strictly controlled through both national and international regimes. Brexit could thus have important effects. As the Stockholm International Peace Research Institute (SIPRI) argues, 'While the issue played no role in the pre-referendum Brexit debate and likely resides somewhere near the bottom of the list of priorities for UK and EU negotiators, exports controls are arguably an area of foreign and security policy where EU cooperation reached its deepest level.' This means changes in this area could be both a 'key indicator and driver' of Brexit's wider impacts on defence and security policy.

Besides the EU Defence Directives outlined above, the UK's export control regime is currently subject to three key EU instruments which could be affected by Brexit:[144]

- **EU Common Position on arms exports:** This sets standards for controlling transfers of military goods, with the UK, like all EU members, legally required to subject all items on the EU Military List to export controls and consider eight 'common criteria' when assessing arms exports to help prevent conflict and human rights abuses. The EU has no legal powers to sanction non-compliance, however, and the UK already retains freedom to decide how to implement its obligations. After Brexit, then, UK national legislation would remain in place, but with added freedom for the UK to diverge from EU policy should it wish, for instance, to strengthen or relax controls on UK exports to authoritarian regimes. If it were to do the latter, this could potentially trigger a 'race to the bottom' between the UK and EU given the advantages to be had for promoting national exports. However, the UK would still be subject to the UN Arms Trade Treaty and the strong domestic lobby in favour of tight controls, while the EU would have to agree any change to the Common Position by consensus.

- **EU Dual-Use Regulation:** In contrast to the national legislative lead on arms exports, dual-use export controls fall under the 'exclusive competence' of the EU as part of trade policy. The UK control list and the scope of certain licences are updated automatically when EU policy changes. SIPRI suggests that considerable legal work is thus required to clarify which parts of the UK export regime derive their legality from EU or from national legislation, and to update these accordingly after Brexit.

- **EU arms embargoes:** These either replicate UN arms embargoes, expand upon them or are entirely autonomous, as is the case for EU sanctions on Russia and Syria (which Russia can veto in the UN Security Council). Arms embargoes are not part of the 'exclusive competence' of the EU, though the UK has adopted legislation that makes EU sanctions automatically apply at the national level.

After Brexit, the UK would still be obligated to support UN embargoes and could choose to support or ignore EU embargoes on a case-by-case basis. However, it would also lose influence over EU embargo decisionmaking, though non-EU nations such as Norway have secured partial access to some consultation processes. This is of particular significance given the major role that UK diplomats have played in promoting EU sanctions against Russia and Iran (see Chapter 4). The EU in turn would lose access via the UK to other fora such as the Commonwealth, where the EU has previously played an influential part in promoting international support for the Arms Trade Treaty.

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[144] Bromley (2016)

3.5. Defence industry, exports and collaboration

3.5.1. Defence industry has made no secret of its support for remaining in the EU, with strong ties between UK firms and European counterparts

Defence industry in the UK and EU is also sensitive to potential change due to Brexit. Any post-Brexit change in this area could have profound implications not only for national security, but also for the British and European economies. In the UK, the defence industry has an annual turnover of £30bn, including exports of £11.9bn. By official estimates, the sector employs around 215,000 mostly high-skilled workers and supports a further 150,000 jobs in supply chains.[145] The UK industry is also part of a larger EDTIB, thought to be worth €97.3bn annually and supporting 795,000 European jobs (including 535,000 in aerospace).[146] With a lesser focus on the land domain than other EU industries like France or Germany, the UK has particular strengths in aerospace, naval shipbuilding (including nuclear submarines), engines, electronics and complex weapons. Major UK firms such as BAE Systems (Europe's second-largest defence prime) and Rolls-Royce also have a global presence, including privileged access to US markets compared to many European competitors.

UK companies also work closely with European counterparts. Missile supplier MBDA was formed through an Anglo-French partnership; electronics firm Selex and helicopter manufacturer AgustaWestland are owned by Italian giant Leonardo (formerly Finmeccanica); Airbus and Thales both have important operations in the UK. Engine specialist Rolls-Royce works on the multinational A400M transport aircraft; BAE Systems owns Swedish armoured vehicle firm Bofors, forms part of the Eurofighter consortium (with Germany, Italy and Spain) and is currently collaborating with France's Dassault on the unmanned Future Combat Air System (FCAS). In 2012, the German government vetoed a proposed deal which would have seen the merger of the UK's BAE Systems and Europe's Airbus (then known as EADS), creating one of the world's largest defence contractors.[147]

Given these ties, the UK defence and aerospace industry made a number of direct interventions in the Brexit debate, arguing for the benefits of continued membership and noting the dangers of prolonged political uncertainty for business confidence, investments and skills, whatever the outcome of the vote. A 2015 survey for ADS, the UK defence and aerospace trade association, found that 73 per cent of UK firms perceive EU membership as beneficial for their business, compared to 1 per cent who see it as a negative. Indeed, 86 per cent of ADS members reported that they would vote for the UK to remain in the EU against only 2 per cent that would choose to leave.[148] It is not only the UK industry that is exposed to potential change, either. Tom Enders, CEO of Airbus, Europe's biggest defence and aerospace firm, has described the Brexit vote as a 'lose–lose result' for both Britain and Europe.[149] However, Uttley and

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[145] UK Ministry of Defence (2016b)

[146] ASD, Aerospace and Defence Industries Association of Europe (2015, 4–5)

[147] Pickard et al. (2012)

[148] ADS Group (2016)

[149] Fiorenza (2016)

Wilkinson suggest that concerns about the defence industrial implications 'fell on deaf ears' and did not feature as a major subject of the referendum campaign.[150]

Figure 3.1 Survey of Brexit views in UK defence, aerospace and space industry

Does EU membership have a positive or negative impact on your company?

73%

- Positive
- Neutral
- Negative

In the event of a referendum, would it be better to remain in or leave the EU?

86%

- Better to remain
- Don't know
- Better to leave

Free trade, cross-border simplification and growth are seen as benefits to the UK

Benefits to my business of the UK being in the EU

Benefit	%
Free trade within the EU	59%
The simplification of regulations and tariffs within Europe	35%
Overall economic growth in the UK economy	32%
Access to European suppliers/supply chain	27%
Free movement of Labour	23%
Free trade agreements outside the EU	14%
Non-EU FDI to the UK	14%
FDI from the EU	10%
None of the above	7%
Don't know	6%
Other	3%

Source: adapted from ADS Group (2016).[151]

3.5.2. *Access to EU markets could be disrupted by Brexit, though UK firms already focus more on non-EU exports and could benefit in the short term from the devaluation of the pound*

With regard to market access, the future scenarios for defence will reflect the wider economic settlement secured by the UK after leaving the EU – for instance, whether the UK becomes a member of the EEA or reverts to reliance on WTO rules. The latter case would entail diminished access to European market opportunities for UK-based firms, though many are already part of large multinationals (e.g. Leonardo) or else operate subsidiaries in other EU nations.

In contrast to many civilian industries, however, the fragmented nature of the defence market means that UK firms are less vulnerable to major financial losses from a 'hard' Brexit. In fact, EU sales account for only 4 per cent of UK defence industry turnover, compared to 58 per cent for UK contracts and 38 per cent for non-EU exports. This compares to EU sales comprising a quarter of revenues in Germany and Italy, or a sixth in Spain and Sweden, though French industry is more similar to that in the UK, with only 3 per cent of sales going to other EU markets. Indeed, the real importance of the domestic market for UK firms may be even greater than these figures imply. Domestic industry also receives large contracts for services outsourced through the UK MOD's operations and maintenance budget, estimated to be worth

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[150] Uttley and Wilkinson (2016)
[151] ADS Group (2016, 11)

another €10bn.[152] (EU exports are considerably more important for the related civil aerospace sector, with European giant Airbus operating a number of large production sites in the UK and annual exports to the EU accounting for £8bn.)[153]

Diminished access to EU markets is thus unlikely to have a major disruptive impact on UK defence industry order books, at least in the short term. Of greater concern would be reduced access to important non-EU markets, such as the US and Saudi Arabia, should trade agreements take time to negotiate after Brexit. However, many British defence firms already operate subsidiaries domiciled in their key export markets – for instance BAE Systems Inc. in the USA, or the Rolls-Royce production site in Indianapolis.[154] Furthermore, ensuring continued access to the UK as a major defence supplier, industrial partner and export market will likely remain a high priority for Washington, DC and others reluctant to see Brexit interrupt lucrative procurements or the ability of an important NATO ally to procure the best in off-the-shelf kit for its military.

Indeed, a number of interviewees argued that Brexit is likely to accentuate the recent trend in the UK for defence to play a more active role contributing to the Government's wider 'prosperity agenda', as emphasised in the 2015 SDSR. This includes defence engagement activities by the British military, as well as greater emphasis on 'exportability' for UK defence products – both in terms of considering potential non-UK customers early on in their design and of improving government promotion of the UK defence industry overseas.[155] Interviewees noted that wider economic uncertainty in the UK and Europe could see increased political emphasis on lucrative defence exports, both to shore up GDP (and employment) and to drive down unit costs for equipment procured out of potentially strained domestic budgets. Offers of defence industrial collaboration or technology transfer could also provide leverage for the UK when seeking out trade deals with non-EU countries looking to develop their local defence industry, including emerging economies such as India or Brazil.

Similarly, interviewees suggested that additional pressure to make efficiencies within defence budgets to offset any post-Brexit fiscal retrenchment could also accelerate ongoing reform efforts towards a 'Whole Force Approach' whereby private-sector contractors work closely with civil servants, reservists and regular military, creating new opportunities and challenges for industry.[156]

At the same time, the devaluation of the pound provides a short-term boost to the competitiveness of UK firms and exports; however, this effect is mitigated by the fact British manufacturers must buy parts and materials from overseas suppliers, and often already compete on non-price factors such as customer service, technology and diplomatic ties (e.g. BAE Systems' close links with Saudi Arabia). The UK Defence Secretary, Michael Fallon, cautions that it remains too early to tell if recent volatility in currency markets represents short-term uncertainty or a long-term trend that could benefit British defence industry

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[152] Beraud-Sudreau (2015, 15–17)

[153] Royal Aeronautical Society (2016)

[154] Klimas (2016)

[155] UK Ministry of Defence (2016b)

[156] Louth and Taylor (2015)

(either by boosting exports or by making domestic production more affordable for UK customers).[157] The ADS trade group is already working with the new UK Department for International Trade to promote non-EU sales, with a particular focus on Japan, South Korea, Australia and the Gulf States.[158]

3.5.3. Access to skills and foreign direct investment is a major post-Brexit concern for defence industry, though some investors have taken a more positive view

Debates over the future of the UK's economic ties with the EU are not only about market access for exports, however. There is also considerable uncertainty about what Brexit could mean for the defence industrial skills base, which is already facing a number of demographic, recruitment and educational challenges in both the UK and Europe.[159] There is limited data in the public domain on the number of EU nationals currently working in the UK defence sector. However, ADS reports that as many as of 7 per cent of all EU citizens living in the UK work in the aerospace industry,[160] while British defence firms in turn have 16,000 staff currently based in business units in other EU countries.[161] During the referendum campaign, major defence employers Rolls-Royce and Airbus joined the Institution of Engineering and Technology in warning that restrictions on freedom of movement could exacerbate an existing shortage of an estimated 1.82m skilled workers across the wider engineering sector, though this could of course be mitigated to some extent depending on the specifics of any new visa regime.[162]

Figure 3.2 Net FDI inflows to the UK aerospace and marine sectors, 2010–13
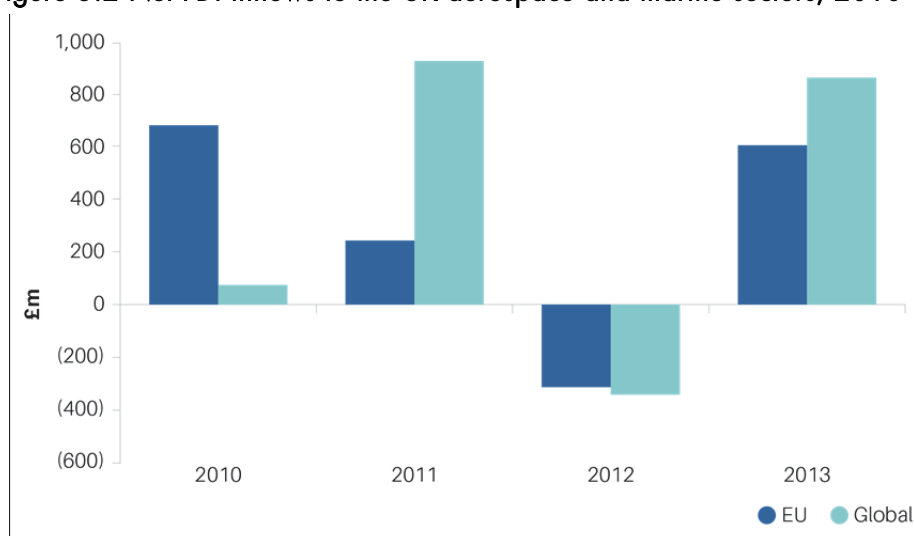
Source: ADS (2015).[163]

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[157] Bloomberg (2016)

[158] Katz (2016)

[159] Retter et al. (2016)

[160] Westbrook (2016)

[161] ADS Group (2016, 19)

[162] Palmer (2016)

[163] ADS Group (2016, 14)

There are also concerns about the implications of Brexit for foreign direct investment (FDI) in the UK defence sector, as well as the future of existing multinational companies and subsidiaries located in the country. The 2015 ADS survey found that a decision to leave the EU was certainly unlikely to see major companies suddenly close their presence in the UK, which remains an important market. Thales chief executive Patrice Caine has noted that Thales UK has experienced record growth in orders recently, with the group already operating in 56 countries and committed to continue doing so 'regardless of political uncertainties'.[164] But ADS argues that when taking a more long-term view, 'the majority of investors [see] little obvious enhancement to their investment decisions if the UK was not part of the EU',[165] with an uncertain future for those international firms, such as US giant Northrop Grumman, that base their EU divisions in the UK and rely on its access to European markets.[166] Multinational European firm Airbus has indicated it will have to review its UK investment strategy after the vote for Brexit.[167] John Ponsonby, the managing director of AgustaWestland, has said the Italian-led group Leonardo will have to reassess its helicopter operations in the UK.[168] Naval shipbuilding on the Clyde could also become less sustainable after Brexit if leaving the EU were to trigger renewed calls for Scottish independence (see Chapter 5).

Against this concern, however, a number of international defence firms have taken a more positive view of the implications of Brexit. Global defence contractor Lockheed Martin has suggested that the UK could in fact become more attractive to investment, given the more lucrative export opportunities if the value of sterling remains low. Marillyn Hewson, chief executive at the US-based firm, noted that post-Brexit uncertainty exists but that the long-term attractiveness of the UK will be influenced more by 'the government and the policies it puts in place'. The UK defence industry also retains many advantages in terms of skills, technology and supply-chain partnerships, with Lockheed Martin for instance having invested £23m in a UK-based centre of excellence for turret manufacture.[169] (Indeed, Lockheed Martin's own F-35 Joint Strike Fighter project – a US-led multinational programme through which other countries can buy into different 'tiers' of influence over development and the delivery schedule based on the level of their financial contributions – could provide inspiration for the UK to pursue a similar model for attracting EU development funding even after Brexit.) Swedish company Saab, meanwhile, has reported Brexit as a 'net positive' for Saab's operations in the UK, with particular focus on the new potential export opportunities stemming from trade deals between the UK and non-EU countries. Continued access of EU firms to their UK supply chains and vice versa (without tariffs and other barriers) remains important, nonetheless, with some 33 per cent of Saab's JAS-39 Gripen fighter aircraft manufactured in the UK before assembly in Sweden.[170]

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[164] Fiorenza (2016)

[165] ADS Group (2016, 14)

[166] Weisberger (2016)

[167] Fiorenza (2016)

[168] Defense World (2016)

[169] Morris (2016)

[170] Ingham (2016)

Box 5. Tax implications of Brexit

Under either the EEA or WTO model, Brexit would also have tax implications that could affect defence firms. After Brexit, the UK would no longer be obliged to have a Value Added Tax (VAT) system and could reduce rates or exempt the defence sector or others as it so chooses – though there is little political appetite to abolish the tax altogether given it is so lucrative for the UK Government.[171] Significantly, however, the UK would also lose access to the coordinated VAT collection that occurs through the EU's acquisition and dispatch system, which allows VAT on EU goods to be accounted for on VAT returns. Instead, goods would be taxed at the UK–EU border. This would leave companies with a 'cash flow disadvantage due to the delay between payment of customs charges on entry and entitlement to recover the VAT as input tax on the next VAT return', while UK defence businesses that sought to register for VAT in an EU member state could face additional administration and costs as a non-EU registrant.[172]

At the same time, the UK could also be freed of EU state aid rules after Brexit. This could allow it more freedom to implement innovative measures to support UK defence industry and incentivise inward investment, if it wished to do so – though it could risk a political backlash from EU partners if it was seen as unfairly undercutting the European defence industrial base. This would also depend on whether the UK chose to join the EFTA or not, as EFTA members are still obliged to follow EU state aid rules.[173]

3.5.4. Non-EU mechanisms exist for the UK and EU to continue cooperating on defence industrial issues, assuming both sides are so inclined after Brexit

Despite the various points of uncertainty on the supply side of industry, perhaps the most significant effects of Brexit will be dependent on any changes in European defence policy, integration and spending.

Of significant concern is the potential for future exclusion of UK industry from major defence industrial developments in Europe, including new multinational development programmes (whether due to regulatory and tariff barriers, or more political reasons should Brexit strain friendly relations). For the rest of the EU, of course, whether the UK were using EEA membership or WTO rules would not affect the most important new political development of Brexit, namely that EU member states could move forward with plans for increased European defence integration. However, were the UK outside of the EEA, European firms could have less access to a major potential customer – Europe's biggest defence spender – and lose an important collaborator on multinational development programmes. This would result in lost sales if tariffs and other barriers proved problematic, and provide an additional incentive for remaining EEA industries to cooperate more among themselves (as already, for instance, on the NEURON unmanned air project between France, Greece, Italy, Spain, Sweden and Switzerland, or on programmes at the Nordic and Visegrad levels), but with the loss of UK firms' technical expertise and financial resources. This could frustrate attempts to create a genuinely competitive, innovative EDTIB through collaboration and consolidation among Europe's leading firms.

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[171] Dhingra et al. (2016)

[172] BDO (2016)

[173] Ibid.

However, it is important to note that defence and defence industrial issues have remained intergovernmental areas of policy, with limited supranational EU input to date. Indeed, many of the multilateral frameworks through which fellow EU member states organise common procurements or work to harmonise requirements and standards are not contingent on EU membership – most notably the Organisation for Joint Armament Cooperation (OCCAR), through which the UK works with European allies to procure the A400M tactical airlifter, for instance, as well as contracting a bilateral Anglo-French programme for maritime mine countermeasures. OCCAR in turn has an Administrative Arrangement allowing it to collaborate closely with the EU through the EDA, often taking over delivery of projects initiated by that organisation when they move towards the procurement and delivery stage.[174]

Former head of the EDA Nick Witney has also suggested that the UK and other leading EU states could seek to increase use of non-EU cooperative instruments through the existing Letter of Intent (LOI) Framework Agreement Treaty. Signed in 2000 by Europe's largest arms producers (France, Germany, Italy, Spain, Sweden and the UK), the LOI aims to harmonise military requirements between the members, as well as promoting defence industrial collaboration and consolidation. Though this mission was subsequently taken up by the larger EDA, the LOI does offer a potential 'legal frame for continued cooperation until some wider relationship between Britain and the EU on defence and security issues is sorted out' – potentially including some sort of role for the EDA as a secretariat, or at least a political move towards additional consultation between this group and smaller EU members.[175]

The degree to which the UK's European partners are willing to make use of this alternative extent framework depends, as in so many other areas of defence policy, on the goodwill London is able to retain after its Leave vote and the degree to which common interest in continuing defence cooperation is not disrupted by wider political wrangling in the Brexit negotiations. The same is true of bilateral defence industrial and procurement partnerships.

Interviewees suggested that upcoming decisions on whether and how to proceed with further investments in the Anglo-French FCAS programme could provide one of the first tests of political commitment on both sides to enduring cooperation between the UK and Europe: the project to co-develop a stealthy unmanned combat aircraft has received £200m of funding to date, with the intention before the Brexit vote being to start a second phase worth £1.54bn in 2017.[176] Both London and Paris have insisted that collaboration of this kind under the 2010 Lancaster House Treaty is 'Brexit-proof' and there are strong industrial and capability arguments for continuing the bilateral programme. At the same time, however, France faces an awkward choice between its UK partner and its commitment to promoting European defence solutions – especially given that Dassault's contribution to the FCAS programme is based on the NEURON demonstrator, an aircraft designed through an earlier collaboration with Greece, Italy, Spain, Sweden and Switzerland, which were controversially excluded from the FCAS in favour of what will soon

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[174] OCCAR (2016)

[175] Witney (2016)

[176] Stevenson (2016)

become a non-EU partner.[177] The UK's vote to exit the EU is likely to throw up more such political complications to already tricky decisions in European capitals about how to balance their use of different EU, multilateral and bilateral instruments to promote more defence industrial collaboration.

Outstanding questions:

- What steps can UK and EU governments take in the short term to provide certainty to defence industry and investors given the many unknowns involved in Brexit negotiations?
- Will the uncertain economic outlook of Brexit bring added impetus to promote defence industrial consolidation and reduce duplication of effort across Europe as a means of reducing procurement costs through 'pooling and sharing', or will the centrifugal politics of the UK's departure further entrench the desire to promote national industries?
- How can the UK most effectively remain engaged with European defence industrial policy once outside of the EU? What consequences does Brexit hold for ties between the UK or EU and other national defence industries in the US or elsewhere?

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[177] Ghez et al. (2017, ch.2)

4. The UK's conventional defence capabilities and multinational defence commitments (EU CSDP and NATO)

4.1. The UK and its conventional military capabilities

As far as Britain's conventional defence apparatus is concerned, for the near term at least, the decision to leave the EU arguably looks likely to have minimal impact.[178] The future of Britain's conventional forces was not an area that received much coverage during the referendum campaign. This may be because both sides of the campaign worked on the assumption that, whether an EU member or not, the UK will wish to maintain its defence capabilities and ability to project military power. Excluding a major near-term political or economic volte-face, it seems likely that the UK will continue to move towards JF2025, reconfiguring its forces and equipment accordingly. However, for the medium and longer term, there are two main imponderables: first, money; second, the threat environment and concomitant levels of ambition.

4.1.1. Financial considerations post-Brexit may have implications for the UK's conventional military capabilities

As outlined in Chapter 3, there are significant concerns that the UK's vote to leave the EU could provoke a period of deep and damaging economic uncertainty, with knock-on effects for the defence budget. This would likely impact on the UK's ability to achieve the level of ambition and capability to which the 2015 SDSR aspires.[179] In the extreme, certain planned capabilities could be rendered unaffordable and abandoned altogether, or the timing and numbers of particular assets being procured might have to be scaled back. Beyond equipment concerns, there is the issue of manpower. For the UK's armed forces as well as defence civil servants, this has been heavily reduced in recent years.[180] The MOD's departmental plan 2015–20 commits to maintaining the size of the regular armed forces, not reducing the Army below

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[178] House of Commons Library (2016)

[179] Ibid.

[180] Defence Statistics figures indicate a continuous decline in military personnel. Between 2011 and 2014, numbers of forces personnel declined from c186, 000 to c159,000 (with the Royal Navy going from c37,000 to c33,000, the Army from c106,000 to c91,000) and the RAF from c42,000 to c35,000). Personnel numbers in the civil service also declined from c86,000 in 2010 to c56,000 in 2016.

82,000 and expanding the reserve force to 35,000.[181] Continuing or worsening economic squeeze might render these commitments difficult to extend beyond 2020. It is plausible that this could result in a shift towards even greater reliance on reserves. Such cuts could limit the ability of the armed forces to fulfil their role effectively.[182] The MOD departmental plan already envisages further cuts to the defence civil service by 2020 but it is plausible that Brexit may lead to even greater civil service cuts being made within the MOD.[183]

From the opposing perspective, should Brexit result in improved UK economic performance, the defence budget could conceivably grow, with associated benefits for the UK's long-term military capabilities. Were Britain to succeed in becoming 'the world's brightest beacon of open trade' with concomitant economic rewards, there could be more, rather than less, money to spend on defence.[184] This could be ploughed into developing, consolidating and expanding the defence capabilities required by Britain in its new post-EU role, especially if a more global outlook required new emphasis on power projection to secure lines of communication and help protect key trading partners in the Indian Ocean and Asia-Pacific.

Indeed, some interviewees suggest that Brexit may further accelerate the growing trend in recent years towards a more visible contribution by UK defence to the wider 'prosperity agenda' and global influence. The 2015 SDSR made defence engagement – capacity-building projects, exchanges and other opportunities to engage with partner nations – a core, funded MOD activity for the first time, and set up British Defence Staffs for the Middle East, Africa and other regions. The need to promote non-EU trade to bolster economic performance after Brexit may thus incentivise the UK to focus more on these sorts of influence activities to help it win over trading partners, and gain enhanced support for defence exports to make an even more direct contribution to the UK economy.

Equally, it is possible that, even in the face of stagnating or declining economic performance, the UK government could decide to extend the ring-fencing of the defence budget into the mid- to late-2020s or allocate defence a greater proportion of declining government spend. Given the conventional wisdom that 'there are no votes in defence' and the competition across government for scarce resources, there are perhaps two potential scenarios that could precipitate this boost for defence.[185] Firstly the UK may adopt a deliberate, proactive policy to strengthen its conventional capabilities in order to highlight Britain's continuing relevance and capability as an international defence actor post-EU. Secondly a significant shift in the wider security situation whereby the threat to the UK and its interests was heightened could precipitate the bolstering, by necessity, of Britain's conventional forces to allow them to respond to the evolving challenge regardless of Brexit.

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[181] UK Ministry of Defence (2016c)

[182] Joint Committee on the National Security Strategy (2015)

[183] UK Ministry of Defence (2016c)

[184] Ross (2016)

[185] Martin (2015)

4.1.2. Levels of ambition may – by necessity or by choice – be adjusted post-Brexit

The resourcing of conventional defence capabilities – the manning and equipping of conventional forces – has a direct correlation with the levels of ambition achievable by Britain's armed forces and the role envisaged for them in the UK's realigned international status post-Brexit. The level of ambition determines the list of tasks which the armed forces are expected to carry out (or at least support). Levels of ambition ebb and flow according to the evolution of the contemporary operating environment and the permissiveness of the economic climate. Over the last few decades, the trajectory has been towards trying to do a similar (or even greater) number of different types of task but with fewer resources, maintaining standing and defence engagement tasks while delivering against a broad portfolio of operational commitments, with a concern that defence institutions have become the 'risk managers' of first rather than 'last resort'.[186]

It is plausible that the UK will seek to maintain or even expand its level of ambition in order to demonstrate its continuing relevance and loyalty to its partners and allies. Although there is no precedent for a country leaving the EU, there is a comparable precedent for such behaviour within NATO. In 1966, having left the integrated military command structure of NATO (albeit while remaining an Alliance member), the French government had to strive hard to counter perceptions of disengagement from the Alliance. This exercise in reputational damage control meant that Paris continued to spend heavily on defence and maintain levels of ambition in order to affirm France's solidarity and reliability as an ally.[187]In the same way, the UK may seek to demonstrate its ongoing commitment to European and international defence, maintaining or expanding its levels of ambition accordingly.[188]

However, some question whether the expansion of levels of ambition is possible given the reduction in capability resulting from recent resource cutbacks.[189] Indeed, questions have been raised over whether even the current levels of ambition are achievable by Britain's forces given recent cuts.[190] Cost-saving measures have produced known constraints in relation to manning (particularly in relation to Reserve quotas), force readiness and equipment availability.[191] Some have warned of a collapse in the defence paradigm whereby trying to keep all military capabilities going at the lowest possible level renders them militarily ineffective.[192] Admiral Sir George Zambellas, then First Sea Lord and Chief of the Naval Staff, giving evidence to the House of Commons Defence Committee in 2015, said 'we now cannot do what we are mandated to do: what do you wish us to give up?'[193] The reconstitution and development of capabilities which would allow the UK's forces sustainably to meet levels of ambition would be costly and

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[186] Houghton (2014)

[187] Menon (2016)

[188] Freedman (2016)

[189] Coughlin (2015)

[190] Kirkup (2012)

[191] See, for example, Carter (2015)

[192] Clark (2015)

[193] UK Parliament, House of Commons Defence Select Committee (2015)

would depend – as discussed above – on either improved economic performance or a willingness to favour defence over other sectors. Some consider the current force structure sufficient to meet levels of ambition: the then Secretary of State in his evidence to the same committee in 2015 stated that armed forces resourcing was 'adequate to do the jobs that have been thrust on us'.[194] In the event of declining defence spending in post-Brexit Britain, if a similar level of ambition is to be maintained (let alone expanded), where there is room for trimming (of the current force structure) is not immediately obvious.

As things stand, the emphasis of JF2025 – agreed before the Brexit vote – is to deliver a range of new and enhanced capabilities enabling UK forces to deliver against a broader mission set in a range of operational contexts. Given the governmental guarantees on defence spend until the early 2020s and assuming no significant decline in the UK's economic performance, the provisions of JF2025 may be achievable, enabling the UK to work towards increasing its breadth, if not depth of capability in support of its level of ambition. If the post-Brexit economy were to falter seriously, there would be an option for Britain to reduce its level of ambition. A small reduction might see the shrinking of British defence engagement, the recalling of attachés (although some interviewees commented that the attaché network will be critical to Britain's global defence status) or the limited downgrading of the mission set. A more substantial reduction might involve the adoption of a specialisation agenda, a move away from the provisions of JF2025. If appropriate bi- and multilateral relationships were in place (for example with the US and France), the UK could pursue a more specialised route, either in the kinds of operations it was configured to undertake or in the equipment and capabilities it was able to contribute to coalition operations. This would go against the trends and investments of recent years and would likely erode Britain's standing as a world-class defence and security actor, increasing its dependency on others and reducing its influence as a 'soft' (as well as 'hard') power actor.

What seems clear is that, to allow the government to make long-term strategic decisions about what would be a credible level of ambition for post-Brexit Britain in the areas of defence and security, the UK must first decide what it wants to be post-Brexit. From this standpoint, capabilities could then be altered accordingly, designing the ways and means to fit the UK's strategic ends. At the very least, the UK would be able to avoid blindly walking down a path that could de facto limit its strategic options downstream.

Notwithstanding the economic drivers and national levels of ambition for defence, there are other specific areas which are called into question with the Brexit decision: the UK's future involvement in multinational defence formations; the UK's future role in EU defence and security initiatives; and the broader future of CSDP. These are assessed below.

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[194] Secretary of State, the Rt. Hon. Michael Fallon MP, giving evidence to the House of Commons Defence Committee (2015)

4.2. The UK's future involvement in multinational defence formations

4.2.1. The UK's commitment to NATO will endure, and perhaps intensify, post-Brexit

The UK has made clear NATO represents 'the bedrock of our defence in the United Kingdom'.[195] It is therefore likely that the UK's commitment to NATO standing commands and force structures will continue (for example, hosting the HQ Allied Rapid Reaction Corps in Innsworth). Similarly, it is likely that, resource constraints permitting, the UK will continue to provide capabilities and personnel to support NATO-led operations and exercises as per current plans. These include the framework battalion for enhanced forward presence in Estonia, contribution to NATO Force Integration Units, maritime commitments in the Aegean and elsewhere, and support to assurance measures such as the Baltic Air Policing operations, in which UK assets take part on a rotational basis. The UK will likely continue to commit to Alliance High Readiness Forces such as the VJTF.

It is also possible that the UK will seek to contribute more to the Alliance – to 'lean in' as one interviewee put it – in order to maintain its standing, influence and involvement, and to cement its multi- as well as bilateral relationship with the US. One question that arises, however, relates to the UK's standing occupancy of the DSACEUR post within SHAPE. The DSACEUR, under the Berlin-Plus Agreement, acts as the operational commander for EU operations conducted under CSDP using a NATO HQ. Clearly for a British General to be de facto operational commander within an EU operation produces an anomaly following Britain's exit. Some have suggested that an additional DSACEUR post be created for this eventuality, or that the post now be rotated between France and Germany as members both of the EU and of NATO.[196]

4.2.2. Britain's other non-EU multilateral defence commitments are not likely to be directly affected by Brexit

The new UK Prime Minister has stated that the UK will remain an 'outward-facing, global partner at the heart of international efforts to secure peace and prosperity'.[197] This being the case, there appears no reason to suggest that the UK would seek to reduce its other non-NATO, multilateral defence commitments once it has left the EU (unless forced to do so by circumstance). Indeed, multinational involvement of this kind might be one mechanism by which the UK could maintain its profile and engagement with international defence partners. The JEF, involving the UK, Norway, the Netherlands, Denmark, Estonia, Latvia and Lithuania, would likely be unaffected by Brexit. Excluding major political disharmony between London and Paris, the Anglo-French CJEF, agreed under the Lancaster House Treaty and validated in 2016, would be likely to endure, as would operational-level partnerships such as the UK–Netherlands Amphibious Force. The UK would be likely to continue to contribute to 'coalitions of the willing' such as Operation Inherent Resolve against ISIS, the Combined Maritime Forces

[195] House of Commons Library (2016)

[196] Biscop (2016)

[197] Buncombe (2016)

organisation and indeed commitments to UN Peacekeeping, all of which help to secure national security interests as well as demonstrating the UK's continued post-Brexit engagement with the world.

It is possible however that political tensions created or exacerbated by Brexit could introduce practical difficulties into these arrangements or erode political will for their maintenance. It is also plausible that a greater emphasis by the Union's members on EU defence capabilities will encourage EU member states to channel their defence and security initiatives through the EU framework. Unless specific provisions can be negotiated, this would reduce the UK's opportunities for involvement. However, it is also possible that, with Britain on the outside of the EU, there may be greater appetite, both in London and other capitals, for multinational military collaboration outside of EU frameworks, to participants' mutual operational, as well as political, advantage.

4.3. The UK's future involvement in EU defence and security activities

4.3.1. The removal of UK defence capabilities from the EU inventory arguably represents a considerable diminution of collective EU defence capability

Brexit removes from the EU one of its two military powers capable of operating and thinking on a global scale, leaving France as the only major military power in the EU. With its departure, Britain takes with it a disproportionate share of Europe's high-end military equipment, with its impact on a selection of capabilities outlined in Figure 4.1. Various other niche inventories such as minesweepers or armed UAVs will be similarly diminished.[198]

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[198] Oliver (2015)

Figure 4.1 UK share of total EU military assets in selected categories
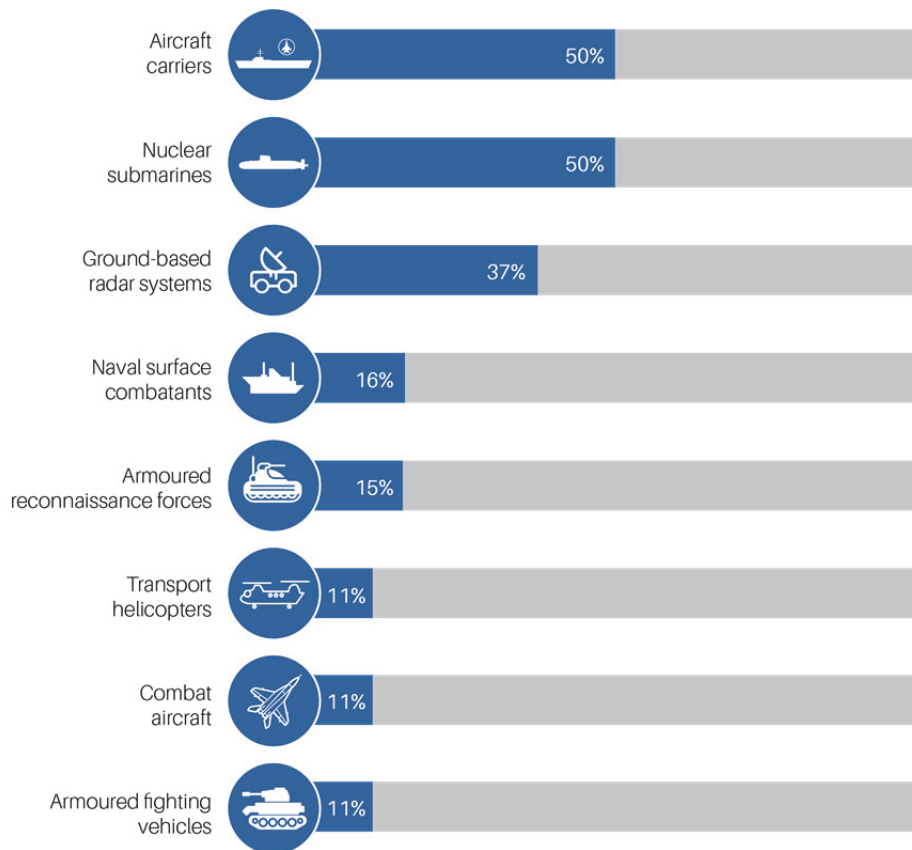
Source: IISS Military Balance (2016). Note: figures include the Royal Navy's new
Queen Elizabeth-class aircraft carriers, which are currently under construction.

This is not to say that these capabilities have been put beyond European use: they will still be made available through NATO, through other multinational military frameworks and perhaps in support of EU operations as agreed on a case-by-case basis. Nonetheless, in quantitative terms, some estimate that Brexit will reduce the EU's military capacity by a quarter,[199] both in terms of combined defence spending and the number of deployable European troops.[200]

4.3.2. British contributions to European defence operations will continue to be determined on a case-by-case basis and may be increased or reduced post-Brexit

Considerable uncertainty surrounds the future of the UK's operational commitments to EU frameworks and missions. In the past, Britain has provided funding and troop numbers to EU operations. The UK is currently contributing to a number of EU operations, including: EUFOR Operation Althea, the European Union Force in Bosnia and Herzegovina (31 personnel); the EU Training Mission in Mali (26 personnel);[201] and the EU Naval Force Mediterranean (EUNAVFOR MED), also known as Operation

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[199] Macdonald (2016)

[200] Besch, in Andersson et al. (2016)

[201] International Institute for Strategic Studies (2015)

Sophia, which is working to counter migrant-trafficking in the southern Mediterranean (see Chapter 2).[202] The UK has provided a number of important enabling capabilities to the EU, perhaps most notably the use of the UK's Permanent Joint Headquarters at Northwood to command EUNAVFOR Operation Atalanta, a counter-piracy mission active off the coast of Somalia.[203] Britain has been – and is currently (until December 2016) – an EU Battlegroup Framework Nation on rotation.

It is possible that, after leaving the EU, the UK could in fact seek to increase its contributions to EU operations, albeit more on an ad hoc basis than previously. The UK and EU may consider that their enduring common interest in relation to security and defence makes continuing engagement with the CSDP – albeit with the UK on the outside of the EU – mutually advantageous. Since the UK is one of the largest and most advanced military powers in the EU and one of only five EU countries capable of deploying an operational HQ and therefore commanding a mission, militarily, a UK withdrawal would likely place the EU at a disadvantage, with fewer assets and capabilities at its disposal.[204] This is particularly true of certain strategic assets such as tactical airlift and intelligence, surveillance and reconnaissance assets.[205] For this reason, there may be an appetite among EU member states to work to secure continuing UK military involvement. Similarly, the UK may aspire to demonstrate its continued willingness and involvement as a capable international defence partner. UK willingness to be involved in EU operations will depend both on domestic political will and on what is at stake. For instance, there may be a strong rationale for UK involvement in any European response to the invocation of Article 42 (the binding mutual defence clause of the European treaty) by an EU member state even if, once outside the EU, the UK will no longer be obliged to respect this clause. [206] To facilitate this eventuality, the UK might maintain a link with the EU mutual defence clause that would permit the UK to contribute voluntarily – as agreed between the UK government and EU Council – to common defence efforts. This could be particularly appealing if the unity and resilience of the NATO Alliance were to weaken as a result of any future US disengagement, as many British and European leaders fear given the many uncertainties of a Donald Trump presidency.

Beyond crises and existential threats, there might therefore be a rationale on both sides for negotiating new arrangements that permit the UK's continuing involvement with the wider purposes and activities of CSDP. There is precedent for the negotiation of such partnerships between the EU and non-EU states. Certain of the UK's current activities in support of CSDP are not contingent on EU membership (for example, it is possible to contribute to an EU Battlegroup without being a member state, as Norway and Turkey have done in the past). Their continuation and possible extension should therefore be easily attainable. It would, in theory, be possible for arrangements expanding these commitments to be made, albeit on a different institutional footing. Even if it does not seek to extend its current contributions to

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[202] European External Action Service (2016)

[203] UK Ministry of Defence (2016c)

[204] House of Commons Library (2016)

[205] Ibid.

[206] This clause states that 'if a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power, in accordance with Article 51 of the United Nations Charter'. European Commission (2012)

CSDP-related activities, the UK could maintain its current commitments, negotiating its involvement on a case-by-case basis.

Alternatively, the UK could cut its current contributions to EU operations. If CSDP moves towards greater integration of the Union and defence and security terms, this might be at odds with both the UK's agenda for the future and the EU's willingness and ability to incorporate external actors. It would be, in some respects, counterintuitive for post-exit Britain to commit more wholeheartedly to EU operations when it has declared its view of NATO's primacy in this area. In a scenario of disengagement from EU defence and security activities, the UK could withdraw from the battlegroup roster, and potentially withdraw its contributions to the EU CSDP, including the Operational HQ for Atalanta and maritime assets supporting Operation Sophia in the Mediterranean. As a result, remaining EU member states would be forced either to increase their own contributions or to accept a reduction in the deployed forces supporting CSDP missions. This could plausibly include an end to Operation Atalanta if an alternative Operational HQ cannot be found from among the four other countries possessing such a capability.

For some, Brexit has thus raised questions about whether new institutional structures or consultation arrangements could be built to allow the UK to continue to input its views into EU decisionmaking, rather than merely contributing troops and money to missions it has not shaped at the strategic level. Some experts suggested for example an 'EU27+1' format for the Foreign Affairs Council, potentially being widened to include a more formal mechanism for input from other non-EU countries and NATO. Others, however, note that this would require strong political will and agreement from other EU member states to make the necessary changes to accommodate the UK despite having voted to leave EU decisionmaking structures, making it potentially very unlikely, at least until post-Brexit relations have been normalised between London and Brussels.

4.3.3. Loss of the UK will result in a reduced global basing footprint for the EU

Previous studies for the European Parliament have noted that the EU is increasingly global in its security and economic interests, including an ambition to help secure global lines of communication and project power more widely.[207] One enabler of a truly global EU strategy is access to overseas military installations – much like the US makes use of the many hundreds maintained by its forces. With their colonial pasts, the UK and France (and to a much lesser extent Spain) also retain important global military outposts, including sovereignty over important transit and power projection hubs such as the Sovereign Base Areas (SBAs), Ascension Island or Diego Garcia (see Figure 4.2).

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[207] Rogers and Simon (2009)

Figure 4.2 Map of overseas military installations of EU member states
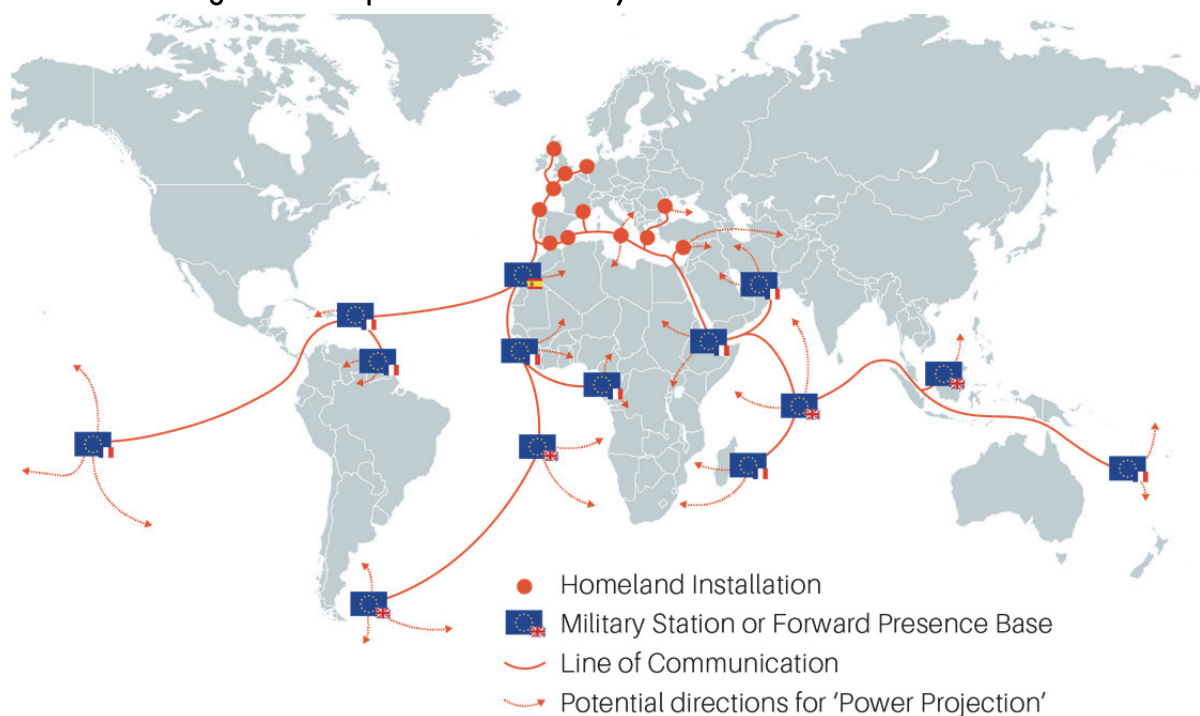
Source: adapted from Rogers and Simon (2009).

Unlike other EU states (except France), the UK also has troops deployed overseas in non-UK territory, including locations such as Brunei, Canada, various Gulf States and the US. Brexit thus entails further shrinkage of the EU's overseas military footprint, with potential (though as yet unclear) ramifications for its global strategic interest and capacity to project force – particularly at a time where the UK is already becoming more focused on returning 'east of Suez' and increasing its own presence in the Middle East, Indian Ocean and Asia-Pacific.[208]

4.4. The EU as an international defence and security actor post-Brexit

4.4.1. Brexit raises questions about the future strategic goals of the EU, which in turn influences the future direction of CSDP

In the same way that Brexit raises the question of what role the UK wishes to assume post-EU, it also provokes debate regarding the EU's collective ambition as a defence and security actor and geostrategic player. The launch of the EU Global Strategy in 2016 marks a significant moment for Europe's ambition as an international diplomatic and security actor. Experts noted however that it had inevitably been overshadowed by the UK's vote, necessitating potentially not only a renewed political focus to regain momentum but also updates in subsequent guidance (e.g. a potential EU defence White Paper) to take account of the new post-Brexit reality.

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[208] Rogers and Simon (2009)

There is much disagreement as to whether Brexit will change Europe's foreign and security policy priorities. Some suggest that Brexit will render the EU a 'small power' and one that is far less important, with diminished impact geographically, economically, politically and militarily. A Clingendael report states that 'to most of the outside world, the EU behaves like a Rottweiler, but looks like a Dachshund'. Post-Brexit, the report states that the EU should tone down its ambitions and behave accordingly, adjusting to a new geostrategic reality. Others contend that, by contrast, the EU is likely to become a more assertive and ambitious global security actor in the wake of Brexit, both to demonstrate its enduring relevance and to exploit the opportunities presented by the removal of the obstructionist UK.

Securing agreement on exactly where and how the EU should focus its efforts in the area of defence and security may however prove challenging. Difficulty in agreeing on strategic priorities and primary threats is also already apparent within the European members of the NATO Alliance. The uncertainty prompted by Brexit could further exacerbate tensions between the countries of the south which are primarily concerned with the migrant crisis and terrorism, and those in the east and north-east, which emphasise collective territorial defence. A further area of concern is the impact of a diminished UK voice on the EU's sanctions policy, with the UK having been one of the most vocal critics of Russian aggression in Ukraine and the Baltic region (see Section 4.4.7).

Some commentators note that the UK has traditionally held a more global outlook than the rest of the EU (with the possible exception of France), given its colonial and maritime history, the influence of the English language, and its globalised economy and power projection capabilities. One concern is that Brexit could thus see the EU become more inward-facing and parochial, particularly if the UK's departure exacerbates internal discord over difficult issues such as the migrant crisis. Another possibility is that the EU reorients its 'global' strategy to those regions where its members retain a larger footprint; this could entail perhaps a focus on North and West Africa (where France and Spain have particular expertise and interests), compared to the UK's greater and growing emphasis on the Middle East and Asia-Pacific. Other experts disagreed, however, suggesting that Brexit may catalyse a more ambitious and engaged EU more generally. Much will depend on the individual approaches adopted by and informal alliances formed between EU members. The influence of particular states – most notably France and Germany – will be pivotal to determining EU strategic ambitions and, in turn, the direction of CSDP. There remains considerable uncertainty regarding the posture these countries will assume, both individually and jointly.[209,210,211] These factors compound the uncertainty regarding the future of European strategy and CSDP after Britain's exit.

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[209] Sundberg and Zetterlund (2013)

[210] Biscop (2012)

[211] Kempin (2013)

4.4.2. Initiatives aimed at closer integration of European defence activities have been characterised by slow progress in recent years: Brexit may prove a turning point

The Brexit decision may represent a catalyst in relation to CSDP either accelerating or undermining initiatives to bring about closer defence and security integration. Efforts to promote a common EU approach to security and defence have evolved slowly over the last two decades. Milestone agreements include the Saint Malo Declaration of 1998 (which gave the EU decisionmaking authority to respond to crises when NATO was not involved) and the Berlin-Plus agreement of 2003 (that provided options for the EU to collaborate with NATO).[212] The current CSDP is derived from Article 42 of the Treaty of Lisbon.[213] However, member states have been unable to agree on the application of Article 42,[214] including on the provisions for a potential EU Army. This has hampered progress towards closer EU integration in the defence and security sphere.

4.4.3. Brexit may provide impetus for further integration in European defence…

Some believe that Brexit could reinvigorate CSDP, arguing that it will enable France and Germany to reboot the EU's role in defence, unshackled by the 'blocking' influence of the UK. Initial reactions suggest that EU governments are keen to demonstrate unity and relevance in relation to defence and security. Ursula von der Leyen and Jean-Yves Le Drian, the defence ministers of Germany and France, respectively, in September 2016 stated that 'it is high time to strengthen our solidarity and European capacities in defence, to more effectively protect our borders and EU citizens, and to contribute to peace and stability in our neighbourhood'.[215] They emphasised the need for the EU's remaining 27 member states to move towards 'a comprehensive, realistic and credible defence in the European Union'.[216] Although it is not entirely fair to blame the UK for the EU's lack of progress on military matters, advocates for closer defence integration – not solely in Berlin and Paris – have seized on the Brexit vote as an opportunity to relaunch that policy.[217] Without foot-dragging from London, member states may be motivated to commit more financial and political resource to strengthening European defence capabilities. This could precipitate a greater emphasis on European security and protection as envisaged in the European treaties including, potentially, steps to operationalise mutual assistance (Article 42.7) and solidarity (Article 222), as well as use of other, long-proposed vehicles intended to help deepen military integration.[218]

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[212] During Saint Malo, the UK and France agreed that the EU should '…have the capacity for autonomous action, backed up by credible military forces, the means to decide to use them, and a readiness to do so, in order to respond to international crises'. This represented a change in the UK's policy whereby NATO was the instrument for military deployments.

[213] European Commission (2009)

[214] Walsh (2014)

[215] Barker (2016)

[216] Ibid.

[217] Keohane (2016)

[218] Keohane and Mölling (2016)

One of the primary problems for Europe in harnessing the power of its armed forces is fragmentation: limited defence budgets spent on a plethora of small-scale capabilities result in disproportionately high spending on overhead and intra-European duplications, with, consequently, less spending on deployable capabilities and actual operations.[219] Multinational cooperation can potentially help overcome these constraints. The Protocol on Permanent Structured Cooperation in Defence (PESCO), annexed to the Lisbon Treaty, makes provision for this.[220] Under PESCO, a core group of 'opt-in' member states would agree on levels of investment in defence, alignment of defence apparatus, enhancement of forces' availability, flexibility, deployability and interoperability, and capability development.[221] This, some claim, would have obvious implications for budgetary efficiency, capabilities, armaments cooperation, R&D, the defence market, interoperability, joint participation in operations and overall political solidarity.[222] There has been no obstacle to the use of PESCO in the past – Britain could not have prevented it – but the desire to use it has been lacking. Some claim that this is, in part, due to difficulties in determining who should join and who should not, and agreeing realistic levels to be achieved.[223] A Franco-German paper produced in advance of the September 2016 Bratislava summit rejuvenated the debate on PESCO, which will be discussed, along with other treaty provisions for closer defence integration, at the European Council meeting in mid-December 2016.

Other EU leaders have suggested that PESCO may, even as a flexible 'opt-in', be too reliant on complex EU decisionmaking structures. Italian defence minister Roberta Pinotti and foreign minister Paolo Gentiloni have thus called for a more informal, flexible approach outside of EU treaty frameworks – proposing that 'like-minded countries would begin sharing military capabilities and resources on the basis of an ad hoc agreement'. This kernel of cooperation outside of EU structures but between EU member states would then be open for others to join and could become a formalised part of 'European' defence at a more developed stage – an approach dubbed 'Schengen for Defence', given its similarities to the process used to create the European passport-free zone.[224]

Proposals have gone beyond structured cooperation as far as large-scale integration. The German defence minister, Ursula von der Leyen, in September 2016 called for a European defence union, which she also described (with slightly different meaning) as a 'Schengen of defence'.[225] Some contend that the integration of small states' defence capabilities with those of their larger neighbours could represent a substantial leap forward. The European Council on Foreign Relations posits the following scenario:

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[219] Biscop and Coelmont (2010)

[220] As described in Articles 42 (6) and 46 of the European Commission Lisbon Treaty (2009)

[221] European Commission (2009)

[222] Biscop and Coelmont (2010)

[223] Economist (2016g)

[224] Gentiloni (2016)

[225] Reuters (2016b)

> 'If Germany was to take a decisive step into the direction of a European defence, it should propose to merge its defence in an integrated structure with Poland. Collective defence would become a joint operation under one command and a single political decision, not subject to a veto from one of the two parliaments. Constitutions would have to be adapted accordingly. Insofar as both countries would wish to maintain military capabilities to be deployed out of area on the basis of a national decision alone, they would have to embed such units into the merged territorial defence force and fund such missions from the national budget. This way, France could be participating in a Polish-German defence union while maintaining its national nuclear deterrence and sizeable expeditionary forces to be deployed outside of Europe.'[226]

Such a scheme could be opened up to neighbours, in this case the Benelux and Baltic countries, to construct an integrated defence structure. One professional territorial defence force would cover the territory of eight or more member states, under unified military command and joint political control with one single budget, procurement process and market for defence products. This group would constitute the territorial 'core' but could incorporate 'bolt-ons' by other EU or NATO member states with particular specialisms or assets to contribute in pursuit of efficiency gains. This sort of model, it is argued, 'would not weaken NATO but strengthen both the EU and NATO at a time in which the traditional alliance purpose has assumed a renewed meaning'.[227]

If the apparent expanded appetite for closer integration is sustained, there may be in turn renewed impetus to make use of the EU Battlegroups, 1,500-strong military units provided by member states. These were developed more than a decade ago to provide a rapid response to crises but have never been deployed, despite having had full operational capacity since 2007.[228] Existing benchmarks could be consolidated or expanded. For example, the level of ambition for the Helsinki Headline Goals could be raised, as some have argued. Were the Headline Goal to envisage the availability of 100,000 rather than 60,000 soldiers for deployment on European endeavours, this would provide for a minimal deterrent of two corps, deployable in two theatres simultaneously.[229] Similarly, the European member states could be encouraged to commit 2 per cent of GDP to defence spending, mirroring the undertakings given to NATO, or to refresh their approaches to closing known capability gaps.[230] Equally, an enhanced appetite for CSDP could lead to an expansion in the span of areas to be covered by the policy and an enhanced focus on collaboration in areas such as industrial base, cyber, counterterrorism and intelligence.[231]

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[226] Janning (2015)

[227] Ibid.

[228] Beesley (2016)

[229] Keohane and Mölling (2016)

[230] Ibid.

[231] Ibid.

Box 6. Possibilities for a European operational headquarters after Brexit

The pre-Bratislava Franco-German paper also proposed the establishment of a permanent EU operational HQ, a current deficiency to which the ineffectiveness of EU missions was recently attributed by Jean-Claude Juncker.[232] This idea has long been vetoed by the UK given concerns regarding cost and the potential for duplication with NATO. Brexit has thus been greeted by some EU defence advocates as an opportunity to establish a robust new operational HQ to improve the coordination and planning of CSDP missions, as well as reduce the EU's reliance on national or NATO structures.[233] However, plans agreed by EU foreign and defence ministers in November 2016 appear to have scaled back on these ambitions, much to the approval of the UK. The plans commit to an incremental approach, 'developing a concept' for a HQ with a limited mandate focused on 'nonexecutive military missions', such as training and capacity-building, as well as civilian operations such as policing.[234] However, it may be that these initial plans do evolve towards a higher level of ambition and resourcing for any EU HQ – especially if the election of Donald Trump in the US destabilises NATO structures, as many European leaders fear it will, in which case there may be a renewed case for increased EU planning and command autonomy.

4.4.4. …or may have limited tangible impact, with CSDP continuing on its present trajectory.

The sort of enhanced ambition described in the section above would however likely require much stronger geopolitical consensus among the EU member states, both about priority threats and capabilities, and about the wider role of the EU as a defence and security actor. Historically this has been difficult to achieve given the differing perspectives, capabilities and resource ceilings that exist between EU members. An alternative potential outcome, then, is that Brexit has limited tangible impact on CSDP, notwithstanding some possible short-term initiatives or new structures to demonstrate EU unity for largely political purposes in the wake of the UK's vote.

Some suggest that the withdrawal from the EU of a major defence power such as the UK would precipitate minor adjustments but that existing institutions and arrangements will continue unchanged.[235] Member states could continue to work towards the implementation of the principles and agreements underpinning CSDP and continue to use the frameworks and procedures that exist for capability development and industrial cooperation. Since the UK may continue to play a role in EU operations and other initiatives on an ad hoc or bespoke basis, the look and feel of European defence initiatives may not differ noticeably from the pre-Brexit situation. Since the character of CSDP as it is currently envisaged is intergovernmental in nature[236] and its execution primarily the premise of the member states,[237] there may be 'business as usual' albeit with the UK on the outside of, rather than within, the EU fence.

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[232] Juncker (2016)

[233] Economist (2016g)

[234] Rankin (2016c)

[235] Walsh (2014)

[236] Economides and Kleine (2016)

In the longer term, it is possible this potential 'business as usual' outcome will result, albeit slowly, in the fulfilment of CSDP as currently envisaged. However, since traditional approaches to CSDP appear to have lost momentum in recent years, it is perhaps more likely that continuation on this trajectory will produce a decline in CSDP capabilities and credibility since business as usual is unlikely to encourage EU governments to commit more resources or cooperate more intensively on capability-related projects.[238]

4.4.5. Alternatively Brexit may precipitate or accelerate the fragmentation and eventual collapse of the EU defence integration efforts

Some experts contend that the withdrawal of the UK – one of the Union's most militarily capable members – from the EU will deal a serious blow to aspirations to closer integration in defence. The loss of UK military capability undermines the Union's defence credentials, even if British involvement may be negotiated on a case-by-case basis through the creation of bespoke arrangements. Beyond the military impacts, the UK's exit may be interpreted as a sign of political disunity that weakens the credibility of CSDP and the EU as a serious actor in defence with knock-on effects for the EU's new Global Strategy on Foreign and Security Policy.[239] The uncertainty produced by Brexit may increase caution among member states, further slowing decisionmaking as states defer major decisions as they wait for a stable picture to emerge. Any economic downturn in Europe due to the uncertainty around Brexit would further compound the issue and might result in falling defence budgets across the EU and the abandoning of the 2 per cent pledge on defence spend (to the limited extent that it currently holds).

France and Germany, which are likely to be in the vanguard of European defence initiatives, would of course likely seek to combat political inertia or reductions in defence spending. However, the two have different approaches to strategy and readiness and differing attitudes regarding thresholds for intervention and scope of military activity.[240] In addition, both have occasionally wavered on issues of integration. France rejected the European Defence Community in 1954 as well as the European Constitutional Treaty in 2005. Germany, which supports a federal model for the EU, has itself backed off from previous integration initiatives including the planned merger between defence firms EADS and BAE in 2012, and obstructed the EU Energy Union. Brexit does not do away with other national reservations.

Since there is no indication that this lack of strategic alignment and occasional resistance to integration activities will be altered by Brexit, these factors will likely hinder efforts to drive forward closer EU defence integration under strong joint Franco-German leadership. This could, in turn erode other states' confidence in the continuing viability of the EU defence experiment and potentially reduce their involvement in CSDP missions and structures. Should the aspiration towards closer defence integration

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[237] Ibid.

[238] Keohane and Mölling (2016)

[239] Economides and Kleine (2016)

[240] France's frustration with CSDP is considered to be a major factor in its rapprochement with the UK in 2010.

be undermined in this way, these countries may pivot increasingly towards NATO, in which they would put their faith for territorial defence, recognising the EU as being a predominantly civilian actor.[241]

There are also questions regarding the appetite for closer defence integration in European capitals. Capitals opposed to closer integration which have been able to hide behind Britain's stance may now find themselves exposed, forced either to let their opposition be known or proceed towards closer defence union and find the resources needed to make this work. Some suggest that such silent opposition has been undermining CSDP for years and that the UK was only the visible tip of the iceberg. Clearly, of course, the uncertainty presently surrounding the future of NATO raises difficult dilemmas for European leaders as to whether to prioritise the Atlantic Alliance (at a time when US engagement is less assured than it has been in decades) as a means of reinforcing it, or else to hedge by supporting EU initiatives that may face national opposition and which may only hasten any weakening of NATO unity.

It is important then that any political step towards greater EU ambition for defence integration after Brexit not overlook the credibility gap that already exists between the EU's stated Headline Goals and its actual capabilities – a gap that may only worsen if the EU is to declare new heightened goals for political purposes after Brexit without delivering increased national contributions for financial or political reasons. As Besch argues, the UK's Brexit vote was 'in many ways a reflection of a broader, Europe-wide sense of disappointment with the technocratic and inward-looking nature of EU cooperation…[and new EU defence proposals] should demonstrate awareness of this criticism, lest it open itself up to be denounced as merely the EU's next integrationist project'.[242] For de France, similarly, EU defence finds itself at an important crossroads, having emerged as the unexpected focus of immediate European responses to the UK's vote: 'Brexit has raised political stakes to unprecedented levels, so that [the EU's] successes in security are likely to be scrutinised as much as its mishaps are magnified'.[243]

These uncertainties over the degree to which Brexit will help ameliorate or exacerbate the gap between Europe's ambitions and its capacity to provide sufficient financial and military means are captured in four illustrative examples in Figure 4.3 below. In many respects, increased EU ambition without the resources to match it represents the worst potential scenario for the future after Brexit – even more damaging than a Europe that is left visibly reduced by the loss of the UK – threatening as it would to embroil the EU in crises and conflicts where it could not deliver the capabilities required to achieve success.

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[241] van Ham (2016)

[242] Besch, in Andersson et al. (2016)

[243] de France, in Andersson et al. (2016)

Figure 4.3 Illustrative examples of potential outcomes for EU defence credibility after Brexit
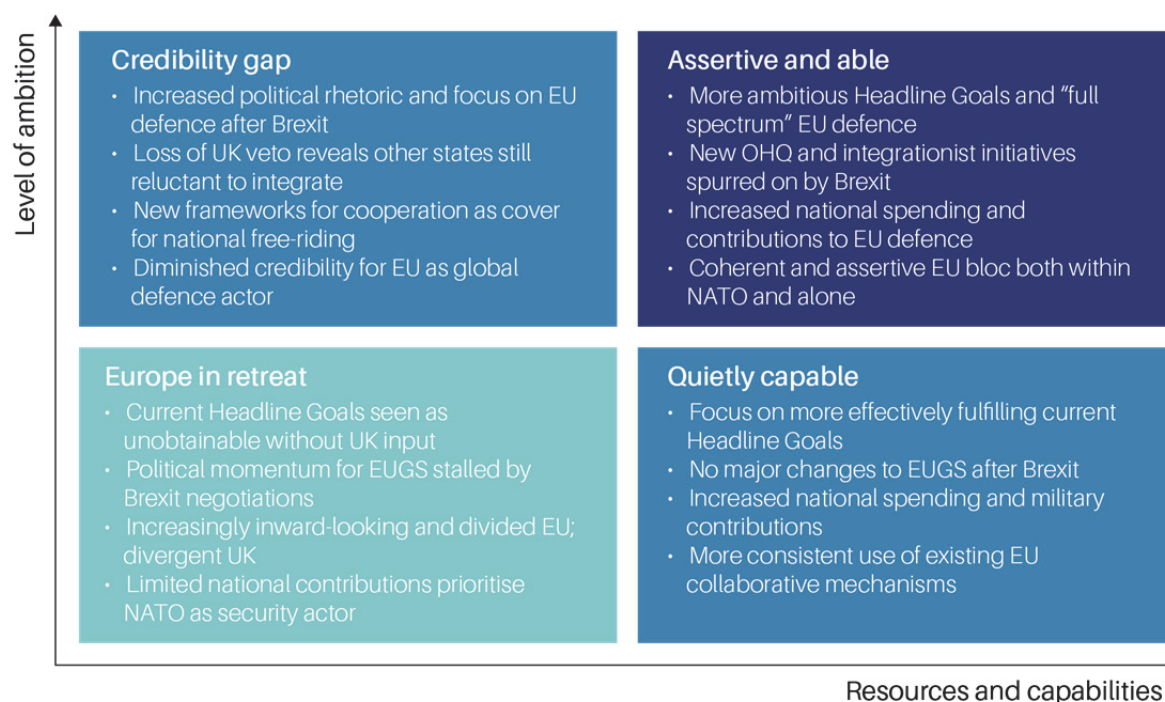
4.4.6. The future of the EU and NATO relationship will, in turn, evolve depending on the nature of CSDP post-Brexit

It is also unclear whether and how the relationship between the EU and NATO might change post-Brexit. This will depend largely on the evolution of CSDP and the extent to which the US – NATO's predominant military power – remains committed to the NATO Alliance after recent election results. These two multilateral institutions have in common 22 member states and share similar fundamental values and some of the same political and operational challenges. Currently cooperation between these two institutions is based on a series of both informal and formal agreements.[244] In 2003 the EU and NATO established a strategic partnership, and at the NATO Summit in Warsaw in 2016 a Joint Declaration on EU–NATO cooperation was signed, stating that a stronger EU means a stronger NATO. How EU–NATO relations develop will depend on the evolution of the broader European defence initiatives and the role Britain, Europe and the US seek to occupy after Brexit and following Donald Trump's inauguration as president.

In the event that efforts to create closer EU defence integration should falter or the status quo endure, the collaboration between the two organisations could lessen over time with existing cooperation arrangements being abandoned or rendered irrelevant in the light of the emerging strategic context. After all, as Bilčík notes, the 'UK's impending departure from the EU means that some 80 per cent of NATO's budgetary and military contributions will come from non-EU member states'.[245] This could result in

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[244] Walsh (2014)

[245] Bilčík, in Andersson et al. (2016)

added tensions between those non-EU nations (most notably the US and UK) seen to be underwriting the defence of the EU, with that institution a net 'security consumer' rather than producer.[246]

Should the EU however become a stronger, more credible actor in responding to complex crises – particularly those requiring joined-up responses involving multiple instruments – a clearer, more formalised division of labour may emerge, specifically delineating those tasks which fall to NATO as a defence-, rather than security-focused organisation, and articulating how NATO functions as one of the strands involved in a coordinated EU response to a security crisis.[247] Plausibly this more deliberate approach to burden sharing could be reflected in the creation of new demarcated capability targets, embedded within the planning processes of both organisations and with greater coordination between the two.[248] EU members may similarly be spurred to operate a more coherent diplomatic strategy within NATO, forming a more clearly defined EU bloc within the Alliance decisionmaking process.

A third possibility is that EU defence integration deepens and additional European defence structures (such as a standing operational HQ and PESCO) are adopted that result in EU and NATO operations overlapping to a greater extent than they do currently. Greater independence in Europe's ability to undertake defence operations could reduce the EU's reliance on NATO (notwithstanding the likely continuing shortage of strategic enablers, where Europe relies on the US and to a much lesser extent the UK) but would risk duplication between the two organisations and strain already-stretched defence budgets to fund these European defence initiatives. Avoiding duplication would require much closer coordination at all levels, strategic, operational and tactical. Some commentators have suggested that the EU should actively seek to 'NATO-ise' its extant EU Battlegroups and proposed operational HQ by applying the NATO Framework Nation Concept, boosting the Battlegroups to form a sort of brigade-level EU VJTF-equivalent and earmarking this for high-readiness responses to any threat in eastern Europe (formally under the EU's own Article 42 assistance clause, but overlapping with NATO's Article 5).[249]

Given these heightened concerns about duplication after Brexit, it is thus possible that the UK's departure may in the long run result in the design of new institutional frameworks for cooperation between the various multilateral organisations and ad hoc clusters with overlapping but differing memberships: the EU, NATO, NORDEFCO and the anti-ISIS coalition, for instance. The UK may prove a strong proponent and catalyst of such a reframing of ties and mechanisms for formal consultation between different groupings, given its potential interest in still contributing to EU decisionmaking as far as possible. As Besch argues, 'it is unlikely that the UK will be content with a subordinated "trading troops for influence" role and the British case could spur other third states to seek a bigger role themselves. Thus, in designing mechanisms of cooperation today, [any steps towards EU defence union] must account for

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[246] Barbé and Kienzle (2007)

[247] Sundberg and Zetterlund (2013)

[248] Biscop (2012)

[249] Keohane, in Andersson et al. (2016)

the future association of non-EU members'.[250] Potential instruments include enhanced involvement of non-EU members in the Foreign Affairs Council and EU CSDP planning processes, as well as a wider process for defining Europe's long-term security 'vision' involving not only non-EU governments but also industry, academia and civil society.[251]

4.4.7. It is plausible, and perhaps likely, that the international sanctions regime will be negatively impacted by Brexit

Sanctions are the principal coercive foreign policy tool available to the EU, outside of military force, and over the last two decades the EU has actively used these restrictive measures in a variety of different contexts including against Russia, Syria, North Korea and Iran. The UK has been one of the main supporters within the EU for tougher sanctions, especially on Russia. EU sanctions are determined on the basis of unanimity whereby member states hold the power of a formal veto. Since unanimity has often depended on strong lobbying from the UK,[252] Britain's departure from the EU could weaken the sanctions regime and strengthen the hand of those countries supporting the relaxation or lifting of sanctions for their national economic or political interests. Some suggest that, without the UK, it would thus be more difficult to employ sanctions in order to support a rules-based international order; this could affect the EU's ability to play a central role in international negotiations and maintaining global stability at a time of emerging rival powers.[253] While the UK would still be involved in the imposition of UN Security Council sanctions and could continue to collaborate with the EU, the process could become costlier and more complicated.[254] London would lose its influence over EU sanctions policy as well as its toolkit for building sanctions-related momentum and consensus; in turn, it may be less willing to impose sanctions that would hurt its own economic interests if competing European banks and businesses were not subject to the same restrictions, especially at a time of uncertainty about the UK's post-Brexit trading relations and economic performance. Wider concerns that the US might also pursue a more lenient sanctions policy towards Russia after the election of Donald Trump could thus combine with Brexit to signal a significant change in direction for Western use of these economic coercive measures.

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[250] Besch, in Andersson et al. (2016)

[251] Keohane, in Andersson et al. (2016)

[252] Moret (2016)

[253] Freedman (2016)

[254] Moret (2016)

5. Scotland and the UK nuclear deterrent

This section of the report addresses important issues emerging from Brexit in relation to Scotland:

- First, the possibility of a second referendum on Scottish independence, and the defence and security implications any such break-up of the UK would entail.
- Second, the specific challenges posed to the continuation of the UK nuclear deterrent, which is based exclusively in Scotland despite strong local political opposition.

5.1. Scottish independence

The UK's vote to leave the EU has revealed deep divisions within the constitutional set-up of the UK itself.[255] Despite majorities for Leave in England and Wales, the Scottish electorate opted to remain in the EU by a significant margin with some 62 per cent of the vote. This has caused some to suggest that Scotland could block any move to enact Brexit, including Scotland's First Minister Nicola Surgeon, who has promised to investigate the possibility of a legal challenge in the courts, or else of using the Scottish Parliament to defy any attempt to remove the European Communities Act 1972 from the statute books.[256] The central UK Government has however argued that the referendum did not stipulate any requirement for all parts of the UK to support Brexit, and reiterated that responsibility for foreign policy lies with Westminster and the royal prerogative.[257]

5.1.1. The UK's vote to leave the EU has sparked calls for a second independence referendum in Scotland, though Brexit poses new challenges for secession

London thus looks set to push ahead with Brexit despite Scotland's opposition. That the Leave vote could precipitate the break-up of the UK, as many have speculated, reflects the remarkable recent political ascendancy of the Scottish National Party (SNP), of which Ms Sturgeon is leader. Describing itself as 'a left of centre, social democratic and progressive party', the SNP was formed to campaign for an independent, sovereign Scotland – one which would remain a committed member of the EU.[258]

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[255] BBC News (2016i)

[256] Peck (2016)

[257] Herald Scotland (2016)

[258] Scottish National Party (2016)

Despite losing the 2014 referendum on Scottish independence (55 to 45 per cent), the SNP has since leveraged the electoral machinery built up in the campaign to further consolidate its political dominance north of the border. The party is now in its third successive term as the devolved government in Edinburgh and largest grouping in the Scottish Parliament at Holyrood (though it narrowly lost its majority in the 2016 Scottish elections). It also increased its representation in the UK Parliament at Westminster from six MPs in 2010 to 56 (out of a total of 59 Scottish MPs) in 2015, earned with 50 per cent of the popular vote due to the UK's 'first-past-the-post' system. This leaves the SNP as the predominant political force in Edinburgh and the third-largest party in the UK behind the Conservatives and Labour.[259]

After the SNP lost the Scottish referendum vote in 2014, it pledged in its manifesto that there would be another ballot if there was a 'significant and material' change in circumstances and a clear desire among Scottish voters to revisit the question of independence. In the wake of the Brexit vote, the Scottish Government has noted that a central argument of the unionist campaign in 2014 was that remaining in the UK was the best way to secure Scotland's prosperity and membership within the EU. Ms Sturgeon has thus suggested that a second Scottish independence referendum is 'highly likely', particularly if the SNP is not able to negotiate a special arrangement that would keep Scotland within the EU despite being part of the UK (see Section 6.5. on the possible precedent of the SBAs).[260] Indeed, the SNP began consulting on a fresh Independence Referendum Bill in October 2016,[261] though this has been seen by many political commentators primarily as a gambit to boost Scotland's bargaining power within the UK as it enters Brexit talks, rather than any concerted move towards independence as of yet.[262]

Certainly, such a possibility was of deep concern to a number of interviewees for this study, particularly in the US defence community, and has been the subject of extensive speculation in the UK and international media. However, it is important to note that the Brexit vote also raises new challenges and obstacles to a second referendum on Scottish independence, at least in the short term. Jim Sillars, former deputy leader of the SNP, has argued that Brexit actually complicates the SNP's task considerably, with Scottish voters and businesses unlikely to want to create further uncertainty by pursuing a future outside the UK at a time when the UK's own post-Brexit relationship with Europe remains a work in progress. Indeed, that an independent Scotland and rump UK would both be EU members (contrary to unionist claims that other EU members, most notably Spain, would likely veto Scottish membership to deter other secessionist movements) was a central plank of the SNP's argument in 2014. With the UK outside the EU, issues such as trade, currency and border arrangements with an independent Scotland would become more complex to negotiate. Particular difficulties could arise were the UK to adopt a 'hard Brexit' and leave the EEA and customs union. This could necessitate a physical border, as well as tariffs and other regulatory

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[259] As of October 2016, the SNP has 54 MPs in Westminster, having withdrawn the whip from two members, one over allegations of campaign funding irregularities and another for a separate investigation into possible mortgage fraud.

[260] Geoghegan (2016)

[261] O'Leary (2016)

[262] Economist (2016)

barriers to trade with the rest of the UK. There is also concern that without London to lobby for it, Scotland could lose the UK's opt-out from joining the euro, further hampering cross-border trade. This prospect is particularly alarming given Scotland's exports to the rest of the UK amounted to £48.5bn in 2014 (excluding oil and gas), more than four times the £11.6bn it sent to the wider EU.[263]

Experts at the workshop convened for this RAND study thus considered Scottish independence unlikely, despite renewed SNP rhetoric around the issue following the Brexit result. Nonetheless, if independence did occur it would not only signal the end of a political union that has endured three centuries. It would also present challenges in the defence and security arena, with potentially significant implications for the UK, Europe and NATO. The following sections examine the possible impact of independence on the UK's conventional military assets and domestic security arrangements, before a more detailed discussion of the possible ramifications of Brexit and Scottish independence for the UK nuclear deterrent.

Outstanding questions:

- How can the UK and EU best accommodate the sometimes-divergent interests of regions within the UK (not least Scotland) when negotiating a new post-Brexit settlement?
- What new models must the SNP consider for an independent Scotland in light of new policy problems created as a result of Brexit, e.g. on currency or border arrangements?
- Are UK and non-UK policymakers adequately prepared for the eventuality of Scottish independence, given the prospect of Brexit was similarly discounted by many commentators?

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[263] Dickie and Parker (2016)

Box 7. Proposed defence and security capabilities of an independent Scotland

The Scottish Government's proposals for independent Scottish armed forces include:

- **Spending:** Pledge to spend £2.5bn annually on defence and security.
- **Personnel:** Total of 15,000 regular personnel, with 5,000 reserves.
- **Command:** A Scottish version of the UK's Permanent Joint Headquarters to be established at Faslane.
- **Land forces:** Initially, a deployable brigade with associated support units and Special Forces. Over time, to increase the size of the three infantry battalions with more recruitment and new equipment, possibly involving the restoration of Scotland's lost regiments, as per previous SNP commitments.
- **Maritime forces:** At the point of independence, a Scottish Navy of two Type 23 frigates, a command platform, four mine countermeasures vessels, and four to six patrol boats drawn from the existing fleet of the Royal Navy. Over time, to increase to four frigates.
- **Air forces:** A minimum of 12 Eurofighter Typhoon fighters, six Hercules C-130J transport aircraft and a multirole helicopter squadron. Over time, to increase to 16 Typhoons to allow Scotland to contribute to coalition operations overseas in addition to protecting Scottish airspace.
- **Nuclear:** Scotland to be free of nuclear weapons, potentially with this provision written into the new country's founding constitution (see further discussion of Trident below) and agreed with NATO.

The White Paper suggests that Scotland would inherit membership of both the EU and NATO, as well as the UN and Commonwealth, though this argument was hotly contested even before Brexit. The role of the Scottish armed forces would thus be focused on 'participation in rules-based international co-operation to secure shared interests…[the] protection of Scotland, our people and our resources…[and the] promotion of sustainable growth' and of human rights.[264] The Scottish Government has proposed a 'triple lock' over the future use of force to prevent a repeat of Scottish involvement in interventions such as the 2003 US-led invasion of Iraq, requiring approval from the UN, Scottish Parliament and executive.

For counterterrorism, cyber, surveillance and resilience matters, an independent Scotland would also establish its own security and intelligence agency, which would work closely with Police Scotland. The agency would seek to work closely with the UK intelligence community to ensure a smooth transition and provide assurance to international partners that Scotland could receive and handle intelligence safely and securely. An independent Scotland would also 'explore the benefits of developing closer relationships with the primary EU agencies already engaged in cyber security' and the NATO Cyber Centre of Excellence.[265]

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[264] Scottish Government (2013, 208–209)

[265] Scottish Government (2013, 265)

5.1.2. Scottish independence would pose practical, financial and political challenges to Scottish defence, given its integration and reliance on UK-wide systems

In contrast to the more recent Brexit campaign, anticipation of the 2014 Scottish referendum did provoke a number of peer-reviewed studies of what Scottish independence would mean for security and defence – though this literature is mostly confined to a small cluster of think-tank and academic analysts. For its part, the SNP also set out its own proposals for what an independent Scotland's armed forces and security arrangements would look like in its 2013 White Paper, *Scotland's Future*.[266] An overview of the SNP's main proposals for the division of UK military and security assets, and key policy directives for independent Scottish institutions, is outlined in Box 7. (It is important to bear in mind that these plans were drawn up in the specific context of the 2014 Scottish referendum. It may be the case that the Scottish Government would choose to alter its proposals ahead of any second independence vote, given both the new challenges posed by Brexit as well as wider changes in the global security environment. The SNP has not yet indicated any major change in its level of ambition for defence and security, however.)

The proposed goals, size, structure and budget of an independent Scottish armed forces and intelligence agency are the subject of considerable debate. Firstly, critics of the SNP proposals argue that they suggest a reduced level of ambition, even beyond the less interventionist approach expected of a small nation or a ruling party which has been a vocal critic of wars in Iraq and Libya – indeed the SNP had a long-standing opposition of NATO until it controversially revised its policy in 2012 in favour of membership.[267] As noted by Dorman, the military's role does not include a commitment to protect Scottish citizens overseas. Indeed, the ability to project power globally to this end would be significantly curtailed outside the UK.[268]

Secondly, many defence experts and the UK Government have expressed concern over the limited budget and capabilities with which an independent Scotland could pursue its stated goals. A total of £2.5bn for both defence and security would represent only 1.3 per cent of current Scottish GDP (and less than the £3bn spent by Scottish taxpayers on defence alone). It would also be equivalent to only 60 per cent of Belgium's 2011 defence budget, or 80 per cent that of Denmark.[269] This suggests considerable strain on budgets, especially given the one-off costs and additional inefficiency incurred – at least for the short term – due to independence. Scotland might also be required to take on a share of defence liabilities incurred through Private Finance Initiative (PFI) and Public–Private Partnership (PPP) contracts. Though the force structure is supposedly modelled closely on equivalent small Nordic nations, in particular Denmark and Norway, it includes only limited numbers of key capabilities. An air force with only 12 Typhoon fighters would struggle to maintain a Quick Reaction Alert capability to secure Scottish airspace while also committing to other missions, especially overseas; by contrast, the RAF maintains at least twice as many fighters to offer the same capability, and that excludes the large pool of other aircraft in England for

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[266] Scottish Government (2013)

[267] BBC News (2014)

[268] Dorman (2014)

[269] Chalmers (2014)

training, replacement and other missions.[270] (For comparison, Denmark operates 48 F-16s, soon to be replaced by 28 F-35A Joint Strike Fighters.)

Other capabilities are likely to be missing altogether. Some pertain to missing kit. Former DSACEUR General Sir Richard Shirreff notes that Scotland, under the SNP proposals, would lack any naval aviation, air-to-air refuelling capability or dedicated search and rescue aircraft.[271] Other challenges stem from the geography of the UK's integrated military footprint. Radar stations, airfields, naval bases, training ranges, command centres and educational institutions are not evenly distributed across the UK (see Figure 5.1). In its own analysis, the UK Government cites the example of the RAF's management of all the UK's airspace from the Control and Reporting Centre at RAF Boulmer in Northumberland, which integrates radar and intelligence data from across the UK and its allies, coordinating quick-reaction Typhoons from RAF Lossiemouth in Scotland and RAF Coningsby in England to meet potential threats. Dismantling this sort of integrated system would weaken the operational effectiveness of both sides.[272] Furthermore, an independent Scotland would face considerable practical and financial challenges if forced to develop these anew for itself. This is particularly true given the lack of economies of scale – Scotland could not hope to efficiently maintain an independent facility to train new pilots for an air force with only 12 fighters. As such, bilateral arrangements between the UK and Scotland to share key facilities or kit appear likely.

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[270] Dorman (2014, 684)

[271] Shirreff (2014)

[272] UK Ministry of Defence (2013)

Figure 5.1 Map of Scotland's integration into UK defence

Support to units and assets in Scotland provided from other parts of the UK

- Training establishments produce trained soldiers and officers (Phase 1, 2 and 3)
- Resources, stores, consumables
- Ammunition
- Procurement services
- HQ organisations (e.g. Joint Forces Command/Permanent Joint Headquarters Northwood)
- Main training areas for manoevre forces (e.g. Salisbury Plain)
- Aviation support (e.g. Air Warfare Centre Waddington)
- Tri-Service recruiting HQ
- Command and Staff training (e.g. Royal College of Defence Studies London, Defence Academy Shrivenham)
- Combined arms simulation trainers (e.g. Warminster, Catterick)
- Command and policy at MOD and 2-star HQs (London Head Office)
- Intelligence support (e.g. Defence Intelligence & Security Centre Chicksands, London)
- Medical provision (e.g. Catterick, Aldershot)
- Role 4 medical facility at Royal Centre for Defence Medicine, Queen Elizabeth Hospital, Birmingham (the sole R4 capability in the UK supporting UK defence)
- Logistics (e.g. Royal Logistic Corps HQ at Deepcut, Abingdon)

UK defence units and assets in Scotland

- Trained units to depoy on operations
- Individuals to mobilise in support of operations
- Troops for ceremonial tasks in Scotland and wider UK
- Nuclear deterrent fleet
- Cape Wreath - the only naval gunfire and in-service live firing range in the UK
- Benbecula live fire range for Multiple Launch Rocket System
- Other ranges, including West Freugh, Tain, Gairlochead and Barry Budden
- Integral part in UK air defence plan
- 16 Air Assault Brigade, Royal Military Academy Sandhurst and NATO exercise area in Galloway Forest
- Army Personnel Centre

Source: adapted from UK Government (2013).[273]

Other challenges pertain to recruitment, procurement and the future of Scotland's defence industry. An independent Scottish armed forces may experience difficulties in recruiting personnel to new institutions (especially as Scottish infantry regiments already struggle to recruit from within Scotland). Some analysts have suggested that the heavy infantry focus of the proposed Scottish land contingent and the possible need to revisit military remuneration packages as a means of incentivising recruitment would also imply that personnel costs would take up a larger share of defence spending than is currently the case for the UK. This would only further exacerbate the difficulties of the small Scottish military in finding adequate funds to procure new cutting-edge equipment or to support Scotland's defence industry (see below for discussion of the future of naval shipbuilding on the Clyde).[274]

It is also unclear that the UK would readily hand over important and already limited stocks of expensive equipment (e.g. frigates, minesweepers, fighter aircraft), especially if wider negotiations soured or if it did not assess Scotland to have the skills, facilities and processes in place to maintain and operate them. The threat of diversion could also mean that it would have to strip out important sensitive systems before

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[273] UK Ministry of Defence (2013)

[274] Dorman (2014, 683)

handing equipment over, reducing their value and effectiveness.[275] Until Scotland could build up sufficient logistical, maintenance and training infrastructure to underpin responsible ownership of defence equipment, some sort of phase-out of UK responsibility for different functional areas might be required – with the British military continuing to fulfil roles such as securing Scottish airspace or search and rescue for an interim period, presumably with financial contributions from Edinburgh. The Scottish Government has suggested a transition period of ten years.[276]

This would still pose symbolic and political difficulties, however, undermining Scottish claims to have achieved true independence. On the other hand, any Anglo-Scottish cooperation would in some respects merely accentuate existing trends towards the 'broader normalisation of defence cooperation (and sharing) between states across the transatlantic area', building on NATO's 'smart defence' concept, the EDA's 'pooling and sharing', or the collaborative NORDEFCO approach of those Nordic countries which Edinburgh so often looks to emulate.[277]

An independent Scotland would also have to take time to develop a track record as a reliable partner in security and intelligence matters, and would lose membership of the Five Eyes Treaty, as well as the sophisticated cyber and surveillance capabilities of GCHQ. Though Police Scotland already has strong cross-border cooperative ties with services in the wider UK, and an independent Scottish intelligence agency would inevitably work closely with (and indeed be staffed by veterans of) UK agencies, 'Scotland might not initially enjoy the same confidences as the UK does as part of the "Five Eyes" intelligence network, and the onus is firmly on Scotland to demonstrate…it can handle security information safely before it can expect to get special access to privileged information'.[278] However, common interests in tackling transnational threats such as terrorism and organised crime, as well as strong professional ties between Scottish and UK personnel should ensure a strong desire to smooth the transition to independence as far as possible.[279] Fleming thus argues that 'rhetoric about Scotland being a "soft target" for terrorism smacks of politicking rather than hard evidence'.[280]

5.1.3. Scottish independence would also present new difficulties for the rest of the UK, with a concern that – as with Brexit – politics could frustrate attempts to pursue security cooperation alongside tricky exit negotiations

For the UK's part, the loss of Scotland would imply a disruption and diminution of its defence and security capabilities, at least in the interim, as well as a period of uncertainty about the country's future role and influence on the international stage.

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[275] Chalmers (2014, 34)

[276] Scottish Government, (2013, 245)

[277] Fleming (2014, 764)

[278] Fleming (2014, 770)

[279] Scottish Government (2013)

[280] Fleming (2014, 770)

Losing elements of the UK's current integrated assets and footprint would mean further cuts to military effectiveness, particularly in areas where total equipment numbers are already close to the minimum required to achieve the UK's strategic goals. In some areas, the UK could suggest handing over systems that it is seeking to replace anyway – transferring older C-130Js to Scotland, for instance, as the RAF's fleet of new A400M transports come online. Elsewhere, however, the UK would either be highly reluctant to trade away critical pieces of kit, or else forced to expand or accelerate procurement plans to compensate for lost assets. Along with the other one-off costs of ensuring a smooth transition to the new Scottish forces, this could imply 'substantial extra costs to the UK, as it sought to maintain credible and coherent forces'. The financial burden would be exacerbated by the loss of the £3bn that Scottish taxpayers currently make to the UK's defence.[281] Of greatest concern, of course, would be the future cost and basing of the UK nuclear deterrent currently based in Faslane (see Section 5.2 for detailed discussion).

However, it is important to note that even were the UK to lose a share of its defence equipment, many military and security personnel may be less eager to transfer to new Scottish services. In terms of personnel, the proposed Scottish maritime and air forces would be equivalent to 10.8 and 10.3 per cent of the Royal Navy and RAF respectively. For the land contingent, the figure is 5.3 per cent when compared to the British Army and Royal Marines. However, past RAND Europe studies of the motivations for recruits and service personnel in the UK military suggest that many are attracted by its professionalism, warfighting reputation and opportunities for adventure and foreign travel, which may not be as readily available in a less ambitious Scottish force.[282] The Scottish Government has indicated that it would, in principle, be open to the UK military continuing to recruit from Scottish communities, though many would presumably have to be willing to relocate to bases and careers outside of Scotland.

Also uncertain would be the impact on the UK defence industry. The Royal Navy is reliant in the short term at least on the naval shipbuilding industrial base on the Clyde in Scotland, with the exception of BAE's submarines business in the north of England. Trade union leaders and UK defence ministers have both suggested that this arrangement would not continue after Scottish independence, raising the possibility that naval shipbuilding would be forced to return to Portsmouth or other English sites.[283] However, the UK Parliament has reported that replicating the Clyde facilities elsewhere would pose significant skills-based challenges and likely cost far more than the £3.5bn recently spent upgrading the Clyde site.[284]

These and other challenges provoked by Scottish independence would require careful planning, additional expense and complex negotiations. They are far from insurmountable, however. In the long term, the loss of Scotland's GDP and its population of 5.3m would be offset by England's much quicker demographic growth, which means Scotland already represents a decreasing share of the UK. The UK Government might also benefit from the end of the Barnett formula, under which it spends a disproportionate share of

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[281] Chalmers (2014, 31)

[282] Pung et al. (2007)

[283] Stacey (2014)

[284] UK Parliament (2013)

revenues on Scottish services as compared to those elsewhere. Uncertainties of course remain about the future of North Sea oil; its value in negotiations would depend on oil prices, remaining reserves and estimated decommissioning costs. Many of the defence and security issues could similarly (as with Brexit) be resolved through compromise. This would seek to promote close Anglo-Scottish cooperation on defence and security matters – though over time the 'divergence of national practice and procedure, driven as much by bureaucratic separation as by cultural difference, [could] incrementally increase the costs of cooperation, making it more difficult to maintain initial levels of interoperability…[exacerbated by the] asymmetry in strategic objectives between the two states'.[285]

As with the Brexit negotiations, however, with any Scottish independence, 'the practicalities of competing interests could well lead to a breakdown in goodwill well before all the issues pertaining to defence are resolved'.[286] Furthermore, independence would likely provoke a period of further uncertainty and political upheaval within the UK (adding to that brought on by Brexit). Negotiations could thus be very volatile and vulnerable to producing sub-optimal outcomes for both sides, and defence is unlikely to be the top priority. As Chalmers notes, the 'vote would leave the rest of the UK in a state of humiliation and existential crisis, having to ask difficult questions about its own identity (including its name and flag) even as it was expected to negotiate the separation settlement…[UK voters are] likely to have little sympathy for any policies that are seen as being too accommodating to their Scottish cousins'.[287] If independence were to occur in parallel with Brexit or post-Brexit negotiations with Europe, this would create further unpredictable interdependencies for both sides to manage. If Scotland were to leave the UK once London's relationship with Brussels had been clarified, however, the experience of Brexit could at least provide a template or lessons learned for how to extricate a country from a larger union.

Outstanding questions:

- To what extent must SNP proposals for securing an independent Scotland change to reflect both an evolving threat environment since 2014 and the unexpected challenges posed by Brexit?
- How might extant models for 'smart defence' or 'pooling and sharing' provide potential blueprints for UK-Scottish defence cooperation in the event of independence? What future lessons can be drawn from the experience of Brexit negotiations?

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[285] Chalmers (2014)

[286] Dorman (2014)

[287] Chalmers (2014)

5.2. Future of the UK nuclear deterrent

The future of the UK's independent nuclear deterrent has been described as the 'elephant in the room' following Britain's decision to leave the EU.[288] This may at first seem counterintuitive. As recognised by both literature and interviewees, 'membership of the EU has no formal bearing on nuclear defence'; it is perhaps the last issue over which a national government would ever surrender sovereign control. However, the UK's Brexit vote could have a range of important indirect and unintended consequences, given the sensitivity of Britain's nuclear programme to any changes in economic or political circumstances.[289]

Interviews suggest this is an area of particular concern to US policymakers, though many UK stakeholders – and indeed the British government – remain confident that the Trident nuclear programme remains financially and politically affordable.

Key concerns about Brexit's impact include:

- Potential for Brexit to trigger a renewed push for independence in Scotland, where the UK's nuclear force is based.
- Economic uncertainty with possibility of fiscal pressure on UK defence budgets.
- Finite institutional and human resources in Whitehall with which to manage the Successor programme to renew Britain's deterrent alongside Brexit and other major projects.
- Impact on international cooperation on nuclear issues, specifically with the US and France.

5.2.1. The UK nuclear deterrent is based on a policy of continuous at-sea deterrent, with the Royal Navy's nuclear force located entirely in Scotland

Initially an important contributor to the US-led Manhattan Project, the UK became the third country to develop its own independent nuclear arsenal in 1952. Today, the UK is one of five 'nuclear weapon states' recognised under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), along with the other four members of the UN Security Council. Unlike the US, which maintains a 'nuclear triad' of land, air and sea-based weapons, the UK is solely reliant on submarine-launched systems. With the British Isles too small and densely populated to hide missile silos easily on land, and the RAF having given up its air-based systems, the UK now maintains a policy of continuous at-sea deterrent (CASD). This involves a fleet of four ballistic missile submarines, one of which is always armed and hidden at sea while the other three undergo various stages of training and maintenance.

Since 1998, when the last RAF free-fall nuclear bombs were scrapped, this policy has meant that the UK nuclear force has been based entirely in Scotland. This strategic development came with unfortunate political timing, given the process of constitutional change initiated in the 1990s to devolve power from Westminster to a new Scottish Parliament, which has criticised UK nuclear policy.[290] The force consists of four *Vanguard*-class Royal Navy nuclear submarines equipped with Trident II D-5 ballistic missiles,

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[288] Beckhusen (2016)

[289] Webber (2016)

[290] Chalmers and Walker (2002)

which operate from HM Naval Base Clyde at Faslane. The base is also home to the Royal Navy's *Astute*-class nuclear attack submarines – with three already built and a further four planned to replace the older *Trafalgar*-class vessels based at Plymouth in southern England.[291] In total, around 3,000 service personnel and 4,000 civilian workers are based at the site. In addition, a few miles from the Faslane base is the Royal Naval Armaments Depot at Coulport, a separate Scottish facility responsible for the storage, processing, maintenance and issue of the Trident warheads and other submarine-deployed weapons.[292]

Nuclear weapons have been a long-standing source of political controversy in Scotland since the 1960s, when US Navy submarines were stationed at a site near to Faslane at Holy Loch as part of a US–UK deal to procure the Skybolt air-launched nuclear missile. Following the failure of the Skybolt programme and the development of the UK's own at-sea deterrent, the decision to base it at Faslane and Coulport has generated significant opposition in Scotland – stemming from both ethical and cost concerns, as well as the uncomfortable proximity of these potential military targets to Glasgow, one of the UK's largest and most densely populated urban centres.

The future of nuclear basing in Scotland consequently formed a key battleground in the 2014 referendum on Scottish independence. The UK government pledged that Faslane would become home to all Royal Navy submarines – at the expense of Plymouth – if Scotland voted to remain in the UK, with the number of personnel at the base increasing to 8,200 by 2022.[293] The SNP, meanwhile, has campaigned to eradicate nuclear weapons from Scotland since the 1960s and in its 2013 White Paper promised to negotiate their 'speediest safe removal' in the event of independence – aiming to remove Trident 'within the first term of an independent Scottish parliament'.[294] Holding an overwhelming majority (54 of 59) of Scottish seats in Westminster, the SNP provided the largest voting bloc against the renewal of Trident when the UK Parliament elected to move forward with a successor in July 2016.[295]

5.2.2. Scottish independence or political unrest after Brexit could threaten the future basing of the UK nuclear force, with Scottish Nationalists pledging to scrap Trident

As noted in Section 5.1, it is not yet clear how Brexit will affect the likelihood or the timing of any future Scottish independence. However, in the eventuality that Edinburgh did break from the rest of the UK, this raises obvious concerns about the future basing and thus costs (both political and economic) of the UK's nuclear deterrent.

A range of different potential outcomes have been predicted. The first and perhaps most plausible option would be to relocate Trident basing within the rest of the UK. This would ensure operational control and the continuing independence of the UK's nuclear deterrent. However, any base must fulfil a number of practical and regulatory requirements; for instance, it must: be easily defensible; have secure deep-water

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[291] Telegraph (2015)

[292] Nicolson (2015)

[293] Ibid.

[294] Scottish Government (2013)

[295] Press Association (2016a)

access to the sea; be located in close proximity to the armaments depot where the nuclear weapons would be stored (to minimise time spent sailing between the two facilities); and at the same time ensure this depot is at a safe distance from major population centres, potential explosive hazards and earthquakes. Though public debate has often focused on the challenge of finding an alternative to the naval base at Faslane, in fact there are various sites where submarine docking and repair would be possible without major disruption – indeed, even the limited port facilities of tiny Gibraltar have served as a repair site for both British and US Navy nuclear submarines in recent years.[296] Considerably more difficult is replicating the nuclear weapons storage facilities at Coulport, or, more to the point, finding a location able to satisfy the requirements for both a new Coulport and a new Faslane.[297]

A number of sites have been suggested (see Figure 5.2). These draw on the original shortlist considered in 1963 when choosing Faslane and Coulport, as well as the UK submarine enterprise's footprint today:[298]

- **Milford Haven, Wales:** This Pembrokeshire-based site offers an attractive natural deep-water port with good access to the open sea. Wales's First Minister Carwyn Jones has also previously argued that submarines would be 'more than welcome' in the area, boosting local employment by some 6,000 jobs.[299] However, the port is also home to two major liquefied natural gas facilities, handling 30 per cent of the UK gas supply, along with oil refineries and a power station. The dangers of an explosion or tanker collision – potentially catastrophic, even if highly unlikely – would pose serious challenges to any proposed nuclear basing.

- **Plymouth, England:** The Devonport Dockyard in Plymouth is the largest naval base in Western Europe, with 15 dry docks and some 650 acres of land. It is already home to the *Trafalgar*-class nuclear attack submarines (though only to 2017) and site of the Royal Navy's main nuclear repair and refuelling facility. However, the dockyard is also in a densely populated area, with Plymouth situated within 3.5 km of the base and home to 250,000 residents. Any nuclear armaments depot would thus have to be located elsewhere to meet safety regulations.

- **Falmouth, England:** Other options considered when choosing Faslane included Falmouth on the southern English coast. It was initially suggested as a possible site for a weapons depot to complement a submarine base at Devonport, but this idea was dismissed due to the 70 km distance between the two. Situated in a vibrant tourist area, it would also require the UK Government to acquire protected National Trust land, which could prove difficult legally and politically.

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[296] UK Ministry of Defence (n.d., 7)

[297] If this were to prove impossible in the event of needing to move the UK deterrent from its current site, the UK government could choose to alter its current operational model and situate its Faslane and Coulport equivalents at a greater distance from each other (though both would still require ease of access to the open sea). This would however increase the time spent by submarines shuttling between the two, increasing maintenance periods and placing added strain on operational timetables, as well as posing new security challenges to protecting two separate sites and the personnel and equipment regularly being moved overland at long distances between them.

[298] Barford (2014)

[299] Masters (2015)

- **Barrow-in-Furness, England:** Though not shortlisted in 1963, Barrow-in-Furness in Cumbria is now home to the BAE Systems shipyard responsible for construction of the *Vanguard-* and *Astute*-class nuclear submarines. The site offers a number of advantages, including the existence of important support facilities such as a ship-lift, similar to those found at Faslane. However, previous RAND research has shown that there are only limited windows each month where the tide is high enough for submarines to safely reach the open sea – indeed, *HMS Repulse* ran aground when first launched at Barrow in 1967.[300] Extensive dredging could therefore be required. Furthermore, the town of 69,000 residents is nearby and it is unclear where the nuclear armaments depot would be located.

Despite these options, both interviewees and literature noted that 'a host of legal, financial and political difficulties may preclude any such relocation'.[301] There will likely be significant local political opposition from residents and high one-off costs for construction of new facilities, and potentially difficulties in acquiring the necessary land given changes in planning laws since the 1960s. One interviewee suggested that the UK Government might have to make an exception on national security grounds and force through a compulsory purchase (potentially of protected National Trust land) on this one occasion. Despite the high financial and other costs, this option may be the most advantageous in the long term as it would retain full UK control over the basing of the deterrent and demonstrate the UK's continuing desire to remain a major international player even after the twin upheavals of Brexit and Scottish independence.

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[300] Raman et al. (2005)

[301] MacDonald (2014)

Figure 5.2 Potential basing options for UK nuclear force
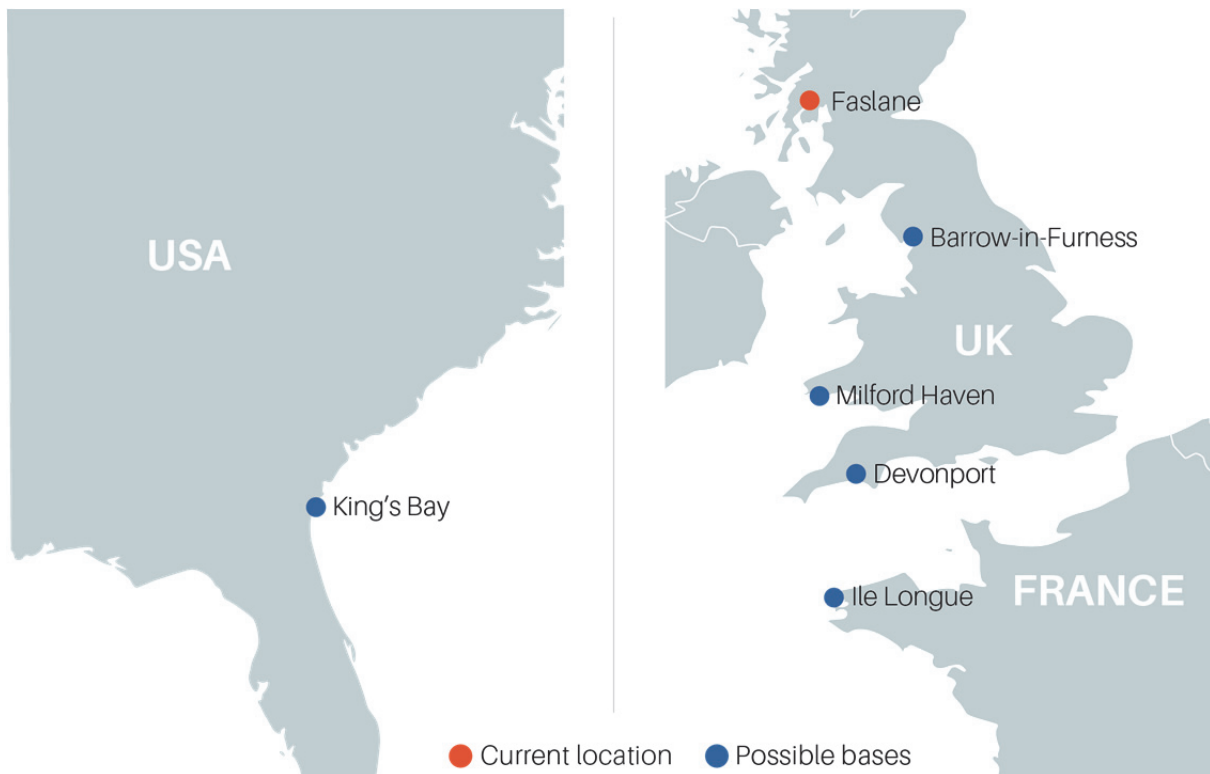
Source: adapted from BBC News (2014).[302]

Given the difficulties of relocating the nuclear force within the UK, a number of commentators have suggested rebasing Trident overseas – at least temporarily – in either the US or France. Such an option would make use of the US Navy facilities at King's Bay, Georgia, or the equivalent French location at Ile Longue in Brittany, and leverage existing close ties between the UK and its allies on nuclear matters. The UK already contributes some £12m a year as part of the running costs of the King's Bay base, where the UK's nuclear ballistic missile submarines (SSBNs) regularly dock for maintenance and rearming of their Trident II D5 missiles. This builds on long-standing cooperative ties between the two nuclear states, formalised through the 1958 US–UK Mutual Defence Agreement. The UK and France, meanwhile, have taken steps to deepen their partnership on nuclear issues since the 2010 Lancaster House Treaties, including the construction of a joint nuclear weapons research establishment in Valduc. Following the collision of SSBNs *HMS Vanguard* and *Le Triomphant* in February 2009 there have also been calls for greater coordination between the deterrent patrols of the two European allies.[303] Proponents of rebasing Trident overseas suggest this would provide an opportunity to circumvent the political, legal and cost challenges of relocating within the UK, while also deepening diplomatic and operational ties with the UK's closest allies, leveraging economies of scale from existing facilities (which would require

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[302] Barford (2014)

[303] Ibid.

modifications but not construction from scratch) and offering a potential stepping stone towards a shared NATO or European deterrent.[304]

However, a number of practical, political and legal obstacles remain. The UK's obligations under domestic and international law, as well as security concerns, would likely require the construction of a separate SSBN base and nuclear weapons depot alongside its allies' facilities. This could be a particular challenge at Ile Longue, where space is limited.[305] UK military personnel would have to be deployed to guard these facilities. Furthermore, it cannot be assumed that local politicians and residents would accept the presence of foreign nuclear weapons on their soil, including on safety grounds. In the case of France, the diplomatic impact of Brexit would provide an added layer of uncertainty, depending on whether bilateral relations are strained or rejuvenated with the UK outside the EU. Importantly, the unprecedented move of stationing the entire deterrent overseas – something no other country has done before – would provoke significant controversy within the UK. Critics of Trident already argue that the UK lacks a truly 'independent nuclear deterrent', given the reliance on the US for key elements of the capability.[306] For UK military leaders, the uncertainty created by dependence on foreign bases would in turn be seen as undermining the credibility of the deterrent, with fears that the basing agreement could be reneged upon if UK–US–French interests diverged in any future conflict.

If relocation within the UK proved costly and rebasing overseas too fraught with uncertainty, one alternative would be for the deterrent to stay put even despite Scottish independence. Ahead of the 2014 independence referendum, the British media reported that the MOD was investigating the possibility of designating Faslane and Coulport as 'sovereign United Kingdom territory' in the event of Scottish independence.[307] This would use the model of the military SBAs retained by the UK after Cyprus declared independence in 1960 (see Section 6.5). At the time, however, the UK Government was quick to disown the proposal as neither 'credible [n]or sensible', amid strong criticism from the SNP and others.[308] Whether any UK Prime Minister would reconsider the option in the event of a Scottish vote for independence is unclear. After such a vote, of course, opposition from Scottish voters would no longer be as pressing a concern for London, and the costs of relocation could make the 'Akrotiri model' an attractive option to revisit.

One variant of this proposal would be to delay relocation temporarily as a way of allowing the UK to take a more considered approach to the political, legal and cost challenges involved. Previous studies have raised the possibility of an 'organised phase-out' that would enable the UK to relocate its nuclear force 'at acceptable, predictable costs, and over an acceptable, predictable timeframe'.[309] This would involve temporary basing arrangements to continue operating SSBNs out of Faslane for a lengthy interim period (perhaps one or two decades) while building alternative facilities elsewhere. However, this could provoke

[304] Curry (2014)

[305] Barford (2014)

[306] Wallis Simons (2015)

[307] BBC News (2013)

[308] Watt (2013)

[309] Chalmers and Walker (2013, 114)

significant political controversy and would also likely require other British military forces to be stationed on Scottish soil to secure Faslane and Coulport. Various legal challenges would remain, including the fact Scotland would retain sovereignty over (and responsibility for managing) the bases' sea approaches and that the UN Law of the Sea would thus require submarines to 'navigate on the surface and to show their flag' in Scotland's territorial waters.[310] Perhaps most importantly, the UK could not guarantee that Scotland would not withdraw its assent for the base at some future date, potentially at the moment when the deterrent was needed most. Chalmers and Walker cite the precedent of post-independence Ireland, which insisted on the removal of Royal Navy forces from its territory in 1938 to secure neutrality on the eve of war with Nazi Germany.[311]

5.2.3. Outcomes from Scottish independence would depend on how nuclear issues were leveraged in wider exit negotiations, as well as by allies and NATO

Which of the above options was pursued for the UK nuclear force after Scottish independence would depend on a range of factors, including the state of the British economy, domestic politics, relations with Europe and NATO partners, and progress made in the Successor programme. Above all, however, outcomes would be shaped by the independence negotiations between London and Edinburgh – just as so many other issues are now reliant on the final Brexit deal achieved between Britain and the EU.

Trident has hitherto been an important issue in disagreements between the SNP and Westminster over the future of Scottish independence. However, it is not clear to what extent the subject would be a priority for either side in independence negotiations, compared to other concerns such as trade, currency, or the UK–Scotland border arrangements. Some commentators suggest that the SNP's opposition to Trident may primarily be a political means to the end of achieving independence. They argue that if that end were achieved, Holyrood might become less vociferous in its criticism of the UK nuclear posture and more amenable to a compromise, perhaps in exchange for concessions on dividing up the UK's assets, national debt and North Sea oil. Notably, the SNP allowed themselves room for manoeuvre in their 2013 independence White Paper, in which they committed to try and negotiate the withdrawal of nuclear weapons within the first term of an independent Scottish Parliament, but failing that to seek the more ill-defined 'speediest safe removal'.[312]

The willingness of the SNP to stomach such an arrangement could also be affected by whether they were to also seek membership of NATO, whose members (especially the US) might not look favourably upon any Scottish intransigence that could force the UK to unilaterally disarm if relocation seemed totally unfeasible. Besides the US – and unlike France – the UK is the only other NATO member to have committed its nuclear weapons to the defence of the Alliance. This is particularly valued in Washington, DC. Though its nuclear arsenal is comparatively small, the presence of the UK as an unpredictable 'second centre of decision' within NATO serves to complicate the strategic calculus of any potential

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[310] United Nations (1982)

[311] Chalmers and Walker (2013, 115)

[312] Scottish Government (2013)

aggressor.[313] This relieves the US of what US Secretary of Defense Ashton Carter has called 'the sole political burden of NATO's nuclear deterrence'.[314] Though a small number of NATO states oppose the deployment of allies' nuclear weapons on their territory, Scotland could have to contend with the threat of a veto of its application for NATO membership if it were not able to persuade all existing members to give it such an exemption. In this sense, 'linkage of Trident's future basing with Scotland's NATO membership, and of their terms, would be inescapable'.[315]

Even leaving NATO aside, the Scottish Government would likely also be mindful of its wider reliance on the UK military to guarantee Scottish security (at least in the short term) and help build up its fledgling defence forces, including handing over a share of its equipment. 'One could legitimately question why [the rest of the] UK would feel compelled to help Scotland transition its own forces or to work cooperatively with it' if unceremoniously evicted from Faslane.[316]

Others argue, however, that this sort of reasoning misconstrues genuine and deeply held ethical opposition to nuclear weapons among SNP and other Scottish politicians. It may also underestimate the pressure that any newly independent Scottish Government would find itself under from voters, who could reasonably expect to see nuclear weapons removed as soon as possible given Trident's central role in the independence debate. As one analyst has noted, 'the SNP has staked its political credibility on getting rid of Trident' and would likely be reluctant to risk a voter backlash by reneging on its commitments on this key issue ahead of the first elections in an independent Scotland.[317]

5.2.4. Brexit poses a number of other financial, political and organisational risks to the UK nuclear deterrent, even setting aside the Scotland issue

It is important to note that there are other potential threats to CASD after Brexit, besides the Scottish question. Interviewees placed greatest emphasis on the challenge of funding Trident given the potential for long-term economic uncertainty in the UK as a result of negotiating to leave the EU. In the 2015 SDSR, the UK MOD announced an increase in the estimated cost of acquiring four replacement SSBNs to £31bn, with an additional £10bn set aside for contingencies.[318] Critics of the programme suggest that the focus on procurement costs is misleading, however, arguing that whole-life-cycle costs are more important and may be much higher than predicted. Crispin Blunt MP calculated, as chair of the Commons Foreign Affairs Committee, that the new Trident system could cost as much as £167bn over 30 years.[319] The Campaign for Nuclear Disarmament suggests an even higher figure of £205bn.[320] Even if official government estimates prove correct, this spending could come under pressure if Brexit were to

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[313] UK Parliament (2014, para. 66–67)

[314] Quot. in Webber (forthcoming)

[315] Chalmers and Walker (2013, 118)

[316] Fleming (2014, 768)

[317] Dr Nick Ritchie, quot. in Barford (2014)

[318] UK Ministry of Defence (2015)

[319] Norton-Taylor (2016b)

[320] Campaign for Nuclear Disarmament (2016)

provoke a prolonged period of fiscal retrenchment or engender a politics more critical of defence spending – even outside of any scenario in which the MOD is forced to incur additional costs to relocate Trident out of Scotland.

In addition, some have questioned whether Whitehall has the requisite human resources, organisational bandwidth and political focus to manage Trident renewal alongside the sizeable bureaucratic challenges of Brexit and the other demands of government. The head of the National Audit Office, Sir Amyas Morse, has warned that UK Government may not have sufficient spare capacity to manage Brexit alongside everyday services and its £405bn portfolio of major projects – including Trident renewal, high-speed rail, airport expansions and new power plants – without increased risk of cost overruns, poor oversight and programme delays.[321]

Of course, the Successor programme faced the potential of unexpected cost escalation or programme difficulties even before Brexit. If the UK's withdrawal from the EU results in boosted economic growth, as Leave proponents suggest it will, this could in fact serve to alleviate the pressure on the project and the wider defence budget (see Chapter 3). If this more positive scenario were not to occur, however, a number of options present themselves:

- **Increase defence spending** to maintain both Trident renewal and the Defence Equipment Plan.
- **Cut back on procurement of other equipment** (e.g. F-35, Type 31 frigates) to prioritise spending on the nuclear force, with a consequent loss of conventional military capabilities.
- **Delay elements of submarine construction** or Trident missile replacement, though this may damage the UK defence industrial base and increase overall long-term costs.
- **Pursue alternatives to CASD**, including potentially an air- or land-launched system.
- **Abandon the nuclear deterrent**, with the UK choosing to disarm unilaterally.

Each poses new risks as much as it presents possible benefits. If the UK were to reconsider its nuclear posture after Brexit, much guidance has already been provided by the 2013 Trident Alternatives Review, in which the Government explored a range of sea-, land- and air-based deterrent options at the behest of its Liberal Democrat coalition partners. However, Prime Minister Theresa May has insisted that 'no credible deterrent is cheap'.[322] The 2013 Review found that while alternative systems could inflict sufficient damage to deter a potential aggressor, none would provide the combination of the range, resilience and continuous posture offered by a four-SSBN fleet. Furthermore, the total life-cycle costs of using large bombers, fighter aircraft (e.g. F-35) or submarines armed with stealthy cruise missiles (SSN[VL]) could in fact be higher than the current Trident programme due to the need to develop new warheads and procure two Successor *Dreadnought*-class SSBNs as a 'stop-gap' measure until this lengthy process was complete.[323] The predicted costs of the different principal options are outlined in Figure 5.3 below.

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[321] Irvine (2016)

[322] Mason and Asthana (2016)

[323] HM Government (2013)

Figure 5.3 Cost estimates for alternatives to UK nuclear deterrent
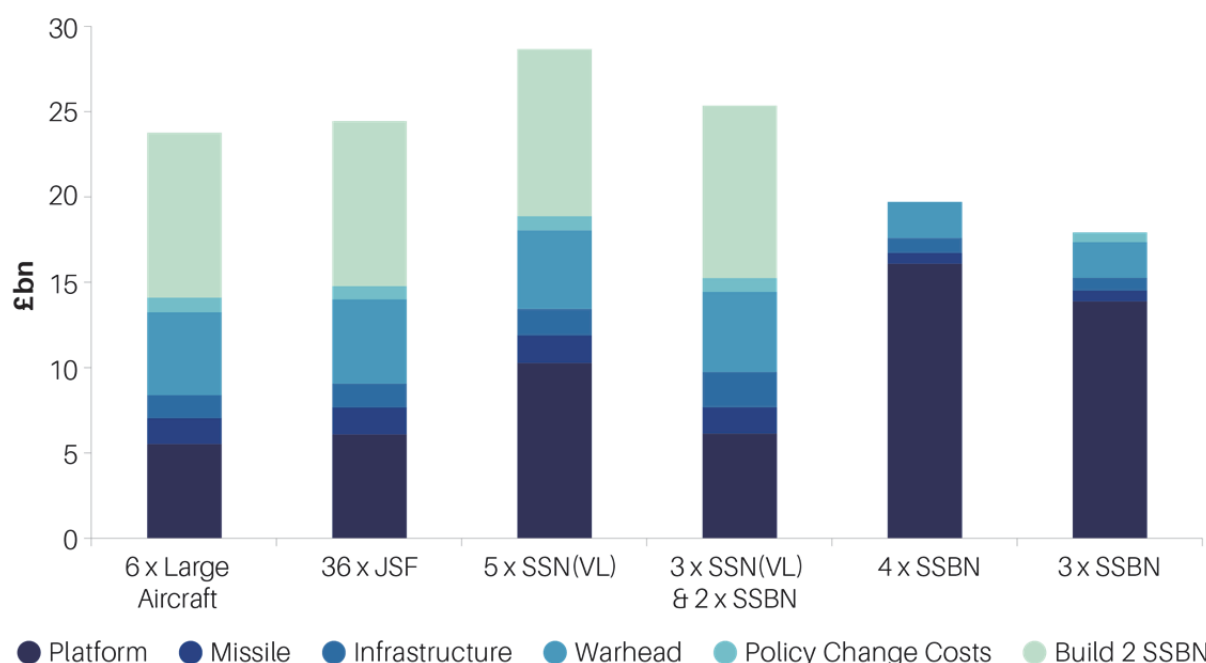
Source: UK Government (2013).[324] Note: shows Net Present Value comparison at 50 per cent confidence. Abbreviations denote F-35 Joint Strike Fighter (JSF) and cruise-missile equipped nuclear submarines (SSN(VL)).

Finally, during the referendum campaign it was also suggested that Brexit could undermine nuclear cooperation between the UK and its closest allies, the US and France, as a result of the diplomatic fallout any withdrawal from EU structures could entail. However, interviewees noted that the EU has no role in this area of policy, and stressed that the only other nuclear EU member, France, would continue to have a strong interest in close nuclear cooperation with its NATO and Lancaster House ally. Similarly, Vice Admiral Terry Benedict, director of the US Navy's strategic systems programmes, has emphasised that the Brexit vote will not affect the US and UK's close transatlantic partnership on nuclear matters.[325]

5.2.5. Reducing or scrapping the UK nuclear deterrent would impact not only UK security, but also its wider role in NATO and international security policy

It is beyond the scope of this Brexit study to discuss in detail the value of nuclear weapons to the UK or the degree to which they contribute more widely to international security. Both remain subjects of hotly contested debate among political leaders and military strategists alike. However, it is important to note that literature and interviewees raised a number of points about the possible security implications of unintended consequences from the UK's decision to leave the EU. Any unilateral disarmament could undermine the collective deterrent of NATO, which would be reduced to two nuclear powers, only one of which (the US) has committed its weapons to the defence of the Alliance. Interviewees were however uncertain as to what implications this would have for the wider rules-based global order and aggression by

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[324] HM Government (2013)

[325] Harper (2016)

revisionist actors such as Russia. In turn, the loss of Trident (and potentially Scotland) could further stress the UK's relations and standing within NATO and other partnerships (e.g. Lancaster House), compounding the potential loss of international influence as a result of Brexit.

One further argument that has been made by proponents of Trident both before and during the Brexit referendum is that any disarmament could also threaten the UK's permanent seat on the UN Security Council.[326] In fact, the UK membership of the so-called P5 on the Security Council is unrelated to (and predates) its status as a 'nuclear weapons state' in the NPT. Previous attempts to reform the Security Council, for instance to include India, Germany or Japan, have all failed and the UK retains the right to veto any such initiatives that threaten its interests (and would likely receive strong support from the US). Any unilateral disarmament by the UK may at most give some additional credence to the arguments of Germany and others that the Security Council should be reformed and need not be made up exclusively of nuclear powers.

Despite the concerns of many interviewees, critics of the Trident programme argue that, 'far from weakening the UK, a surrendering of its nuclear posture would result in a stronger and more functional UK military footprint and would bolster the UK's standing in the international arena'.[327] They contend that funds freed up by scrapping the nuclear force could be used to invest in additional conventional forces, for instance an increased Royal Navy surface fleet, additional combat aircraft, or equipment needed to fight modern foes that Trident cannot deter – most notably terrorists and other non-state actors. This assumes, of course, that the MOD would be free to reinvest any savings; some interviewees suspected the Treasury would be more likely to divert the funds elsewhere. Proponents of disarmament also suggested that scrapping Trident would demonstrate the UK's moral leadership and buy it considerable diplomatic capital, both on the issue of non-proliferation specifically and more widely.[328] However, it is not clear that disarmament would be viewed as decisive leadership if the decision had been foisted upon a reluctant and reduced UK.

Outstanding questions:

- What trade-offs are the Scottish Government and electorate willing to accept between Trident removal and other considerations in possible negotiations, e.g. access to North Sea oil?
- What would be the estimated costs of relocating the UK nuclear deterrent, including more detailed evaluation of different domestic and international options?
- What short-term steps can UK policymakers take to ensure efficient management and oversight of the Successor programme given the added financial, industrial and political uncertainties created by the Brexit vote?

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[326] World Future Council (2016)

[327] MacDonald (2014, 326)

[328] Ibid., 326

6. Migration, border security and overseas territories

This chapter examines those potential issues arising from Brexit in relation to border security and the British Overseas Territories:

- The potential consequences for collective efforts to deal with Europe's ongoing migrant crisis, including the risk of xenophobia and social fragmentation.
- The challenges raised at the UK's border with France, including the implications of Brexit for the Le Touquet Treaty and the Calais migrant crisis.
- The regional security implications of leaving the EU for Northern Ireland, including the possible effects on the peace process, the border and bilateral cooperation with Ireland.
- The possible ramifications of Brexit for key Overseas Territories, specifically those bordering EU states or else hosting a large UK military presence.

6.1. European migrant crisis

6.1.1. Brexit has raised concerns that it could further strain attempts to build common EU responses to complex transnational issues, including the migrant crisis

Questions about border security after Brexit are tightly interwoven with uncertainty about its implications for the wider challenge of Europe's migrant crisis. Given the focus on immigration during the referendum debate, many have portrayed the EU's failure to resolve this crisis as a major factor in the UK's decision, with Hungarian Prime Minister Viktor Orbán explicitly blaming Brexit on the European Commission's migration policies.[329] In turn, there is concern that the UK's withdrawal could further exacerbate the ongoing crisis. Interviewees and literature have raised a number of concerns:

- **Potential for Brexit to strengthen centrifugal forces that undermine collective solutions:** The Greek Deputy Defence Minister Dimitris Vitsas has described Brexit as a 'serious setback that would undermine Europe's collective handling of the crisis while allowing some states to instead act independently…or not at all'.[330] This includes a fear that Brexit could undermine the already shaky deal with Turkey to curb migrant flows (see Section 6.5 for UK advocacy of Turkish EU

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[329] Gotev (2016b)

[330] Carassava (2016)

membership).[331] Within the EU, there is already significant strain and divergence of national agendas for the migrant crisis, with Italy recently suggesting punitive measures to cut EU funding to Eastern European member states that continue to oppose the EU relocation scheme.[332]

- **Risk of EU being distracted by Brexit negotiations:** Another concern is that the administrative complexity and political wrangling involved in Brexit negotiations might dominate EU politics at the expense of proactive responses to other issues, including the migrant crisis.

- **Possible loss of UK contributions to Operation Sophia:** The UK has contributed a number of military assets to counter migration and people-smuggling in the Mediterranean, including Royal Navy vessels and a detachment of Royal Marines to support the EU's Operation Sophia. However, the UK Government has indicated it may still contribute to CSDP missions after Brexit, or could alternatively shift its contributions to similar NATO-led efforts in the region (see Chapter 4).[333]

- **Uncertainty over future UK aid budget:** As noted in Chapter 3, there is also a high degree of uncertainty about what effect Brexit will have on UK Government spending, including the international development budget. With the UK among the few countries in the world to meet the UN target of spending 0.7 per cent of GDP on foreign aid, and a major donor to important refugee hubs such as Jordan, any reduction in spending could have knock-on effects for migration flows across the Mediterranean.[334] The fall in the value of sterling has already entailed a commensurate drop of €1.4bn in the value of British aid. EU development influence could also be diminished by its loss of UK funding, with UK contributions accounting for £1bn, or 10 per cent, of the EU's own aid budget.[335]

Others have been more positive about Brexit's effects, however. UK Foreign Secretary Boris Johnson has emphasised that the UK will continue to help the EU tackle the migrant crisis, seeing Brexit as an opportunity to forge a wider transnational 'partnership' to confront the issue.[336] European Commission President Juncker and other leaders, not least those in southern and central Europe, have similarly called for the EU to use the UK referendum decision as an opportunity to move towards more integrated European responses to the crisis (see Chapter 4).[337]

6.1.2. The UK referendum has also exposed divisions within the UK and Europe, with concerns over the security threats posed by social fragmentation and the far right

Centrifugal forces also play out at the societal and street levels. Police, political leaders and European embassies have expressed particular concern over the rise in hate crime since the referendum. The UK's National Police Chiefs Council reported 6,193 such incidents in the month after the vote, the majority of

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[331] Dennison (2016)

[332] Squires (2016)

[333] Farmer and McCann (2016)

[334] Szent-Ivanyi (2016)

[335] Murphy (2016)

[336] Hughes (2016b)

[337] BBC News (2016c)

which involved some form of violence.[338] These figures represent a 41 per cent increase on the same period in 2015.[339] Particular public concern has been raised over attacks on Muslim[340] and Eastern European communities,[341] though limited polling also suggests there has been a 147 per cent increase in attacks of a homophobic or transphobic nature.[342] Many commentators and academics have drawn a direct linkage between the tenor of the Brexit referendum debate and this surge in hate crime. Some point in particular to the controversial 'Breaking Point' poster launched by pro-Leave group Grassroots Out,[343] criticising it as the 'crystallisation of a moral panic narrative' that 'set race discourse reeling back decades'.[344]

Figure 6.1 Percentage increase in recorded hate crimes in England, Wales and Northern Ireland
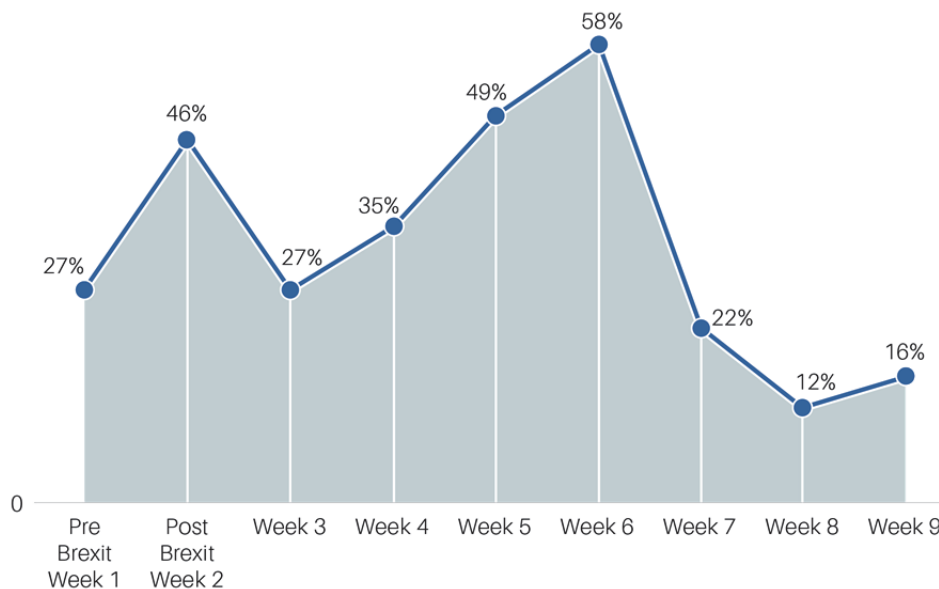
Source: Hassan (2016). Figures shown represent percentage increase compared to same period in 2015.

The extent and longevity of any 'Brexit effect' on hate crime and xenophobia remain uncertain. These were nonetheless points of significant concern for many interviewees, who expressed fears that the intra-EU wrangling of Brexit negotiations and the potential for the UK's exit to distract from responses to other issues like the migrant crisis could exacerbate existing social tensions, promoting fragmentation. Importantly too, hate crimes not only represent a human tragedy for victims, but also have wider security and strategic implications, straining police resources, undermining community relations and public trust (so vital to the prevention of terrorism), and playing to the propaganda of Russia, ISIS and other parties

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[338] Deutsche Welle (2016)

[339] Serhan (2016)

[340] Daily Sabah (2016).

[341] Krupa (2016)

[342] Hassan (2016)

[343] Launched by UKIP leader Nigel Farage, the poster showed a queue of Middle Eastern migrants with the text 'Breaking Point: The EU has failed us all'. For more on the resultant controversy, see Chandler (2016)

[344] Morrison (2016)

seeking to portray and perpetuate religious or racial divisions within European society.[345] The febrile atmosphere around the referendum has also contributed to a direct attack on the British state, with the murder of Labour MP Jo Cox (a prominent campaigner for both refugee rights and the EU) just one week before the vote, with the accused reported to have had far-right political motives.[346]

Indeed, interviewees expressed concern that the possibility of diminished cooperation between UK and European security agencies after Brexit (see Chapter 7) could make it more difficult to identify, understand and disrupt new xenophobic or far-right terror groups, if the migrant crisis remains a long-term strain on social cohesion in the EU.

Outstanding questions:

- What long-term effect, if any, is Brexit likely to have on social cohesion and community relations in both the UK and EU? What would be the effect of different models for immigration control?
- How best to combat those far-right and other groups that might seek to exploit the Brexit vote for their own propaganda purposes (contrary to the decent and reasonable views of the vast majority of Leave voters)?

6.2. Border with France

Immigration and control of UK borders were central topics of the Brexit referendum campaign. Indeed, one-third of Leave voters ranked this as the biggest single reason for exiting the EU, making it the second most important factor behind wider concerns over UK sovereignty and lawmaking.[347] In large part, of course, public concern is focused on wider social questions: the numbers, entitlements and integration of those entering the UK to live or work. Nonetheless, the specific arrangements governing how those individuals are checked and controlled – particularly on the border with France – represent a significant area of debate.

6.2.1. Brexit adds a new dimension to existing tensions over border arrangements between the UK and France, as well as a potential need for enhanced controls

Border arrangements between the UK and France are currently governed through a bilateral agreement, the Le Touquet Treaty – with the UK not a member of the borderless Schengen zone. Signed in 2003, the treaty effectively relocates the British border to Calais (and other key points of departure, e.g. Channel ports or the Eurostar terminal in Paris), with physical protections around the port and Eurotunnel, and UK personnel deployed to conduct checks. In turn, France is entitled to carry out its own 'juxtaposed controls' in Dover and at other UK sites.[348]

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[345] Kantor (2016)

[346] Hjelmgaard (2016)

[347] Ashcroft (2016)

[348] Sandhu (2016)

This arrangement has generated controversy within France, particularly in the Calais region, as migrants attempting to reach or claim asylum in the UK are prevented from leaving French soil. The result has been a significant humanitarian and security challenge in and around the port of Calais, most notably with the creation of makeshift migrant camps such as the 'Jungle' (dismantled in October 2016),[349] disruption to lorry traffic and a number of deaths from individuals trying to cross through the Eurotunnel.[350]

Though the Le Touquet Treaty is not formally dependent on the UK's EU membership, any souring of diplomatic relations and security cooperation between the two countries could impact the existing border arrangements. During the referendum campaign, the French economy minister (now a potential presidential candidate) Emmanuel Macron echoed a call by Xavier Bertrand, president of the Nord-Pas-de-Calais-Picardie region, that Le Touquet be scrapped in the event of Brexit.[351] Since the vote, the French Government has since argued that the current border treaty will continue, cautioning that any change could see large-scale loss of life among migrants attempting to cross the English Channel, as is already the case in the Mediterranean Sea.[352] However, the treaty allows for either side to unilaterally terminate the agreement at any time, with a two-year notice period, and remains a source of political contention in France – with French interior minister, Bernard Cazeneuve, noting 'It is obvious that leaving the EU will always result in countermeasures'.[353]

Literature and interviewees therefore identify a number of challenges and potential models for a post-Brexit relationship at the Franco-British border:

- **Strain on close working relationship between UK and French police:** Existing arrangements are highly dependent on effective coordination and information sharing between Kent Police and French counterparts. Border checks also draw on other EU intelligence mechanisms, including inputs from the Schengen Information Service and Europol. Any disruption of this exchange would require the UK to invest more in resource-intensive physical checks at the border. As discussed in Chapter 7, potential changes in UK access to mechanisms such as the EAW would also impact on the UK's ability to extradite individuals.
- **Potential need for additional customs checks:** If the UK were to exit the European customs union as part of a Brexit settlement, additional checks would be required on vehicles and goods at the border to check compliance with relevant regulations and prevent cross-border smuggling. This could increase transit times and costs, as well as requiring additional personnel at the border.[354]

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[349] France 24 (2016)

[350] Russia Today (2016)

[351] Week (2016)

[352] Chrisafis (2016)

[353] Travis (2016)

[354] Additional tariff or non-tariff barriers on trade between the UK and EU could potentially also directly impact UK budgets for border management – with the automated e-gates at British airports, for instance, supplied by Portuguese firm Vision-Box. Cf. Passenger Self Service (2016)

- **Pressure in France for creation of asylum 'hotspot' in Calais:** An alternative model that has been proposed by French officials is to allow migrants to lodge their asylum claim for the UK in France in a so-called 'hotspot'. Consequently, anyone rejected by the UK could be deported from France by the authorities. The UK has supported such a concept elsewhere, but maintains that this should not be an option for the Franco-British border.[355]

- **Rising calls for relocation of migrant camps to UK soil:** Before the Brexit vote, Prime Minister David Cameron warned the so-called 'Jungle' could be relocated to British soil. In reality, moving the border to the UK would likely require new temporary detention centres in Dover and at other arrival points, before asylum seekers were dispersed across London and elsewhere, rather than remaining in makeshift camps.[356] However, in such a 'worst-case' scenario, the breakdown of Franco-British cooperation at the border could generate significant political animosity and threaten collaboration in other areas of security and defence, as well as placing significant new pressures on UK police to secure sites and prevent any anti-migrant backlash.

- **Diminished UK influence over wider EU responses to migrant crisis:** Importantly, of course, the uncertain future of the Franco-British border cannot be divorced from wider questions about the UK's ability to shape and assist wider EU responses to the migrant crisis after Brexit. This issue is addressed in more detail in Section 6.1.

Outcomes in this area, then, are likely to be shaped by the nature of the wider Brexit settlement negotiated between the UK and EU, particularly with regard to access to the common market and the principle of freedom of movement. At the same time, political controversy in the UK and France over the humanitarian and security situation at the Calais border is likely to impact those countries' wider responses to the migrant crisis and those international principles currently under strain as a result – most notably the EU's 'Dublin rules', under which migrants seeking asylum must lodge their application in the first safe country they reach and can be returned there if they attempt to move elsewhere.[357] On both sides, immigration and border controls have emerged as major issues in domestic politics, and are likely to feature in the French presidential election debates given the strong polling for the far-right National Front's Marine Le Pen.[358]

Outstanding questions:

- What policy, humanitarian and security measures can be taken to ease the pressure on makeshift migrant camps at Calais? How can French and British responses best be integrated with the wider international approach to Europe's migrant crisis?

- What impact are the French presidential election and growing popularity of the National Front likely to have on Franco-British border cooperation?

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[355] Sandhu (2016)

[356] Travis (2016)

[357] Jannic-Cherbonnel (2016)

[358] Ibid.

Box 8. The UK's ability to deport illegal immigrants after Brexit

One area that may not be subject to as much potential change as some Leave campaigners might hope is the UK's ability to deport illegal immigrants more generally. After Brexit, the UK would no longer be subject to EU rules such as the 2005 Asylum Procedures Directive and the Charter of Fundamental Rights, which restrict how member states can deal with asylum seekers. However, many such EU rules codify wider international law – such as the 1951 UN Geneva Convention on Refugees and its amended 1967 Protocol – to which the UK would remain a signatory.[359] Though the UK could also choose to break with the UN Convention and other international law (for instance, the principle of non-refoulement), this would likely provoke significant political opposition both at home and abroad.[360]

6.3. Northern Ireland

Another area sensitive to change as a result of Brexit – and a high priority for many interviewees – concerns the future political stability of Northern Ireland. Breaking with voting patterns in England and Wales, some 56 per cent of Northern Irish voters backed the UK staying in the EU. Though a number of political leaders and constitutionalists have suggested this entitles Stormont (and Edinburgh) to a veto over any exit from the EU, the new Prime Minister has emphasised that individual nations should not be allowed to hold up the overall UK mandate.

Particular areas of concern expressed by security experts and literature include:

- Threat to Northern Ireland peace process
- Future of the border with Ireland
- Anglo-Irish police and counterterror cooperation.

The potential outcomes and implications, and outstanding questions in each regard, are outlined below.

6.3.1. EU membership has helped support the Northern Ireland peace process, with nationalists calling after the Brexit vote for a border poll towards a united Ireland

Though the impact of leaving the EU is deeply uncertain, the potential for Brexit to undermine the Northern Ireland peace process, inflame sectarian tensions and provide a moment of political opportunity to dissidents has been a recurrent theme of both interviews and literature.[361] Between the late 1960s and 1998, Northern Ireland suffered a period of violent conflict between those, predominantly Protestants, loyal to the UK and a Catholic minority pushing for unification with the Republic of Ireland. Alongside peaceful protest, this included a campaign of terror by violent groups such as the Irish Republican Army (IRA), as well as a number of bloody clashes involving the British Army or loyalist paramilitaries. In total,

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[359] Swidlicki (2016)

[360] 'Non-refoulement' refers to the practice of not allowing refugees or asylum seekers to return to a country in which they are liable to be subjected to persecution.

[361] Dyer (2016)

the Troubles claimed more than 3,500 lives. In 1998, concerted diplomatic and political talks led to the signing of the Good Friday Agreement, underpinning a peace settlement for Northern Ireland.[362]

Importantly, polls suggest the Brexit vote was divided along sectarian lines. Around 70–80 per cent of Sinn Fein supporters are thought to have voted for Remain, while the Democratic Unionist Party backed the official Leave campaign.[363] The outcome has been condemned by republican groups, while the pro-EU Social Democratic and Labour Party has warned that uncertainty over the border (see below) could erode Northern Ireland's fragile political settlement and prompt renewed dissident and paramilitary activity.[364] The power sharing arrangement at the Stormont executive and assembly has been the subject of persistent deadlock and discord in recent years. Political tensions have run high and decisionmaking has stalled despite urgent challenges to resolve, such as the region's fiscal deficit.[365] At the same time, police have been dealing with a 40 per cent increase in bomb alerts, with 52 attacks in the 12 months to May 2016, compared to 36 the previous year.[366] Also in May, the Northern Irish police seized one of the largest arms caches found in recent years, including anti-personnel mines, ammunition, explosives and bomb-making materials.[367] The British Security Service (MI5) has upgraded the threat level in the province to 'severe', meaning an attack is 'highly likely', while the threat assessment for the rest of the UK from Northern Ireland-related terrorism has been raised from 'moderate' to 'substantial'.[368]

Despite widespread concern, however, the immediate impact of Brexit on the peace process is unclear. EU membership is certainly an important political and symbolic enabler for the Good Friday Agreement. It has created numerous cross-border social, cultural and business initiatives to help diffuse sectarian tension and been used to help reassure Catholic nationalists that Ireland can remain divided by a border but still move towards ever closer bonds within an EU context. Nonetheless, Sinn Fein has responded angrily to the Brexit vote and argued that Northern Ireland's majority for Remain should trigger a border poll on unification. The First Minister, Arlene Foster, and the UK Government have both stated, however, that the criteria for a border poll have not been met, and the Good Friday Agreement is ambiguous on this point – enabling the Secretary of State to call a vote 'if at any time it appears likely to him [or her] that a majority of those voting would express a wish' for change.[369] In addition, the agreement places greater significance on both sides' acceptance of the European Convention on Human Rights, which – despite featuring prominently in the Brexit debate – is not in fact related to EU membership.[370] The UK Parliament's Northern Ireland Affairs Committee also contends that 'arguably, the USA has played a

[362] Jans (2016)

[363] Iho (2016)

[364] News Letter (2016)

[365] O'Brien (2016)

[366] McDonald (2016b)

[367] McDonald (2016a)

[368] BBC News (2016g)

[369] Sloat (2016)

[370] Belfast Telegraph (2016)

more significant role in supporting the peace process' than the EU, and this US interest in continuing peace is not likely to diminish with Brexit.[371]

Box 9. Northern Ireland and EU funding programmes

The Northern Irish economy is uniquely exposed to Brexit in a number of ways. As Burke notes, 'much of Northern Ireland's "peace dividend" has come from the EU, both through structural funds aimed at boosting the region's economy and specialised programmes designed to reinforce the peace process'. EU funds contributed include €1.3bn spent in 1995–2014 with the aim of mitigating violence and dealing with the legacy of conflict; initiatives have included trauma counselling for 5,000 people in Northern Ireland.[372] An additional €229m has also been allocated for the PEACE IV programme, though the Northern Ireland Affairs Committee notes that the long-term future of this beyond the current funding round was already uncertain before Brexit.[373]

6.3.2. The most significant practical and political challenge will be defining new – or defending old – arrangements for the UK's border with the Republic of Ireland

The largest practical challenge presented by Brexit concerns security and customs arrangements at the Anglo-Irish border. Neither the UK nor the Republic of Ireland forms part of the Schengen free travel zone, with border relations instead managed through the Common Travel Area originally agreed in 1923. This effectively removes the need for passport controls between the two countries, though border checks, roadblocks and watchtowers were established at various times during the Troubles.

With the vote to leave, however, this becomes an EU external border. Before the referendum, the chair of UKIP Northern Ireland called for the British Army to return to policing the border in the event of Brexit, arguing it had become a 'national security threat' or 'backdoor' allowing dissident republicans, criminals and people-smugglers to move unimpeded into the UK.[374] Such claims have been roundly opposed on both sides of the border, however, with significant concern expressed that any return to a 'hard border' would only serve to inflame sectarian tensions, embolden dissident groups and damage relations between London, Stormont and Dublin.[375]

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[371] UK Parliament (2016, section 4, para 85)

[372] Burke (2016)

[373] UK Parliament (2016, section 4, para 85)

[374] Millar (2016)

[375] Iho (2016)

Given these and economic concerns on both sides (see Box 10), there is a strong interest in maintaining as open a border as possible. After Brexit negotiations unfold, a number of possible models exist:

- **Security and/or customs checks return:** In the event of a 'hard Brexit' which saw the UK outside of the EEA or customs union, or which placed restrictions on freedom of movement, increased controls would be needed to prevent illegal migration and smuggling at the land border. Such a scenario would be likely to inflame sectarian tensions and strain relations between Dublin, London and Brussels, as well as posing a significant threat to trade and jobs. Physically securing the border would also require significant investments in policing, checkpoints and surveillance. Perhaps 30,000 commuters cross daily, in addition to others on one-off trips.[376] More than 300 formal crossing points and numerous smaller trails exist on the border, which runs through lakes, woodland and other territory hard to secure against determined attempts at infiltration.[377] Cross-border intelligence sharing and close cooperation between British and Irish police would become even more important at a time when they might themselves be under strain as a result of Brexit (see Chapter 7).[378]

- **Controls are instigated between the island of Ireland and the rest of the UK:** An alternative solution would be to maintain an open border between the Republic and Northern Ireland, despite potential limitations on trade or free movement in any Brexit settlement. Instead, border controls would exist between the island of Ireland and the rest of the UK. This would be easier to secure in practical terms, the border in question not being a land border, but could pose political difficulties in the UK – with Parliament labelling restrictions on internal movement 'undesirable'.[379]

- **The border between the UK and Republic of Ireland remains open:** The border between the two countries could potentially remain open after Brexit. However, this would most likely require the UK to remain part of the EEA (though some customs checks do exist between Sweden, part of the EU, and Norway, an EEA member).[380] Alternatively, the UK and Ireland could seek to develop some new bespoke arrangement regardless of the Brexit negotiations, citing the precedent of the Common Travel Area, or the fact that since 2014 citizens of China and India have been able to enter both Ireland and the UK with a single visa. In Parliament, however, the Northern Ireland Affairs Committee has noted that under EU law any future border arrangements between the two countries would have to be agreed not only with Dublin, but with the rest of the EU.[381]

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[376] UK Parliament (2016, section 4, para 76)

[377] Booth (2016)

[378] Ibid.

[379] UK Parliament (2016, section 4, para 80)

[380] BBC News (2016h)

[381] UK Parliament (2016, section 4, para 72)

Box 10. Northern Ireland and the cross-border economy

Cross-border trade is also of huge significance to both sides. The UK is Ireland's largest trading partner, accounting for 17 per cent of total exports; in turn, Ireland is the UK's fifth-largest external market, receiving €17bn of British goods and services annually, which is more than China, India and Brazil combined.[382] The Northern Irish economy is also a disproportionate recipient of EU subsidies through the Common Agricultural Policy (CAP) compared to the UK, with CAP payments estimated to account for 82 per cent of local farm revenues.[383] In total, some 8.4 per cent of regional GDP is thought to be directly dependent on support from different EU programmes.[384] Similarly, local employment is disproportionately reliant on the British public sector, meaning that any fiscal retrenchment and cutbacks in UK Government as a result of Brexit could have significant consequences for Northern Irish jobs.[385] Difficulties in the Northern Irish economy would in turn impact resources available to UK defence.

6.3.3. Brexit also raises wider concerns about Anglo-Irish security cooperation, including access to EU mechanisms such as the European Arrest Warrant

Importantly, Anglo-Irish security cooperation is not merely about securing the border. Rather, it forms an indispensable component of wider attempts to combat terrorism and serious and organised crime.

There is a wide array of institutional ties between the Police Service of Northern Ireland (PSNI) and Irish Garda. Bilateral collaboration is formalised through the Intergovernmental Agreement on Cooperation on Criminal Justice Matters (IGA). First agreed in 2005, the IGA was amended in 2010 following the devolution of policing and justice powers from Westminster to Stormont.[386] Notable successes include the launch of a joint Cross Border Policing Strategy in 2010, regular cross-border secondments of both police and civilian staff, and a biennial Cross-Border Organised Crime Seminar to share best practice and promote a coordinated approach.

Beyond these formal arrangements, extensive cooperation takes place on a daily basis. The PSNI Chief Constable has noted that the strong working relationships between the two police forces would continue after any Brexit, built on common interest, personal ties and trust. However, the potential for diminished access to EU cooperative mechanisms such as Europol would, according to the Constable, 'make a difference in terms of the formalities but a lot of the infrastructure – not all of it – is built on EU structures for exchange of information'. While intelligence sharing could revert to bilateral or ad hoc arrangements, 'it will be slower, complicated and more costly'.[387] Literature and interviewees expressed particular concern over the uncertain future of the EAW (see Chapter 7.), with the PSNI receiving around 265 such warrants for action in Northern Ireland in the period 2004–13 and applying for 50 in other EU

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[382] Burke (2016)

[383] O'Dwyer (2016)

[384] Burke (2016)

[385] O'Brien (2016)

[386] Irish Department of Justice and Equality (n.d.)

[387] UK Parliament (2016)

countries – the majority of them in the Republic of Ireland.[388] Considering the whole of the UK, a total of 192 suspected criminals and terrorists were handed over from Irish to British authorities using the EAW in the same period.[389]

Outcomes for the peace process and political settlement in Northern Ireland remain closely linked to wider negotiations about the model for UK–EU relations adopted after Brexit. The Republic of Ireland has a strong interest in maintaining as close economic, social and diplomatic ties with Belfast and London as possible, meaning it is likely to be a strong proponent of a more favourable deal for the UK in negotiations. The degree to which Brussels allows or inhibits Irish attempts to develop bespoke bilateral arrangements of its own with the UK will also be an important determinant and possible source of political controversy. Literature also suggests that Scotland's future is likely to impact on Northern Irish attitudes towards possible reunification, with any Scottish independence leaving Northern Ireland increasingly isolated politically within the rump UK.[390]

Outstanding questions:

- What would be the costs and advantages of different models for post-Brexit border and security cooperation?
- Through what diplomatic strategy can the Republic of Ireland best protect its own security and economic interests during Brexit negotiations? How will this affect wider relations with the EU?
- What steps can London, Stormont and Dublin take in the short term to mitigate any disruption to the Northern Irish peace process or effective cross-border cooperation?

6.4. Gibraltar

6.4.1. Brexit also raises unique economic and security concerns for Gibraltar, reflected in the overwhelming 96 per cent majority that voted to remain in the EU

The disruptive effect of Brexit on regional politics extends to the British Overseas Territories – most notably Gibraltar, the small but strategically significant outcrop guarding the entrance from the Atlantic to the Mediterranean Sea.[391] Uniquely among the Overseas Territories, Gibraltar lies within continental Europe and is considered part of the EU.[392] As a result, its citizens were entitled to a referendum vote. Gibraltarians voted by an overwhelming 96 per cent in favour of remaining in the EU, with the Chief Minister warning of an 'existential threat' to the economy in the event of any 'hard Brexit' that brought barriers to trade or free movement with neighbouring Spain.[393]

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[388] Ibid.

[389] Burke (2016)

[390] Whysall (2016)

[391] Buck (2016)

[392] Benwell and Pinkerton (2016)

[393] McSmith (2016)

The territory plays an important role in the UK's global military network and for NATO, hosting a Permanent Joint Operating Base, signals posts, runway facilities and a secure harbour, with protection provided by the Royal Gibraltar Regiment and two Royal Navy patrol boats. Though no military aircraft are permanently stationed at RAF Gibraltar, the station remains at extremely high readiness to support rapid deployment of UK forces to hotspots overseas, including Africa and the Middle East.[394] 'The Rock' also serves as an important training location, not least due to its 30 miles of man-made tunnels. Gibraltar directly supported UK forces and resupplied US Navy attack submarines during the 2011 intervention in Libya, and has previously served as an important staging point for coalition operations in the Gulf and a site for non-nuclear repairs of both British and American submarines, which cannot occur in Spain.[395]

The territory has also seen a number of clashes between British and Spanish forces in recent years, including disruption to cross-border traffic, alleged incursions into UK sovereign waters and a collision between boats from the Spanish Guardia Civil and Gibraltarian police while a Royal Navy tanker was conducting resupplying operations.[396] Any further deterioration of Anglo-Spanish relations as a result of Brexit could exacerbate such tensions and potentially spill over to affect wider military cooperation between the two NATO allies – with Madrid having angered London in the past, for instance, with talks to sell Mirage fighter aircraft to Argentina, which claims another Overseas Territory, the Falklands.[397]

Both preceding and following the Brexit vote, the Spanish government has reiterated calls for joint sovereignty over the territory. Such an arrangement remains unlikely, however, given strong political opposition from locals and the fact Gibraltar's economy remains dependent on institutional separation from Spain – as important as cross-border trade may be – so as to attract insurance and online-gambling businesses.[398] Gibraltarian leaders have noted that the EU has hitherto acted as a useful supranational forum for addressing local disputes with Spain, including deploying EU inspectors to uphold the freedom of movement policy along the Spain–Gibraltar border when Madrid sought to delay crossings and threatened to impose a fee.[399] However, Madrid's ability to disrupt cross-border movement to apply pressure on the UK Government is also limited by the damage this would inflict on its own interests. Gibraltar provides 25 per cent of the economy for the Spanish Campo de Gibraltar region in Andalusia, which already suffers from 32 per cent unemployment.[400]

One alternative possible model – assuming a favourable UK Brexit deal cannot be agreed – would be for Gibraltar to become an Overseas Territory of Scotland if Edinburgh moves to independence, with the two regions ideally retaining the UK's membership of the EU in a so-called 'Greenland scenario'.[401] This

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[394] Rogers and Simon (2009)

[395] UK Ministry of Defence (n.d., 7)

[396] Coffey (2016)

[397] Gonzalez (2013)

[398] Grocott (2016)

[399] Benwell and Pinkerton (2016, 8–14)

[400] Economist (2016d)

[401] Gatehouse (2016)

would provide a further point of contention to an independent Scotland's negotiations over its defence relationship with the rest of the UK (see Chapter 5), with Edinburgh able to leverage the potential offer of continuing UK access to Gibraltar as a military staging post.

Outstanding questions:

- What possible arrangements could be achieved to keep Gibraltar tied to the UK while also having sufficient access to or membership of the EU?

6.5. Sovereign Base Areas in Cyprus

6.5.1. Though not part of the EU, the UK's Sovereign Base Areas in Cyprus also face some practical challenges, but more important may be the implications for Turkey

The UK's withdrawal from the EU also has potential implications for the SBAs at Akrotiri and Dhekelia, over which Britain retained control when Cyprus declared independence in 1960.

Figure 6.2 UK Sovereign Base Areas in Cyprus

Source: BBC (2016).

When Cyprus joined the EU in May 2004, the SBAs did not become part of the EU but rather took on a special status applying certain specific elements of EU treaties.[402] This fact is used as potential inspiration for those, especially in Scotland, seeking a similar post-Brexit deal for those regions of the UK that voted to remain in the EU.[403]

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[402] Sovereign Base Areas Administration (n.d.)

[403] Peter (2016)

In 2011, the UK MOD carried out a review of the SBAs in light of the latest SDSR and reiterated their geostrategic importance as a logistics hub for operations in Afghanistan and a forward base for strikes or deployments in the Middle East.[404] RAF Akrotiri is currently being used by Tornado and Typhoon fighters, as well as electronic intelligence, ground surveillance, tanker and AWACS aircraft supporting strikes on ISIS forces as part of Operation Shader.[405] It also provides a diversionary runway for other coalition forces, including France.[406] With their proximity to Syria and stable political situation – in contrast to recent controversies around the US airbase in Incirlik in Turkey – the SBAs provide an important strategic asset to the UK and its European and NATO allies.[407]

The SBAs remain UK sovereign territory even after Brexit and are not likely to be affected in that regard. Discussion has rather focused on the future status of the 15,000 Cypriots living as EU citizens in the British SBAs.[408] Neither side is likely to want major disruption, however, with the UK military interested in continuing its current relationship with the island and Cyprus conscious that Britain remains its second-largest trading partner and one of three legal and security guarantors of the country's independence.[409]

Potentially more significant, however, are the wider implications for relations between Turkey and the EU. Turkish forces currently occupy the northern half of Cyprus, following an invasion in 1974 in response to a Cypriot coup d'état. The two sides are now separated by a UN Buffer Zone, commonly known as the Green Line, with Istanbul the only international government to recognise the sovereignty of the unilaterally declared Turkish Republic of Northern Cyprus (see Figure 6.2).

Cypriot MEPs have noted that the UK has traditionally been among the strongest supporters of Turkey joining the EU – despite vocal opposition to the idea from Leave campaigners during the referendum – and therefore of resolving the 'Cyprus issue'.[410] The UK's exit from the EU may therefore further stall progress towards Turkey's accession, though this is also dependent on Istanbul's own political direction after a failed coup attempt in July 2016 and the future of the EU's deal with Turkey to stem the flow of migrants to Greece and Bulgaria.[411] With Turkey NATO's second-largest military (behind the US), this in turn has potential knock-on effects for defence cooperation between the EU and NATO, with Turkey and Cyprus able to block further EU involvement in NATO discussions and decisionmaking.

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[404] Foreign and Commonwealth Office (2012, 118)

[405] Stevenson (2016)

[406] KCyprus (2016)

[407] Bruton et al. (2016)

[408] CyprusMail (2016)

[409] Pegasiou (2016)

[410] Michalopoulos (2016)

[411] Birnbaum and DeYoung (2016)

Outstanding questions:

- Does the special legal status of the SBAs provide a potential model for Scotland or other pro-EU regions of the UK?
- What impact is Brexit likely to have on relations with Cyprus and Turkey? How might these affect wider EU–Turkey and EU–NATO cooperation in the fields of defence and security?

6.6. Falkland Islands and other Overseas Territories

6.6.1. Other UK Overseas Territories do not border the EU, but could be affected by any economic uncertainty resulting from Brexit

Unlike Gibraltar and the SBAs on Cyprus, other British Overseas Territories are not situated within continental Europe or bordering an EU member. With the exception of the Falkland Islands (and perhaps also Ascension Island and the British Indian Ocean Territory, which both host important airbases), these global outposts also lack a major defence or security dimension. The primary impact of Brexit on these territories is thus likely to be economic, while the EU has also played an important role in providing additional funds and institutional support on top of the UK's own reconstruction assistance for territories, such as Montserrat, which have been affected by major natural disasters in recent years.[412]

Nonetheless, the impact of EU membership on the security of the Falkland Islands in particular was a theme of the referendum debate. Since the Argentinian invasion in 1982, the islands have taken on a prominent symbolic role within British political consciousness and in discussions of UK defence policy – with the question, 'could Britain reclaim the Falklands today?' emerging as a yardstick against which British military capabilities are commonly (and rightly or wrongly) assessed in public debates.[413] During the Brexit referendum campaign, indeed, both sides claimed that the outcome would affect the UK's capacity to do so. Leave proponents argued that continued EU membership risked the UK being drawn into an EU Army that would undermine London's freedom to defend the Falklands unilaterally, as in 1982.[414] Remain campaigners, by contrast, argued that Brexit could undermine the islands' sovereignty and potentially embolden Argentina, if the UK was seen to lose the diplomatic support of EU allies.[415]

However, it is not clear that Brexit affects either the political situation surrounding the disputed islands or the likelihood of any military threat from Argentina. The country has pursued its claim to the Falklands peacefully for more than three decades; furthermore, its armed forces lack modern equipment with which to challenge the much-improved British defences, which now include a garrison of 1,200 military personnel, Typhoon fighter aircraft and a rotating Royal Navy presence. Argentinian President Mauricio Macri has signalled that his country's position remains unaffected by the UK's decision – telling EU

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[412] Benwell and Pinkerton (2016, 8–14)

[413] Ibid., 8–14.

[414] Thompson (2016)

[415] Hughes (2016a)

leaders, 'Brexit or not, our claim will never change'.[416] Indeed, while Buenos Aires continues to push for sovereignty over 'Las Malvinas', since the Brexit vote Argentina and the UK have agreed to remove measures restricting oil and gas exploration, shipping and fishing around the islands, and pledged to work more closely together on bilateral issues of trade and security.[417]

Of bigger potential concern for the future are two issues. Firstly, there is a risk that the economic security of the islanders might be undermined by loss of access to EU markets, especially for key exports such as fish and agricultural products – with these European exports thought to account for 70 per cent of the Falklands' total GDP.[418] Secondly, interviewees noted that plans to invest £180m in the islands' defence over the next decade – including additional helicopters, a maritime patrol vessel, upgrades to the RAF airbase and modernised air defences – could be affected if Brexit resulted in significant economic slowdown and additional pressure on UK defence budgets (see Chapter 3).[419]

Outstanding questions:

- Given economic uncertainty and the limited political influence of Overseas Territories, will the UK be willing and able to provide alternative funding to compensate for the potential loss of EU funds and market access?

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[416] Gotev (2016a)

[417] BBC News (2016a)

[418] Benwell and Pinkerton (2016, 8–14)

[419] MacLellan (2016)

7. Counterterrorism, organised crime, cyber and resilience

This section of the report addresses the potential implications of a UK exit from the EU for non-defence elements of security. This includes:

- The possible impact of Brexit on UK and European efforts to combat terrorism and serious and organised crime, including the future UK relationship with EU agencies such as Europol.
- The areas of concern and potential change from Brexit in the field of cybersecurity, including the effects on cross-border cooperation and the Digital Single Market (DSM).
- The potential consequences of Brexit for other aspects of resilience, including the protection of CNI and the space, environmental and energy dimensions of security.

As in other chapters, this also outlines outstanding questions facing both policymakers and the research community, reflecting the high level of uncertainty about the post-Brexit future and the differing extents to which subjects such as counterterrorism or cyber formed part of the referendum debate.

7.1. Terrorism and serious and organised crime

7.1.1. Regardless of Brexit, both the UK and EU face significant common threats from terrorism and serious and organised crime

The UK's vote to leave the EU raises significant questions about international cooperation and security at an already difficult juncture. Europe is currently facing the most significant security threat in over a decade. In July 2016, Europol published its annual EU Terrorism Situation and Trend Report (TE-SAT), recording a total of 211 'failed, foiled or completed [terrorist] attacks' in the last year in the EU, causing between them 151 deaths.[420] Worse, the TE-SAT 2016 figures do not include the 86 fatalities that occurred in Nice the week before its publication,[421] or the subsequent murder of a priest and one other at a church in Rouen.[422] In the last year alone, attacks in France, Belgium and Germany signal an increasing focus on international targeting by the ISIS, against which many EU member states are currently conducting military operations in the Middle East.[423] This and the growing number of European foreign

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[420] Europol (2016b)

[421] Time (2016)

[422] Jamieson and Ing (2016)

[423] Black et al. (2016)

fighters are posing new challenges for EU member states, with approximately 850 people from the UK travelling to support or fight for jihadist organisations in Syria and Iraq.[424] As the threat of further terrorist attacks in Europe (and the UK)[425] remains high, there remains a pressing need for the UK and EU to strengthen responses to suspected terrorist networks and foreign fighters.[426] Poor coordination between European agencies to share intelligence, track targets and combat the smuggling of small arms have been blamed as contributing factors in the recent Paris and Brussels attacks, with EU leaders renewing calls for increased intelligence sharing at the European level to combat this transnational threat.[427]

This security problem is exacerbated by the wider challenges of the ongoing migrant crisis, which has placed additional stresses on European institutions' already-strained resources. The large-scale movement of migrants and refugees into Europe – more than one million in 2015 – not only poses major humanitarian and economic difficulties, but has also raised public fears that the EU's porous borders could become a vector for terrorists to move between training sites in the Middle East and North Africa and potential targets in Europe. In fact, the radicalisation of EU citizens remains perhaps the main threat, and alternative routes into Europe exist (many of them easier for would-be jihadists than risking death at sea on a migrant boat). Nonetheless, the example of the attacks in Paris in November 2015, in which four ISIS terrorists entered Greece and crossed Europe posing as refugees, has exacerbated political disputes between EU members about securing individual national borders.[428] The Hungarian Government explicitly linked migrant movements to the risk of terrorism ahead of its controversial referendum on EU migrant quotas,[429] in which 98 per cent of voters elected to defy Brussels (though turnout failed to meet the required threshold).[430] Interviewees noted that Brexit could only exacerbate such centrifugal and nationalist tensions at this critical point for cross-border responses to terrorism.

Serious and organised crime also poses a major threat to Europe and the UK. The most recent EU Serious and Organised Crime Threat Assessment notes that there are an estimated 3,600 organised crime groups active in the EU,[431] while the top five threats to the UK identified by the NCA for 2016 are child sexual exploitation and abuse, organised immigration crime, cybercrime, firearms and high-end money laundering.[432] Interviewees noted that the threats from terrorism and serious and organised crime have become increasingly interconnected, with terrorist groups and criminals sharing many of the same characteristics, methods and networks.

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[424] BBC News (2016k)

[425] The Joint Terrorism Analysis Centre has set the level of the current threat from international terrorism at 'severe', its second-highest level. See MI5 Security Service (n.d.)

[426] Europol (2016a)

[427] Witte and Morris (2015)

[428] Faiola and Mekhennet (2016)

[429] New Arab (2016)

[430] BBC News (2016f)

[431] Europol (2013)

[432] National Crime Agency (2016)

7.1.2. Potential risks or benefits for UK and European security formed an important element of the Brexit referendum debate

The potential impact of Brexit on UK and EU efforts to counter terrorism and organised crime has been a major subject of debate during and since the referendum campaign, with both sides claiming security advantages in support of their arguments for Leave or Remain.

When former Prime Minister David Cameron called the EU referendum in February, he claimed that EU membership made Britain safer, citing opportunities for information sharing and cooperation with European intelligence services and police.[433] In similar fashion, the then Home Secretary Theresa May insisted that being in the EU made Britain 'more safe from crime and terrorism' given EU member states' access to intelligence databases and the EAW, which allows members to fast-track the extradition of individuals from other EU countries.[434]

However, former head of the UK's Secret Intelligence Service (MI6) Sir Richard Dearlove claimed that 'the truth about Brexit from a national security perspective is that the cost to Britain would be low', with other Brexit proponents arguing that EU membership was far less important for intelligence sharing than the UK's access to the Five Eyes network – linking Britain with the US, Canada, Australia and New Zealand – and that it would be straightforward to replicate cooperation with Europe following Brexit.[435] Another argument presented by the Leave campaign focused on UK border security, with former Work and Pensions Secretary Iain Duncan Smith claiming that EU membership 'leaves the door open' to similar attacks to those that hit Paris in 2015.[436]

On the European side, the Brexit referendum has raised fears about the possible impact on cooperation with the UK, which has perhaps the largest and most global intelligence apparatus of any EU member, a respected policing approach, and historically a leading role in many EU security initiatives. Indeed, when the UK's EU Commissioner Lord Hill resigned in the days following the Brexit vote,[437] his replacement Julian King was notably assigned the Commission's security portfolio – joining other high-level Brits running Europol (see below) and the European Parliament's Civil Liberties, Justice and Home Affairs committee, which is responsible for scrutiny of EU initiatives in this area.[438]

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[433] BBC News (2016d)

[434] Economist (2016e); European Commission (2016a)

[435] Economist (2016e)

[436] BBC News (2016j)

[437] Rankin (2016a).

[438] de la Baume and Cooper (2016).

Interviews conducted as part of this study have also raised questions over how Brexit will affect UK and EU capacity to tackle terrorism and organised crime. Particular areas of concern include:

- The UK's future relationship with Europol.[439]
- Continued UK access to the EAW and other EU criminal justice measures.
- Mechanisms for intelligence- and information sharing following Brexit.

Interviewees noted that the strong mutual interest in cooperation is likely to endure after Brexit, particularly at the operational level, but argued that potential outcomes are also likely to be influenced by the level of political goodwill maintained or lost through wider negotiations on the UK's future relations with the EU.

7.1.3. The UK will need to define a new relationship with Europol after Brexit, having previously played a leading role within the agency

Many post-Brexit concerns focus on Europol. As the EU's law enforcement agency, Europol is a central point for information exchange and investigations on cross-border crime, with around 800 staff at its HQ in The Hague and some 145 Europol Liaison Officers seconded from EU member states. Intended to serve as a centre for law enforcement expertise and hub for information sharing, operational support and analysis (lacking its own investigative authority), Europol also hosts the European Counter Terrorism Centre, which coordinates responses to terrorism across the EU, and the European Cybercrime Centre (EC3) (see Section 7.2 below). The UK plays an important role in Europol: around 40 per cent of Europol casework reportedly has a British focus and last year UK authorities initiated some 2,500 cases for cross-border investigation and support at the agency.[440] Since 2009, Europol's Director has been a British citizen and former Security Service (MI5) official, Rob Wainwright; meanwhile, within the NCA the UK International Crime Bureau provides a UK Europol National Unit.

A number of potential models for post-Brexit cooperation with Europol exist. Possible outcomes include:

- **Full membership of Europol:** In this scenario, the UK negotiates a favourable Brexit deal for continued full membership of Europol, meaning it continues to have access to European security databases and the right to lead operational projects.
- **Reapplication to become a second-tier member:** After Brexit, the UK could make use of the extant model for Europol cooperation with non-EU countries, as already used by Australia, Canada, Norway, Switzerland and others. To do so, it would have to reapply for membership and lose organisational influence, full access to security databases and the ability to lead operations. Security experts have suggested this could be the most likely outcome for future UK engagement after Brexit, being deemed more politically feasible despite its operational drawbacks.[441]

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[439] Similar issues will have to be debated concerning the UK's future relationships with CEPOL, Eurojust, EC3, ENISA and other EU policing and criminal justice bodies (for some of which the UK already chooses to 'opt out').

[440] Paravicini (2016)

[441] Rankin (2016b)

- **Supplemental agreement with Europol:** In addition to non-EU association with Europol, the UK could conceivably seek to follow the example of the US, which has signed a supplemental agreement for the exchange of some personal data and related information.
- **Cease cooperation:** Should the UK lose membership, it would lose access to EU policing resources, including European security databases holding information on vehicle licence plates, guns, foreign fighters and organised crime.

Losing access to Europol could have a significant impact, both for the UK and the EU. The UK's current involvement in Europol is extensive, as indicated by almost half of Europol cases involving a UK dimension and UK agencies carrying out 250,000 searches of Europol databases each year. By leaving Europol, the UK may therefore lose access to vital information on security threats and increase the time taken to extradite criminal terrorist suspects from EU member state countries. Interviewees also noted that Britain has been a key contributor to Europol's development to date, leading operations and important developments in policing and crime technology, and so the EU would stand to lose access to the UK's law enforcement capabilities.

Interviewees largely agreed that Brexit is likely to limit the UK's future involvement in Europol. While some suggested that the UK is likely to lose access to Europol altogether, others felt it most likely that the UK will be able to negotiate second-tier involvement in Europol in a similar way to Norway or Switzerland. However, the key difference between the UK case and those of Norway or Switzerland is that the UK is not part of the Schengen Area – a difference which may have implications for the UK's negotiating position. Several interviewees agreed that continued full membership of Europol is improbable in the long term and would most likely depend on the UK remaining in the EU, or else making concessions elsewhere to secure a special deal in Brexit negotiations. The list of third countries with which Europol is allowed to conclude cooperation agreements remains a subject for agreement by the Justice and Home Affairs Council of the EU, presenting potential political barriers to even second-tier membership if the UK's European relations were to sour and outweigh the common interest in tackling Europe's cross-border threats with UK input.[442]

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[442] Europol (2016c)

Box 11. Europol reform as a first test for UK–EU cooperation after Brexit

The debate over the UK's future engagement with Europol is not only significant due to that agency's role in countering crime and terrorism. It also has a wider political and symbolic role in the wider discussion over Brexit negotiations, with Europol having been described after the June vote as 'first in line for life after Brexit'.[443] Prior to the UK's referendum, the EU had already begun the process of reforming the agency's powers, with the new arrangement due to come into force in May 2017, requiring the UK to agree to continued membership and funding or else invoke its 'opt-out'. The proposed alterations represent a response to recent terror attacks in EU states and will give the European Parliament greater powers of scrutiny over Europol as well as pushing for more information sharing from governments.[444]

In November 2016, the UK Government defied a number of earlier reports to the contrary by announcing its intent to remain a member of the reformed Europol, at least until the UK completes the process of leaving the EU.[445] British MEP Claude Moraes, who chairs the European Parliament's Civil Liberties, Justice and Home Affairs Committee, had previously argued that this choice to opt in or out of Europol represents 'a big political and constitutional test for the UK, a sort of pre-Article 50 test'.[446] Reaffirming the UK's commitment to Europol – at least for the short term, whilst Brexit talks unfold – will be seen as a positive step by security officials and welcomed in other European capitals. However, whether this interim decision represents a temporary respite, or an early signal of a more long term commitment to stay closely engaged in this and other European agencies, still remains to be seen.

7.1.4. The UK has already opted out of many EU criminal justice measures, but Brexit raises concerns about future access to key tools like the European Arrest Warrant

The issue of Brexit also raises questions concerning which other aspects of the EU crime and justice system the UK will retain and the form these will take. In 2013, the UK negotiated extensive opt-outs from the 135 EU criminal justice measures, subsequently choosing to opt back into only 35 provisions including Europol, Eurojust, the Schengen Information System (SIS), the European Judicial Network (EJN) and the EAW.[447] According to interviewees, the EAW has been particularly useful for the UK and EU member states in dealing quickly with criminals who attempt to flee the country (see, for example, Chapter 6 for the EAW's impact on the French and Irish borders).

The spectrum of possible outcomes in this area includes continued UK access to the 35 EU crime and justice measures, initial loss of access to those measures and regaining of access on a case-by-case basis, and permanent loss of access. The UK regaining access on a case-by-case basis would likely require the agreement of all remaining member states and the UK may find itself without voting rights in the negotiation of new EU rules. While this may not pose immediate practical or operational problems

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[443] Paravicini (2016)

[444] de la Baume (2016)

[445] Maurice (2016)

[446] Paravicini (2016)

[447] 6KBW College Hall (2016)

(setting aside the wider political and sovereignty questions), in the longer term, this would raise the possibility of a divergence between UK and EU priorities, for instance on which areas of crime to focus on. For the UK, this would mean it would have to comply with EU policies which it may increasingly disagree with; for the EU, it would mean the loss of UK input and leadership in an area where UK security bodies have often provided important leadership, for instance in the dissemination of UK-inspired criminal intelligence models to police forces across Europe.

Several interviewees argued that continued UK access to the 35 EU crime and justice measures is improbable, as this outcome would not be politically acceptable to the EU policymaking community. Should the UK lose access to all measures with no scope for regaining access, this would also be likely to delay investigations and criminal prosecutions. Permanent loss of access to EU crime and justice measures would mean that the UK would either negotiate individual treaties with member states or fall back on non-European multilateral agreements such as the Council of Europe Convention on Extradition or the UN Palermo Convention on Transnational Organised Crime.

7.1.5. Sharing of information may be more affected than that of intelligence after Brexit, with the UK likely to invest more in bilateral and non-EU mechanisms

Questions also arise over how UK and EU information- and intelligence sharing mechanisms will be affected by Brexit. Security information is currently exchanged via a range of mechanisms including Passenger Name Record (PNR) data sharing, EU R&D funding (Horizon 2020) and data pooled via Europol, SIS II, the Radicalisation Awareness Network (RAN), Eurojust and the EU Intelligence and Situation Centre (EU INTCEN). Beyond the EU, the UK shares intelligence with its Five Eyes partners and with other countries on a bilateral basis.

Potential outcomes of Brexit in this area include the UK retaining access to EU security information, regaining partial access or losing input to these mechanisms entirely.

As existing arrangements between the EU and non-EU countries such as Iceland and Switzerland indicate, continued UK access to SIS II and to EU member states' national policing databases may require the UK to join the Schengen Area and to abolish UK–EU border control. Such a development appears extremely unlikely given the UK's strong prior opposition to Schengen and the particular emphasis placed on 'taking back control' of UK borders in the Brexit referendum campaign. Full continued UK access to EU information sharing channels may also prove politically unacceptable to other EU member states, despite mutual security interests, given the requirement to demonstrate that 'Brexit means Brexit'.

Regaining partial access to EU security information would instead entail more ad hoc information sharing arrangements being formed between the UK and EU in areas of perceived mutual importance – for example, PNR data sharing.[448] Existing arrangements between the EU and non-EU countries indicate that the UK would indeed be able to share security information in such a manner. For example, given that the EU has already signed treaties on the exchange of PNR with the US, Canada and Australia,[449] a UK–EU

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[448] European Parliament (2016)

[449] European Commission (2016e)

PNR treaty could be drawn up to allow the UK access to the PNR data of EU member state signatories and vice versa. The 'no access' option would mean that the UK would invest its security resources instead in UK agencies and initiatives, bilateral information sharing arrangements and other multilateral arrangements such as Five Eyes, Interpol, the Financial Action Task Force (FATF) and the G8 Counterterrorism Action Group.

While the UK is said to provide more security information than it receives, one interviewee noted that even small quantities of information can be very important and so it may be in both UK and EU interests to continue to exchange information. Similarly, another interviewee claimed that it will be more difficult for the UK to counter crime without prior intelligence from Europe – which could have security and cost implications. While most intelligence sharing already happens at bilateral levels, rather than through the EU, analysts have noted that the web of different overlapping arrangements needed with different actors can increase the human and financial resources needed to manage all the various interfaces, as well as potentially increasing the chances that something critical might 'fall through the cracks' or be delayed – with Gomis saying that 'bilateral cooperation is no easy endeavour'.[450]

Others, however, took a more optimistic view. Echoing the views of former MI6 head Sir Richard Dearlove, some interviewees suggested that the impact of Brexit on intelligence sharing could be fairly limited, as the EU lacks formalised intelligence exchange mechanisms. The UK will retain some of the most experienced and well-funded intelligence agencies, with particular technical capabilities, regional expertise and global reach that make it likely to remain an attractive, valued partner for European counterparts. In turn, UK agencies look to benefit from the particular strengths of EU member states, while the informal personal and institutional bonds of trust that underpin cooperation at the operational level are long-standing and not necessarily likely to follow the more formal changes in UK–EU relationships due to Brexit.

Outstanding questions:

- How are security threats to the UK and Europe likely to evolve after the UK leaves the EU?
- How will Brexit affect the UK's bilateral security arrangements with EU member states, both directly and indirectly?
- How can any negative impacts of Brexit on the UK and EU's ability to tackle terrorism and organised crime be mitigated?
- How can the UK maximise EU security benefits as a non-EU member? Which mechanisms or institutions have been most beneficial to date, and should thus be prioritised?
- How effective are different intelligence sharing models?

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[450] Gomis (2016)

Box 12. Combating financial crime and illicit financial flows after Brexit

Given the City of London's status as a leading global financial centre and growing recognition in recent years of the need to combat illicit cross-border financial flows, many of which benefit organised crime, corrupt regimes and terrorists, there has also been concern over the impact of Brexit on the fight against financial crime. As in other areas of information- and intelligence sharing, many of the most important mechanisms should not be directly affected by Brexit. This includes FATF, of which the UK is a member in its own right irrespective of the EU, or the ongoing cooperation between national financial intelligence units in the Egmont Group, not to mention high-level political fora such as the G7 or G20. However, according to Keatinge, Brexit would nonetheless be a 'significantly retrograde step' for those fighting financial crime and terrorist financing 'for the simple reason that, given the globalised nature of finance, tackling the associated crime needs more, not less partnership'.[451]

The question of whether the UK will be able to achieve 'passporting rights' for British-based financial firms, depending on the degree of access to the single market agreed in a Brexit deal (see Chapter 3), will also likely impact on the long-term influence and interest of the UK in being a global leader on financial crime issues. The UK's decision to leave comes at a time when the European Commission is negotiating a number of new proposals to combat money laundering in response to terrorist attacks in France and Belgium, as well as the 'Panama Papers' scandal.[452] As Artingsall notes, the UK disagrees on a number of points (for instance, on the privacy of family trusts) and faces 'negotiating on some unwelcome proposals' in parallel to negotiations to leave the EU. While the UK does not have to accept the proposals to meet FATF standards, 'it may be necessary to do so in order to achieve future equivalence with EU standards from outside the bloc, a possible factor in single market access'.[453]

7.2. Cybersecurity

7.2.1. Brexit also comes at an important point in the political and institutional development of cybersecurity matters in both Europe and the UK

Under the strategic aim to become a world leader in cybersecurity, the UK has set out an ambitious agenda to improve sovereign capabilities in cybersecurity, cybercrime and cyber defence, as well as to promote norms, deterrence and international cooperation. In November 2016, the UK Government launched an updated national cybersecurity strategy, including £1.9bn of investments over the coming five years, the establishment of the new National Cyber Security Centre, and plans to develop further the UK's offensive cyber capability. (The new strategy does not directly address the issue of Brexit, but does outline the UK's intent to continue to work closely with international partners, including the EU but also other groupings such as the UN, NATO, G20, Commonwealth and OSCE.)[454] Cybersecurity is similarly

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[451] Keatinge (2016)

[452] European Commission (2016f)

[453] Artingsall (2016)

[454] HM Government (2016e)

a priority issue for the EU. The Union published its own cybersecurity strategy in 2013 committing to an open, safe and secure cyberspace, and has increasingly directed resources at improving European information sharing, network security and data protection. A number of institutional arrangements have been set up or improved in this process, such as the EU-level computer emergency response team EU-CERT, the European Network and Information Security Agency (ENISA) and the EC3 within Europol.

To date, the UK has been a committed partner in strengthening European cybersecurity and has played a significant role in developing and securing cooperation around the EU cybersecurity strategy and the Directive on security of network and information systems (the NIS Directive).[455] However, there have also been tensions in the UK–EU relationship on cybersecurity, particularly in reference to balancing the need for intelligence-gathering with European privacy and data protection concerns.

7.2.2. Cybersecurity did not receive much consideration in the Brexit debate and will remain a priority for both sides even after the vote

Cybersecurity did not feature prominently in the Brexit debate in the UK or at the EU level; nor was it a focus for debate in much of the literature reviewed or interviews conducted for this study. Considering the relative political importance cybersecurity seems to play on both the domestic and regional level, this is perhaps somewhat surprising. It could be that analysts and policymakers foresee limited change in the cybersecurity relationship between the UK and the EU in the case of Brexit and a smooth transition for the UK to a non-member status. Furthermore, several key aspects of cybersecurity cooperation, such as CIRT-to-CIRT information sharing, have developed on an operational level rather than through a mandated bilateral government or regional European effort, which could also make them resilient to institutional changes.[456] Cybersecurity also remains a fundamentally global policy problem that warrants cross-border cooperation, and it would perhaps be surprising to see policymakers either on the British or European side abandoning these discussions entirely after Brexit, given strong continuing common interest.

The relative absence of cybersecurity in the Brexit debate could also be attributed to the nature of British cybersecurity investments and strategy aims, as a majority of future cybersecurity investments and efforts are directed at national sovereign capabilities or initiatives outside the purview of the EU – in some respects mirroring military issues (see Chapter 4) rather than the deeper integration in the counterterrorism field. Much of the forthcoming £1.9bn investment is directed at setting up the National Cyber Security Centre and a new five-year National Cyber Security Programme; further investments in GCHQ; and overall cyber defence and offensive capabilities of the UK government and UK armed forces.[457] Other NSS SDSR cybersecurity priorities related to building deterrence and international collaboration, and many of the UK's ongoing diplomatic efforts in cybersecurity, are directed to non-EU arrangements such as the Council of Europe Convention on Cybercrime, the FCO Cyber Security Capacity Building Programme, the 'London Process' series of conferences on cyberspace, the Global

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[455] European Commission (2016g)
[456] Kiertzner (2016)
[457] HM Government (2015)

Forum on Cyber Expertise, the Commonwealth Cyber Governance Model, the UN Groups of Governmental Experts[458] and Organization for Security and Co-operation in Europe (OSCE) confidence-building measures.[459] So, while the EU increasingly has invested in regional cybersecurity cooperation to attempt to raise its cybersecurity profile, the UK is a global leader in the domain and will most likely continue to aspire to be so, for the short term at least, despite any exit from the EU.[460]

7.2.3. Leaving the EU does however raises concerns about UK–EU policy divergence on data protection, privacy, critical infrastructure and the cyber skills base

The level of post-Brexit cybersecurity cooperation between the UK and the EU will significantly depend on the overall agreement that is reached in relation to British access to the single market, including free movement of services and people and other key trade agreement components.

However, there are pre-existing cases of non-EU member states cooperating on cybersecurity initiatives that the UK could explore as a model in its negotiations with the EU. EEA member Norway, for example, currently participates in the Horizon 2020 programme, the EU Cybersecurity Month and the EU–US Privacy Shield Initiative, and plans to adjust legislation to adhere to the NIS Directive and the General Data Protection Regulation (GDPR).[461] For its part, Switzerland is part of the European Government CERTs (EGC) group. Both these non-EU countries have participated in ENISA activities. It would therefore seem that there are avenues for the UK to actively engage with the EU on cybersecurity issues after Brexit negotiations should it see fit to do so.

Considering these precedents, when cybersecurity concerns were expressed in the literature review and interviews, it was primarily related to longer-term concerns in four areas:

- Data protection concerns and UK compliance with the GDPR and the NIS Directive
- UK access to and influence over the EU cybersecurity policy debate
- Critical infrastructure protection
- UK access to skilled cybersecurity professionals.

A key issue for the EU moving forward is the DSM, which aims to harmonise regulatory frameworks within the Union to enable a digitally driven economy and facilitate cross-border trading. The Commission envisions that the DSM will contribute up to €415bn per year to the EU economy and create hundreds of thousands of new jobs.[462] The UK has also been a strong proponent for the development of the DSM and has supported the removal of internal barriers to create an EU that is at the top of the global knowledge and innovation economy and fit for the digital age. It remains to be seen if

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[458] United Nations Office for Disarmament Affairs (2016)

[459] Cabinet Office (2016)

[460] Fidler (2016)

[461] European Commission (2016a)

[462] European Commission (2016c)

the importance of the DSM will endure the political distractions and technical wrangling of negotiations for a British exit and redefined relationship with Europe.

A key decider in the possible success of the DSM is the implementation of and compliance to the new GDPR.[463] Through the GDPR and the NIS Directive, both operators and data controllers will be subject to EU regulation if they operate within EU markets or involve EU citizens. This means that even though the UK may exit the EU, all British companies operating in other EU countries or selling goods and services to European citizens would still have to prove that they provide adequate data protection for EU citizens' personal data and compliance with the GDPR.[464] Given the amount of market integration between the UK and EU a substantial part of the UK economy would thus have to comply with at least some EU regulation regardless of the UK's EU membership status. This would likely also mean that the UK seeks to reform its Data Protection Act 1998 in line with the GDPR, so as not to fall foul of EU regulation and leave its private sector at a competitive disadvantage.[465] The UK Information Commissioner's Office, which is in charge of data protection regulation, has indicated that the UK is not considering abandoning its previous commitment to ensure British data protection alignment with the GDPR.

While the UK has opportunities to ensure compliance with the GDPR and the NIS Directive, it also runs the risk of losing its influence over the future cybersecurity policy direction of the EU. Outside formalised and institutionalised EU membership, the UK will have limited ability to influence the decisionmaking process beyond bilateral negotiations with the EU itself.[466] Considering that the UK is seen as a prominent world leader in cybersecurity this could potentially be a disadvantage for the EU, but it could likewise be a strategic disadvantage for the UK itself. The British approach to cybersecurity has sometimes diverged from the European agenda, particularly in relation to mass data-gathering for intelligence purposes and privacy standards. The UK's close cooperation with the US on intelligence matters and the revelations of GCHQ's surveillance practices through the Snowden affair brought European scrutiny to British cybersecurity practices, some even arguing that UK surveillance was a breach of European Human Rights.[467] Without a UK seat at the table of EU policy discussions, European cybersecurity may take a different path with a greater emphasis on data protection, resulting in a shift in the balance between the need for intelligence-gathering and the need for privacy protection.

Several of the interviewees expressed concerns about the role of critical infrastructure protection in the wider Brexit cybersecurity discussion. With a British departure from the EU, the critical infrastructure regulations part of the NIS Directive would no longer automatically apply to the UK and it would be up to UK policymakers to decide whether to ensure EU alignment or not. As with the data protection policy and the future of the GDPR, a British departure from the EU policy discussion could lead to disconnects

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[463] Gupta (2016)

[464] Castro-Edwards (2016)

[465] Menting (2016)

[466] Rasch (2016)

[467] BBC News (2015)

between the UK and the EU in critical infrastructure protection issues. Since a significant amount of UK and European infrastructure will remain interlinked, divergent policy responses may lead to increased risks if appropriate processes and procedures are not collaboratively agreed upon and implemented. There are also concerns in relation to where the UK will place its efforts in the cybersecurity domain. If the UK decreases European cooperation and instead relies on cooperation within NATO for its cybersecurity needs it may result in a shift in focus on the protection of civilian critical infrastructure (where the EU is a more natural fit than NATO) to a more militarised focus on cyber defence and the wider NATO infrastructure. Another key issue will be ensuring adequate resources for critical infrastructure issues within Whitehall. Brexit negotiations may require significant investments in terms of manpower and financial resources, which potentially could impact the availability of resources for the protection and supervision of critical infrastructure.[468]

Availability of and access to resources were also reflected in the wider concerns in relation to cybersecurity and Brexit. It is widely known that the technology industry, and particularly the cybersecurity industry, suffers from a widespread skills shortage and lack of qualified professionals.[469] One of the most challenging results of a British exit from the EU may thus lie in the risk of additional difficulties for the British government and companies to recruit and retain qualified cybersecurity professionals.[470] The demand for these skills is only projected to increase in the future and if a UK exit from the EU does not entail British access to the single market and free movement of people, it may shrink the available UK cybersecurity labour pool significantly (see Chapter 3 for the wider post-Brexit skills concerns of the defence industry). The UK Government may of course be able to negotiate some sort of fast-track mechanism to ensure European labour mobility in the cybersecurity area that could help mitigate some of these effects, but whether this happens will remain to be seen.

7.2.4. The impact on cybersecurity after Brexit will be shaped by wider Brexit negotiations, in particular the degree of UK compliance with single market rules

Cybersecurity matters were perhaps somewhat absent from the Brexit discussion in the literature and interviews. This could be an indication that cybersecurity is not a priority area for the UK or the EU, or that experts do not believe there will be significant impact in this area caused by a British exit from the EU. It could also show that the area is somewhat overlooked, particularly in the four issues identified in the study: data protection and compliance with the GDPR and the NIS Directive, UK access to and influence over the EU cybersecurity policy debate, critical infrastructure protection and UK access to skilled cybersecurity professionals. These areas could be priorities for near-term attention from policymakers or future research into potential implications, outcomes and impacts of Brexit in this field.

It seems evident that developments in the cybersecurity domain will be relatively dependent on the wider results of Brexit negotiations in relation to British access to the European and digital single markets, and

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[468] Besch and Black (2016)

[469] Paganini (2016)

[470] Kovacs (2016)

free movement. Nevertheless, the literature and the interviewees seem to suggest that both the EU and the UK should attempt close collaboration in moving forward with negotiations and discussions on cybersecurity. Interviewees also argued that policymakers should similarly attempt to avoid key issues in the cybersecurity discussion, such as critical infrastructure protection, being influenced by political spillover from other, more contentious issues.

Outstanding questions:

- How might Brexit catalyse or constrain the ambitions of both the UK and EU to be a world leader on cybersecurity issues?
- How might future European policy on cyber and related issues such as data protection and privacy evolve differently without the UK's input? How might the UK and EU disagree, and how to mitigate the negative effects of any such policy divergence?

7.3. Critical infrastructure and resilience

7.3.1. Protection of critical national infrastructure will remain a key priority for both the UK and EU after Brexit

Critical infrastructure and resilience is a functional area that spans a wide range of topics including the protection of CNI, space issues, energy security, environmental security and community resilience. Yet despite its breadth, the subject has been largely absent in the Brexit debate.

Both the UK and the EU have significant policy priorities and programmes in these areas, as well as ambitious strategic plans moving forwards. EU initiatives include the European Programme for Critical Infrastructure Protection (EPCIP), the Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO), the Civil Protection Mechanism (CPM) and the associated Emergency Response Coordination Centre (ERCC), as well as the EU Energy Security Strategy.

Prior to the referendum, the UK has to varying degrees participated in these initiatives and in relation to some areas, such as the protection of CNI, has expressed formal commitments to continue working with the EU.[471] As many of these issues have not been extensively discussed in the Brexit debate, there remains a large degree of uncertainty as to how these areas will be addressed by the UK Government or the EU and what the future may hold.

Protection of CNI is an important and growing priority of both the UK and EU, reflecting the increasing complexity and interconnectivity of those critical systems (energy, food, water, telecommunications, etc.) that underpin modern society. In the UK, this area of security is managed by the Centre for the Protection of National Infrastructure (CPNI), which works closely with other government departments and agencies, the police, the private sector and international partners.[472]

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[471] HM Government (2015)

[472] Centre for the Protection of National Infrastructure (2016)

Aiming to safeguard physical, personnel and cybersecurity, the principal challenges for the CPNI pertain to the threats posed by terrorism, espionage and cyberattacks, as well as the proliferation of weapons of mass destruction. The potential implications of Brexit in these areas are outlined above.

In addition, securing critical infrastructure and promoting wider community resilience also entails:

- Managing potential security risks from use of foreign technology in key national assets.
- Safeguarding against other hazards (e.g. natural disasters).
- Securing access to and use of space.

7.3.2. Leaving the EU may influence the UK's future willingness to embrace foreign involvement in key infrastructure projects and technology

Given the global nature of modern technology firm supply chains, much of the UK and EU's critical infrastructure relies on physical components and software produced in non-EU countries, in particular the US and China. One of the few recent high-profile debates over CNI in the UK has stemmed from plans for Chinese involvement in construction of a new nuclear power plant at Hinkley Point, Somerset.[473] These plans include Chinese financing for a new reactor to be built by French energy group EDF at Hinkley Point C, followed potentially by building another plant at Bradwell in Essex using Chinese nuclear technology.[474] This initiative has sparked concern in both Parliament and the UK media over the potential security risks of Chinese involvement, a former chief of staff for the new Prime Minister having previously argued the deal could allow China to 'shut down Britain's energy production at will' and accused the government of 'selling our national security to China'.[475] The UK Government and others caution that fears over China's role are overblown, noting that nuclear designs will be subject to the usual review of UK nuclear regulators as well as security agencies. Nor is it clear that China would want to build any so-called 'Trojan horse' into its hardware or code, given the risk that this would scupper the country's ambitious economic plans to become a world leader in civil nuclear technology if discovered.[476]

Nonetheless, the timing of approval for the Hinkley Point C reactor has prompted analysts to consider the effects of Brexit on the UK's relationship with China and its willingness to accept security risks in foreign deals more widely.[477] Following the political upheaval of the Brexit referendum, new Prime Minister Theresa May opted to delay the planned approval of Hinkley Point C to consult further with security chiefs (it was subsequently approved),[478] prompting an angry response from Chinese officials, who warned that reneging on the deal could damage economic relations at a 'critical historical juncture' for the UK as it sought new trading ties after Brexit.[479] Former business secretary and EU Commissioner

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[473] Ruddick (2016)

[474] EDF Energy (2015)

[475] Timothy (2015)

[476] Morison et al. (2016)

[477] Gracie (2016)

[478] Stewart et al. (2016)

Lord Mandelson has similarly argued that after Brexit the UK cannot be 'too fussy about who we do trade with'.[480]

Box 13. UK resilience against flooding after Brexit

Also potentially subject to some change is the UK's resilience against natural hazards, such as flooding. Beyond the economic and personal significance of major floods and similar events, they place a direct strain on the UK defence apparatus, with the UK armed forces having committed to make 10,000 troops available to deal with domestic emergencies of this kind (as well as terrorism).[481] The prevention aspects of environmental security (i.e. EU work in tackling with climate change) are addressed in Section 7.5 below, but there are also immediate practical concerns for protection measures in the UK after Brexit. The decision to leave the EU has for example raised concerns for UK local government over diminished access to EU regional development funds, out of which many flood defence projects are funded.[482] The EU Solidarity Fund also provides for disaster relief and reconstruction; the UK received over €162m of this money following major floods in June 2007, making it the fifth-largest recipient of EU assistance.[483] There are related questions about the possible effect of the UK leaving the CAP, which could mean fewer funds are available for farm and rural management. However, the UK Government itself committed to improve UK funding for flood defences even before Brexit and could choose to substitute EU funding with national monies, with calls since the referendum vote to use Brexit as an opportunity for a wider review of rural policy.[484]

7.4. Space policy and security

7.4.1. Space is a growing area of interest and investment for both the UK and EU, but the Brexit referendum focused on more terrestrial concerns

Despite being a policy priority under the 'Crisis response and resilience' heading in the 2015 SDSR, issues surrounding space have been almost completely absent from the Brexit campaign, which focused on more terrestrial concerns. The UK has recognised its growing reliance on access to space for its security, economy, disaster management and military capabilities, and also declared that it will continue to work with the EU to contribute to the global effort to ensure a safe and secure space environment. The UK has further expressed the aim for UK industry to become a world leader in developing technologies for the European Galileo global positioning system.[485] The UK space sector generates £11bn of revenues each year, around 35 per cent of which comes from exports, with a total workforce of around 34,000.[486] The EU is also an active actor in space policy through the European Union Satellite Centre (SATCEN), the

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[479] Press Association (2016b)

[480] Gayle (2016)

[481] HM Government (2015)

[482] Allen (2016)

[483] European Commission (2016h)

[484] Weaver and Carrington (2016)

[485] HM Government (2015)

[486] ADS Group (2016, 5)

EDA's satellite communications (SATCOM) programme, and its collaboration with the ESA. Given the level of ambition in regard to space policy from the UK and the EU, as well as the UK's concerns for the increasing congestion and competition of near space, and its ambition to publish a national space policy in the near future, it is perhaps surprising that this area has not been more prominent in the Brexit debate.[487]

Given the importance ascribed by both sides to space and space security, the UK's decision to leave the EU is unlikely to produce a radical change in policy or priorities in this area. For many current and planned projects, Brexit should not have a major direct effect, as these are dependent either on national or private-sector funding and capabilities, or on ESA frameworks. For instance, the UK MOD plans to update its Skynet military communication satellites, with the current PFI contract with Airbus due to expire in 2022 – though the form this update will take is not yet decided. Notwithstanding the possibility of major post-Brexit retrenchment for the defence budget, this is likely to remain an important acquisition priority and an attractive business opportunity for European firm Airbus (the £3.6bn Skynet-5 being the biggest outsourced military SATCOM deal ever).[488]

Box 14. UK and the European Space Agency after Brexit

As a non-EU body, the ESA will also likely remain the main vehicle for UK space collaboration. Around three-quarters of UK space spending goes through the organisation (making up 9.9 per cent of the ESA budget), and ESA Director-General Johann-Dietrich Woerner has said that for ESA programmes, Brexit should have little or no impact.[489] The UK has benefited from a disproportionate role on recent key programmes, with 20 per cent of industrial partners on the Rosetta Mission coming from the UK. Indeed, the month after the Brexit vote, the ESA announced €10m of investment in the UK's hypersonic Synergetic Air-Breathing Rocket Engine (SABRE) programme, on top of funding from the UK Space Agency and defence firm BAE Systems.[490] According to ADS, after Brexit 'it is likely [that the UK] would retain access to EDA programmes as an associate member, similar to the position Canada enjoys now'.[491] However, the 22-member ESA already has non-EU nations Norway and Switzerland as full members, so it is not clear that any change in the UK's membership status would be necessary.[492] Indeed, Dr Woerner has said 'the UK will remain a member state of ESA, this is very clear', while acknowledging that problems could arise in regard to UK access to key EU projects like Galileo or Copernicus (see below).[493]

Also not directly affected will be the UK membership in the Eumetsat meteorological satellite organisation, which works for the EU but retains a separate budget and 30-nation membership.[494]

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[487] de Selding (2016a)
[488] de Selding (2016b)
[489] de Selding (2016c)
[490] Pocock (2016b)
[491] ADS Group (2016, 21)
[492] de Selding (2016c)
[493] Phys (2016)
[494] de Selding (2016a)

7.4.2. The UK's exit comes at a critical juncture for EU space policy, risking loss of influence over the long-term agenda and reduced access to flagship programmes

However, the UK's decision could have a number of implications elsewhere. As in cyber, the Brexit vote comes at an important juncture, where the EU is poised to embark on a more ambitious role in space. The EU is already an important diplomatic actor in promoting space security (as a 'soft power' counterpart to US predominance in space or the militarised approaches of Russia and China), most notably through the Code of Conduct for Outer Space, initiated in 2008 and revised two years later.[495] The EU is also investing over €12bn in space in 2014–20, including in the Galileo and EGNOS satellite navigation systems and Copernicus Earth-observation programme. These have direct military as well as dual-use applications; until recently, Copernicus was known as 'Global Monitoring for Environment and Security' (GMES). Given the introduction of these important new capabilities, the Commission is currently developing 'A Space Strategy for Europe', which will outline the EU's priorities to 2030 and is expected to include deepening cooperation between the ESA and EDA.[496]

With Brexit, then, there is a risk that the UK may find itself with diminished influence over EU space policy, potentially including its defence and security component, depending on the UK's future relationship with the EDA (see Chapter 3). Already, the UK's vote has triggered calls in Berlin and Paris for a common EU satellite surveillance system to support European military operations.[497] There are also important industrial and research questions to consider, if UK and EU priorities in space diverge over time. ADS notes that UK organisations secured around 23 per cent of EU space funding available in FP7 (the predecessor to Horizon 2020), with the UK Space Agency hitherto playing 'a critical role in ensuring that EU funding is used in line with UK objectives and that UK companies and institutions can compete fairly for opportunities'.[498]

There are also potential security challenges in relation to the EU's flagship programmes. UK-based Surrey Satellite Technology Ltd (SSTL) is the prime contractor for Galileo's payload electronics. The current order of 22 satellites was contracted well ahead of Brexit and should thus be unaffected. However, the European Commission is currently running a competition for the next round of Galileo spacecraft and while SSTL has said it is bidding, it notes that Brexit does raise concerns about future access to the project,[499] with the market for Galileo services thought to be worth €6bn by 2015.[500] This applies for the UK military too. Currently, selected non-EU nations are able to take part in the Galileo programme, with permission: Norway has signed a security treaty with the EU allowing it do so.[501] However, it is not clear that this security treaty would be sufficient for a non-EU firm such as SSTL to have such a key role on future EU payloads, were the UK to adopt the same terms as a post-Brexit model. Furthermore, Norway

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[495] Zenko (2011)
[496] European Commission (2016i)
[497] Agence France Presse (2016)
[498] ADS Group (2016, 21)
[499] de Selding (2016c)
[500] Hollinger (2016)
[501] European Commission (2011)

is not allowed access to the Public Regulated Service, through which Galileo provides protected, encrypted signals for military users. Both Norway and the US Department of Defense are awaiting an EU decision on whether to grant access to these secure signals – the outcome could set a precedent for future UK access, assuming a similar security treaty were pursued to enter into force after Brexit.[502]

Outstanding questions:

- What will be the effect of Brexit on the new EU space strategy, both in terms of its content and the political capital expended upon it given other competing concerns for Europe's attention?
- How does the UK's exit from the EU affect the wider relationships between the overlapping memberships and mandates of the ESA, EDA and European Commission?
- Which models offer the most appropriate response to manage Brexit in response to technical and industrial questions thrown up by the UK's role in major EU programmes such as Galileo?

7.5. Energy and environmental security

Out of all the critical infrastructure and resilience focus areas, energy and environmental security figured most prominently in the literature review and the interviews. While energy security was not a leading issue for either campaign side in the run-up to the referendum, it is an important policy area with a wide range of potential implications following a UK exit from the EU. Two main themes concerning energy and Brexit were highlighted by the literature:

1. UK relationship with the European energy market frameworks
2. Potential implications for EU and UK climate policy.

7.5.1. The UK has emphasised the importance of having a strong voice in the EU to reinforce UK energy security; after Brexit, it could find its influence diminished

The UK energy market is integrated considerably with Europe. The UK has a dependence on fossil fuel imports and direct energy supply, importing 45 per cent of its total energy supplies. The largest foreign supplier is Norway (>30 per cent), followed by Russia (12 per cent) and the United States (7 per cent). Considering the lengthy construction times and uncertainty associated with major energy infrastructure projects (see Section 7.3 on Hinkley Point), the reduction in support for renewable energy sources and the projected increases in energy demand, it is likely that the UK could become increasingly reliant on European energy supplies in the near- to long-term future.[503]

The 2015 SDSR highlighted the potential vulnerabilities of the UK's reliance on global markets for imported energy, where disruption to supplies could expose the UK to price spikes or physical disruptions. The SDSR also emphasised the geopolitical concerns regarding energy security, particularly in relation to the UK and Europe's energy dependence on Russia and the Middle East. The review set out a number of planned strategic commitments to ensure a stable and abundant supply of energy for British

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[502] de Selding (2016c)

[503] Froggat et al. (2016)

and European citizens and the economy. These include continued investments into Hinkley Point, increasing EU energy production and supply routes, completing the European internal energy market, and ensuring a 'single voice' in communicating external EU energy policy. Energy security was thus among those areas of the SDSR with the greatest focus on the EU as both an object and partner in UK security policy and strategy.[504] In turn, the EU has been working to realise the internal energy market, designed to improve the underperforming European cross-border system by increasing investments, improving market competition and reducing market fragmentation. The internal energy market is intended to offer Europe improved energy supply and distribution, improve European energy security and allow for Europe to fully achieve its renewable energy potential.[505]

In proceeding with Brexit negotiations, UK policymakers may need to pay particular attention to how they seek to ensure UK energy supply and access to EU energy markets, and how to assist the EU in further developing its energy policies. Several articles and reports have discussed different potential models for energy cooperation for a UK outside the EU.[506] Most suggest that regardless of the model, the UK may face having less access to European energy markets and certainly less influence over EU energy policy:

- **Membership of EEA ('the Norwegian model'):** This would allow the UK to be fully integrated into the internal energy market. However, this would require the UK to adopt most EU energy legislation, but with considerably less influence on its contents and without any formal voting power. This option would also require financial contributions to the UK budget.

- **Membership of the EFTA, but not the EEA ('the Swiss model'):** This would be complemented by sector-specific bilateral agreements with the EU on energy issues, as well as a small contribution to the EU budget, and leave the UK as a participant in the EU energy market. This would still require the UK to harmonise energy legislation without the opportunity to influence it, but to a lesser extent than in the 'Norway' model.

- **Free trade agreement ('the Canadian model'):** This would not require the UK to contribute to the EU budget but would also leave the UK outside the EU energy-related finance programmes and without influence over EU energy policies, rules or standards.

Unless specifically catered for in the Brexit negotiations, the UK could also stand to lose access to key energy security mechanisms such as the gas Early Warning Mechanism and the Gas Advisory Council, as well as key European industry bodies such as the European Network of Transmission System Operators, though common interests in cooperation would persist.[507] As a non-EU member, the UK could also lose access to significant energy infrastructure funding mechanisms through the EIB and the EFSI.[508]

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[504] HM Government (2015)

[505] European Commission (2016j)

[506] See for example Flavell and Villanacci (2016); Froggatt et. al. (2016); Gubb and Tindale (2016), Mayer Brown (2016)

[507] Froggatt et al. (2016)

[508] Economist Intelligence Unit (2016)

At the same time, change in EU–UK cooperation may prove more limited than some fear. Energy interconnectivity and trade links already exist on relatively straightforward commercial terms and could foreseeably continue regardless of a British exit from the EU.[509] In the end, outcomes will depend on the type of wider economic and political cooperation that is negotiated between the EU and the UK. The feasibility of the different extant models is still clouded in uncertainty, particularly considering recent statements that it would be a mistake to look at models designed for other countries and that the UK will seek to develop a unique cooperation model tailored to UK needs. Europe has been a global leader in environmental policy, with any reduction in UK or EU ambition after Brexit potentially affecting environmental security

Although environmental policy was not given much consideration early on in the development of the EU, this has changed drastically in recent years. The EU is now a world leader in many environmental policy areas, with a comprehensive set of progressive environmental policies established.[510] Since the 1990s, the EU has also striven to be a leader in global climate change policy,[511] recently reinforced by the relative success of EU negotiations for the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC).[512]

The UK has also progressed from having an ambivalent attitude to environmental policy in the 1970s and 1980s to becoming a leading environmental actor within the EU and one of the most influential EU member states in relation to environmental and climate change policy.[513] Today, there is close integration between the UK, EU and international environmental law.[514]

The literature review and interviews showed two main areas sensitive to potential change as a result of the UK's decision to leave the EU:

- UK environmental policy standards
- Future direction of EU environmental policies.

A British exit from the EU would not necessarily mean any drop in UK environmental policy standards. However, without having to adhere to EU regulation it could become easier for future UK governments to weaken or abandon domestic policies.[515] The UK Government has reiterated its commitment to the 2008 Climate Change Act and meeting the UK's 2050 carbon reduction target. Yet recent reductions in subsidies for solar power and onshore wind generation, as well as the abandonment of the target for all new homes to be 'zero carbon', mean some observers are concerned that this could change in future.[516] The UK Government has indeed openly stated that EU legislation has been a main driver behind British

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[509] Butler (2016)

[510] Baldock et al. (2016)

[511] Groen (2015)

[512] Dupont and Trauner (2016)

[513] Baldock et al. (2016)

[514] Butler (2016)

[515] Economist Intelligence Unit (2016)

[516] Froggatt et al. (2016)

efforts to combat air pollution.[517] A poll conducted in advance of the referendum by the Institute of Environmental Management and Assessment (IEMA) showed that 65 per cent of 4,000 experts said they believe that environmental considerations could be 'reduced or removed' from future policy decisions on UK infrastructure in the event of Brexit. The same poll showed an overwhelming majority, 88 per cent, agree that EU frameworks are necessary to successfully address air pollution.[518]

The effects on environmental policies in the wake of a British departure from the EU could also be felt at the EU level, given the UK's importance and influence within European environmental policy. The UK, together with likeminded countries such as Germany, France and Sweden, has historically proposed a coordinated and strong European effort to combat climate change. If the UK were to leave the EU the internal power balance may shift from a strong stance on climate change action and decarbonisation, presenting a political opportunity for states that have traditionally promoted less rigorous policies.[519]

As the second-largest greenhouse-gas emitter in the EU, the UK also played an integral part in the EU negotiation bloc for the UN climate change negotiations, particularly in relation to the recent Paris Agreement. When the UK formally leaves the Union, the EU will be required to submit a new Intended Nationally Determined Contributions (INDC) to the UNFCCC as part of the Paris Agreement; without the UK, this resubmission could potentially be less stringent.[520]

Overall, environmental policy concerns need to be considered when proceeding with Brexit negotiations, particularly in relation to energy negotiations. Energy and environment will most likely be negotiated separately and energy will most likely be negotiated first, as from a political perspective it may be considered a higher priority. As such, policymakers need to be cognisant and informed of possible spillover between the two areas and its potential consequences, both on domestic UK and regional EU levels.

Outstanding questions:

- What effect, if any, will Brexit and its economic and political uncertainties have on the ambition of the UK and EU to be leading global players on environmental policy and standards?
- Through which mechanisms and diplomatic strategies can the UK best ensure a strong voice in European energy security matters once outside of the EU? How might these evolve differently without the UK influence?

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[517] Kramer (2016)

[518] Institute of Environmental Management and Assessment (2016)

[519] Froggatt et al. (2016)

[520] Stanley (2016)

8. Emerging themes and reflections

8.1. Context of deep uncertainty

Barring constitutional crisis or a reversal of British public sentiment (perhaps at a General Election or second referendum), 'Brexit means Brexit'. It is less clear, however, quite which Brexit that might be. The UK ballot offered only a binary choice of 'in' and 'out'. Political leaders on both sides of the Channel are now working to define a more concrete vision for what they want to achieve from Brexit negotiations and the framing of new relationships that will continue after Britain leaves the EU. This process of reflection and debate is also taking place both within and between institutions – in parliaments, government departments, military organisations, security agencies, police and industry – and in European electorates. All sides will have to accept trade-offs between their competing visions, and the degree to which the eventual outcome proves positive or unsatisfactory to different parties will depend not only on the effectiveness of negotiating strategies, but also on external and as yet unforeseen events out of any one actor's control. The timelines to develop new post-Brexit arrangements remain uncertain, too, and the tools untested. Mechanisms such as Article 50 were not designed to be used; by being invoked, like all deterrents, the clause has failed its primary objective to keep members within the EU, and may not necessarily prove the most suitable framework for both sides to reach the best possible outcome.[521]

This study does not seek to predict what the future *will* look like after the UK's withdrawal. Rather, the analysis has sought to outline the spectrum of plausible futures, exploring the 'left and right of the arc' for what *may* occur in different policy areas, as well as the main drivers and constraints that will determine the nature of those outcomes. Where possible, it has also sought to identify some of the interdependencies and dynamics that will make Brexit negotiations so complex and their eventual outcomes so difficult to predict. How might one policy option both depend upon and reinforce goodwill with European partners? Where might decisions in one area close off options elsewhere, with what net effect?

Given deep economic and political uncertainty, the experts and literature consulted through this study outlined a wide spectrum of potential outcomes, opportunities and risks. On many issues, the study team found more questions than answers. However, despite the many disagreements and ambiguities, a number of common themes and considerations did emerge.

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[521] Hooton and Stone (2016)

These are outlined in the chapter below, comprising:

- Implications of Brexit for defence and security in the UK and EU
- Knock-on effects of Brexit for cooperation with non-EU institutions and allies.

8.2. Implications of Brexit for defence and security in the UK and EU

8.2.1. Brexit may pose more immediate practical challenges for security than defence, though both are subject to deep long-term uncertainty

- The immediate day-to-day impact of Brexit may be felt less keenly in defence than other policy areas, such as trade, market regulation or social policy. This reflects the continuing focus on the nation-state as the primary actor on defence matters, while international collaboration is predominantly at the intergovernmental rather than supranational level. Despite its ambitions and future plans, the EU is not yet a major defence player; in no small part, of course, due to the UK's strong opposition to past European initiatives that it felt might duplicate or impact NATO.
- The UK will continue to work closely with allies even after Brexit, doing so through the wide range of extant bilateral, regional and international fora: some very operational or technocratic, others more strategic, such as the UK's permanent seat on the UN Security Council. Institutional cooperation with NATO, OCCAR, the OSCE and others will endure, albeit with some indirect complications arising from Brexit. Despite increased uncertainty about its future role and economic resources, for the foreseeable future the UK should remain a global actor able to project a combination of 'hard' and 'soft' power far more than any other EU nation, besides France.
- Compared to defence, leaving the EU presents more immediate practical challenges for security. The UK and its European partners will need to urgently reaffirm or redefine existing models for cooperation on transnational issues such as terrorism, organised crime and cybersecurity. Experts express particular concern over the potential loss of UK access and input to EU information sharing platforms and the EAW. For many stakeholders, security cooperation is seen as 'too big to fail', given the potential human and political costs of weakening UK or EU security at a time of such substantial threat. This suggests that a solution will have to be found, perhaps with greater urgency than developing new frameworks for cooperation on defence. While other bi- or multilateral mechanisms do already exist, shifting towards a more fragmented approach may entail higher administrative costs, unwanted delays and the risk that potential threats might 'fall through the cracks' when institutions manage lots of different interfaces.
- Indeed, Europol has already provided one of the first tests of progress towards a new UK–EU relationship, with the UK Government having had to decide whether to renew or reject membership in a reformed Europol alongside moving towards the launch of wider Brexit talks.
- Some other aspects of security cooperation may be less affected, however, with the UK remaining a member of the important Five Eyes network, and most intelligence sharing with and between European agencies continuing to take place outside of EU frameworks.

8.2.2. The UK leaves the EU at a critical juncture for defence and security, with reduced influence over the EU policy agenda increasing the risk of long-term divergence

- Even before Brexit, Europe was facing a number of significant security threats, including a resurgent Russia, terrorism, the migrant crisis, conflict in the Middle East, and the disruptive effects of new technologies and actors in cyber and space. The UK decision to leave the EU thus comes at a moment when European institutions are already planning a more ambitious role or collective response to these issues. This includes plans for: direct funding of defence research; the introduction of a new EU border force; an increased role for Europol; the promotion of new cyber regulation and the DSM; and the development of flagship space programmes like Copernicus and Galileo.

- The UK's vote to leave the EU adds further uncertainty and new potential complications to this changing policy landscape. These include practical challenges, such as the possible loss of the UK's contributions of funding, talent and important capabilities (e.g. HQ for Operation Atalanta), as well as political issues, such as the risk that leaders become distracted by Brexit negotiations.

- The UK may well have reduced influence over the EU's long-term agenda. Depending on the outcomes of wider negotiations over the single market, it may therefore have to learn to accept imposition of EU rules in important areas, such as defence procurement or cybersecurity, where it no longer has an input to European policy. The EU, in turn, will need to still consider the concerns and priorities of the UK after Brexit, either through informal channels or mechanisms for non-EU consultation. Both sides otherwise risk divergence to the detriment of both parties, undermining cooperation on issues of mutual interest by both government and industry.

- For defence, the withdrawal of the UK offers a number of opportunities for the EU to move forward with an increased EDA budget and proposals for further integration (see below). There is concern among some Europeans, however, over the loss of UK involvement for the credibility of the EU as a military actor, as well as for the outcome of internal debates over issues such as the relationship with NATO, the liberalisation of defence markets or levels of defence spending.

- On the security side, the EU risks losing one of its most experienced and capable security, policing and intelligence actors from decisionmaking, reflected in very practical terms by the loss of UK representatives from leadership roles in the Commission, the European Parliament and Europol. Experts noted that, despite opting out of many JHA measures for political reasons, the UK has often been a driver behind EU reform in many of these areas, and influential in sharing best practice (e.g. disseminating its police criminal intelligence model) with other EU members.

8.2.3. Defence has emerged as a central theme of the EU's response to Brexit, which offers opportunities for further integration, though other obstacles remain

- In terms of defence spending, global footprint and high-end military capabilities, the loss of the UK could leave the EU significantly reduced as a defence and security actor. At the same time, Brexit raises questions about the EU's future credibility and ambition in this field, particularly if Europe hopes to be a counterbalance to US influence within NATO, or to Russia and China.

- However, the UK has in recent years already scaled back its involvement in CSDP, meaning that the practical and financial ramifications for extant missions are mostly comparatively minor; the UK has also indicated its willingness to continue contributing to EU operations after Brexit, where these align with national interests. Some experts suggest this may in fact mean greater UK input, whether to buy goodwill and demonstrate solidarity, or because of diminished domestic political opposition due to reduced fears of being drawn into a European army.

- For the EU, then, Brexit offers an opportunity and potential catalyst for increased defence integration, with many experts ascribing slow progress to date in this field on the UK's veto. Defence has thus emerged (perhaps surprisingly, given the minor role it has played in the referendum debate, or in European politics more generally) as a central theme of EU rhetoric and proposals issued since the Brexit vote to demonstrate the EU's enduring relevance despite the loss of one of its largest members. It remains to be seen whether the EU's increased focus on defence and security will endure, or if proposals for integration in this policy area were merely seen as 'low-hanging fruit' and politically expedient in the immediate post-referendum period.

- The UK's withdrawal from the EU may thus mean further steps towards European defence integration, especially with regard to comparatively uncontroversial issues and 'quick wins' such as increasing the EDA budget, promoting more defence research or potentially setting up an EU operational HQ. EU member states have also issued proposals for new ways to finance defence, including tax breaks, European defence bonds or opening up access to EIB and EFSI funding. The result could be an EU that is more capable, coherent and assertive on defence matters, with the net effect of improving European security despite the loss of UK capabilities.

- However, experts also caution that considerable challenges remain, even after Brexit. One concern is that the EU's post-Brexit focus on defence integration could merely be rhetorical, meant to demonstrate political unity, rather than signalling meaningful intent to develop Europe's military capabilities after years of declining investment. Another is the potential the EU could undermine NATO, as the UK has long argued. Other stakeholders worry that increased 'pooling and sharing' or 'defence bonds' could provide political cover and efficiency savings to allow EU member states to do less at national levels, using EU integration not to do more with the same, but rather to do the same with less. This would leave Europe weaker after Brexit.

- Indeed, the UK has not been the only obstacle to European defence integration in the past (and has even championed it, on various occasions). Other barriers remain, with a concern among stakeholders that the UK veto has hitherto provided a convenient 'alibi' masking disagreements between other EU members reluctant to commit to EU initiatives. Europe after Brexit still faces the long-standing difficulties posed by the divergent strategic cultures, threat prioritisation, financial and military means of 27 members. These include major differences in the positions of its two largest powers, Germany and France, with Berlin's latest White Book suggesting a more proactive military role, but Germans still more reluctant to use force than the French.

8.2.4. Brexit also raises questions about the future strategic goals of the EU, including the balance in focus between the east and southern neighbourhoods

- As well as post-Brexit uncertainty about Europe's ways and means to act collectively, the UK's decision to leave throws up questions about what ends the EU will hope in future to achieve.

- The launch of the EU Global Strategy marks a significant moment for Europe's ambition as an international diplomatic and security actor. Experts noted, however, that it had inevitably been overshadowed by the UK's vote, necessitating potentially not only a renewed political focus to regain momentum but also updates in subsequent guidance (e.g. a potential EU defence White Paper) to take account of the new post-Brexit reality.

- There is much disagreement as to whether Brexit will change Europe's foreign and security policy priorities. One area of concern is the impact of a diminished UK voice on the EU's sanctions policy, with the UK having been one of the most vocal critics of Russian aggression in Ukraine and the Baltic region. The loss of the UK could similarly destabilise the current power dynamic between those southern member states primarily concerned with the migrant crisis and terrorism, and those particularly in Poland and the Baltic States that emphasise collective territorial defence.

- Others note that the UK has traditionally held a more global outlook than the rest of the EU (with the possible exception of France). One concern is that Brexit could thus see the EU become more inward-facing and parochial, particularly if the UK's departure exacerbates internal discord over difficult issues such as the migrant crisis. Another possibility is that the EU reorients its 'global' strategy to those regions where its members retain a larger footprint, entailing perhaps a focus on Africa (where France and Spain have particular expertise and interests), compared to the UK's greater and growing emphasis on the Middle East and Asia-Pacific. Other experts disagreed, however, suggesting that Brexit may catalyse a more ambitious and engaged EU more generally.

8.2.5. Leaving the EU may also accelerate trends towards a changing role for the state, including increased emphasis on influence and prosperity through defence

- Changing political, strategic and economic circumstances after Brexit may not only require government doing different things, but also doing government differently. Experts focused in particular on the open question of whether the UK Government's pre-Brexit architecture (with recent amendments in the form of new departments for Brexit and for international trade) will prove best suited to its new post-Brexit goals and functions.

- One concern is over human and organisational resources in Whitehall. The UK embarks on Brexit with a civil service 18 per cent smaller than in 2010, and a Foreign and Commonwealth Office that has lost a quarter of its budget and hundreds of staff. The MOD, meanwhile, plans to reduce the number of civilians on its payroll by another 30 per cent by 2020. Managing Brexit alongside developing a new role in the world may further strain tight resources, or else incentivise UK Government to invest in growing skills and capability in key, outward-facing areas.

- Cross-government cooperation may become even more of a priority after Brexit. In recent years, the UK Government has promoted a 'comprehensive approach', with deepening institutional collaboration between the UK MOD, the Armed Forces, government departments, intelligence agencies, police and others. Some stakeholders expect this trend to accelerate following the decision to leave the EU, with the risk of reduced influence or financial resources after Brexit incentivising enhanced coordination across government (or potentially even a reorganisation of the current distinctions between departments for defence, foreign policy, development and trade).

- In particular, Brexit may presage a growing need for UK Defence to contribute more to promoting influence abroad. This builds on existing recent trends: the 2015 SDSR, for instance,

promised to make defence 'international by design' and made defence engagement (e.g. international cooperation, capacity-building activities) a funded, core MOD task for the first time, including the establishment of British Defence Staffs in the Middle East, Asia-Pacific and Africa to better understand and influence those regions. Stakeholders noted that these 'understand' and 'influence' functions would become even more important after Brexit, given the diminished access to the EU or EEAS and a potentially reduced ability to shape wider European solutions. Defence engagement and capacity-building efforts to support overseas allies also offer the UK a means of leveraging the expertise of its Armed Forces in support of diplomatic efforts to build new security and trading relationships outside of the EU; investing more in preventing conflicts early on would also reduce strain on uncertain defence budgets.

- One challenge, however, will be managing an already-planned but perhaps accelerated shift towards a mix of contingency and defence engagement activities in such a way as to proactively develop the capabilities and force structures that the military needs in the long term, rather than make ad hoc reforms and respond principally to urgent requirements, as has been the case in some recent decades. This may be difficult given the challenge of making long-term reforms and investments when faced with deep economic and political uncertainty.

- Brexit may similarly accentuate the recent trends towards greater collaboration between UK Government, armed forces and industry. Stakeholders noted that the increased demand for language specialists, trade negotiators, EU law experts and more due to Brexit could require increased outsourcing (an area where UK Government already outstrips many other EU states). Similarly, for defence, any additional strain on defence budgets in this period of uncertainty could increase the already-strong emphasis on achieving efficiency savings and access to a wider pool of skills through the 'Whole Force' approach, which brings together regular military personnel, reservists, civil servants and contractors. Indeed, this model could arguably provide some inspiration to other parts of government as the UK reconfigures after Brexit – one potentially more palatable to those Leave proponents who also argue for a smaller public sector.

- The growing emphasis in recent years on supporting UK defence exports is also likely to continue and may become increasingly important as a means of boosting the UK economy, driving down unit costs for the UK's own acquisitions and promoting new relationships with non-EU markets. Brexit also opens up potential opportunities for a more flexible procurement regime, or more interventionist UK defence industrial policy in future years, depending on the extent to which the UK remains subject to European single market rules or wants to diverge from current policy.

8.3. Knock-on effects for cooperation with non-EU institutions and allies

8.3.1. The UK will need to reaffirm or else redefine its ambitions to be a global actor after Brexit, including investing more effort in NATO and bilateral partnerships

- Though Brexit does not directly affect many of the UK's most important defence and security relationships, withdrawing from the EU will have consequences for the political, economic and military resources the UK is able to invest as well as its strategic role in multilateral institutions.

- Experts focused in particular on the uncertain implications of the UK's diminished role as an interlocutor between the US and Europe or between the EU and NATO. This will not only have

consequences for the influence and agency of the UK, but also may result in a growing duplication of effort between the EU and NATO on defence, or else a beneficial new arrangement between the two institutions, were they to seize upon Brexit as an opportunity to reshape the model for cooperation, perhaps with a more coherent 'EU bloc' within the Alliance.

- The UK may need to invest more heavily in NATO and its bilateral partnerships, especially in the near term, in order to demonstrate its continuing or reenergised engagement with the world after Brexit, as well as to offset its diminished influence as part of a European bloc. The need also to establish new trading relationships with the rest of the globe may accelerate an already-growing shift towards a UK security interest in securing global lines of communications and partners in Asia-Pacific, the Indian Ocean and other economies.

- The UK's ability to demonstrate clout on the global stage, however, will be a function not only of political ambition but of economic resources and the degree to which any uncertainty affects defence and foreign office budgets. Any additional pressure on defence spending as a result of Brexit could, however, further incentivise the UK to invest in further 'pooling and sharing'.

- The vote to leave the EU has also exacerbated constitutional tensions within the UK, particularly in relation to the Northern Ireland peace process and Scotland's place within the two unions. Though Brexit would in fact pose new practical difficulties for any independent Scotland, even the threat could leave it more inward-facing and constrained in acting on the global stage.

- In the event of any Scottish independence, there are particular uncertainties about the future of the UK nuclear deterrent, Scotland's relations with the UK and NATO, and the consequences of break-up for the UK's global ambitions and influence – a challenge analogous to that of Brexit, but potentially only exacerbated further by coinciding with it.

8.3.2. Other EU and non-EU nations will also be concerned to mitigate any disruption to their own defence and security relationships

- Brexit raises particular challenges for France. The French Government may find itself torn between its desire to deepen bilateral ties with the UK through the Lancaster House Treaties, its interest in deterring France's own Eurosceptics through a more punitive approach to Brexit, and its commitments to NATO and to further EU defence integration. The upcoming decision of the next stage of Anglo-French investment in FCAS may provide an early test or signal of the two countries' continuing interest in their bilateral partnership.

- The loss of the UK presents both a challenge and an opportunity to France's own place in multilateral defence organisations, potentially destabilising EU defence if Germany, Italy or other member states do not emerge to replace the UK as France's essential partner, but also offering Paris the possibility of supplanting London as the bridge between the EU and NATO.

- Other EU nations with which the UK has close bilateral defence ties will also need to appraise the implications of Brexit for their strategic priorities, in particular Denmark, Germany, the Netherlands, Poland, Sweden and the Baltic countries. Above all, the Republic of Ireland faces unique challenges to its own security, border and economy after Brexit, which will likely influence its wider engagement with the EU as Brexit negotiations unfold. Spain and Cyprus also face potential challenges arising from their borders with UK Overseas Territories, with further potential knock-on effects from Brexit on the relationship between Turkey, NATO and the EU.

- All EU member states will require new diplomatic strategies for engaging with, and maximising national influence within, multilateral institutions such as the EDA, where the balance between the UK and other large nations has hitherto been a defining feature of internal politics.

- Outside of Europe, the US retains a close partnership with the UK on defence and security matters, including deep ties on intelligence sharing, interoperability and nuclear technology. It will have a strong strategic incentive to push to minimise any negative consequences from Brexit for both its British and European allies, as well as the wider effects of economic and political uncertainty on its own national interests, regional stability and global order.

8.3.3. Alongside these challenges, Brexit also presents opportunities to rethink approaches to cooperation between overlapping groupings, NATO and the EU

- In many areas, there are several extant models which the UK could choose from when seeking to define a post-Brexit relationship with the EU. This is true for high-level economic relations: the UK could look to differing options in Norway, Switzerland, Canada and Turkey, for example. It also applies to individual institutions: one option would be associate status in Europol; another would be an Administrative Arrangement with the EDA.

- All models involve trade-offs, however, and imply a reduction in UK influence over EU affairs. It may be that existing models do not suit UK–EU relations in the long run, designed as they were for smaller states without the UK's economic, military or security clout. However, they are likely to prove much more politically and administratively expedient than negotiating a bespoke model, and could provide a useful interim step while the UK took more time to define post-Brexit roles.

- The potential need to develop bespoke new models for institutional cooperation to suit the specifics of the UK could set precedents for other states such as Norway, Switzerland or even the US, which input to EU institutions but remain formally at the Union's periphery.

- In the longer term, Brexit could thus become an opportunity to re-examine how different groupings with overlapping memberships cooperate with each other on transnational issues. The most immediate example is the question raised by Brexit about the UK's role as an intermediary between NATO and the EU; in practical terms, this may require at a minimum some reform (or reallocation) of the current DSACEUR role. More broadly, however, Brexit has prompted debates about how groupings can 'plug into each other'. These have included suggestions of a possible 'EU27+1' model to continue involving the UK in some EU deliberations, for instance through the Foreign Affairs Council. It is also reflected in debates about whether to pursue EU defence integration through the mechanisms of Permanent Structured Cooperation, or through a more ad hoc and flexible 'Schengen for defence', potentially involving non-EU member states.[522]

- Some stakeholders suggested Brexit could thus provoke a 'Berlin-Plus 2.0', helping create new frameworks for transnational and multi-institutional cooperation on complex issues such as collective defence, terrorism or the migrant crisis. Alternatively, however, the EU may be more focused on showing unity after Brexit and resistant to any suggestion of a multi-speed Europe.

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[522] Gentiloni and Pinotti (2016)

9. Future directions for policymakers and researchers

In light of the emerging themes outlined above, this final section of the report considers:

- The potential short-term challenges facing policymakers when integrating defence and security into the UK's exit talks with the EU.
- The outstanding questions and unknowns facing strategy-making and the research community in a period of deep political and economic uncertainty.

9.1. Integrating defence and security into the wider Brexit negotiations

9.1.1. Defence and security were not the main political issues in the referendum, nor are they expected to be among the highest priorities in Brexit negotiations

The UK's decision to leave the EU has thus raised a number of concerns and challenges, not least in relation to how international cooperation on defence and security issues will be reconfigured – either through the conscious policy choices of the actors involved, or through the imposition of different or reduced ambitions due to external factors such as economic performance or the threat environment. As shown throughout the report, there are a number of alternative models that the UK and EU could look to adopt after Brexit, and strong bonds of mutual trust and common interests are likely to endure at many institutional levels. The design of a new post-Brexit architecture and ways of working for defence and security will not take place in a vacuum, however. Outcomes for both the UK and Europe are likely to be intimately tied up with the question of how wider Brexit negotiations pan out, the new model for economic and political relations that is agreed, and the degree to which these complex and controversial talks present political barriers not only to a mutually beneficial compromise, but also to wider strategy-making in a world with many other coinciding issues and threats.

Defence and security did not constitute the main focus of Brexit referendum debates. While of obvious concern to the military, diplomatic and security officials consulted for this study, even this community of experts expected both UK and EU governments to prioritise other issues – most notably market access, financial passporting and migration controls – in upcoming Brexit negotiations.

9.1.2. UK and EU defence and security will remain deeply entwined, but Brexit risks the onset of a politics that treats cooperation as a 'zero-sum game'

Experts and literature emphasise that common security interests will endure, even after Brexit. Both sides face external threats (e.g. Russia) or transnational issues (e.g. migrant crisis, terrorism, cyber) that cannot

be dealt with effectively alone. Neither stands to benefit from any weakening of the other (notwithstanding the UK's concerns that a more assertive EU could undermine NATO). The 2010 Lancaster House Treaty between Britain and France affirms a mutual dependence that could as easily be applied to the UK and Europe: the two allies 'do not see situations arising in which the vital interests of either party could be threatened without the vital interests of the other also being threatened'.[523]

Both the UK and EU therefore share a strong operational incentive to develop new institutional arrangements, compromises and mechanisms that facilitate continued cooperation after Brexit. This is reinforced by the organisational and personal bonds of trust and mutual respect between British military, civil servants, intelligence officials, police, industry and their European counterparts, built up over decades of increasingly close joint working. The UK also possesses key capabilities that Europe lacks and values – for instance, the global reach of its intelligence network, or its high-end military equipment for power projection – while the UK in turn benefits from the expertise and resources of European partners.

Stakeholders, however, express deep concern that the difficult and potentially bitter politics of the wider Brexit negotiations (in particular, wrangling over access to the single market, financial passporting and the principle of free movement) could get in the way of more 'bottom-up' efforts to maintain close cooperation between UK and European institutions. Within the UK and EU, defence and security actors are likely to push for greater compromise and openness in Brexit talks than some other lobbies and political bodies. Defence and security researchers and industry in particular are likely to oppose proposed restrictions on access to the European single market or free movement of high-skilled labour. Defence ministries will similarly have an interest in maximising economic certainty and positive outcomes for trade as a means of underpinning defence budgets, though foreign and treasury departments may have competing concerns, such as deterring other Eurosceptic members or competing for national advantage in trade or financial services.

Setting aside wider issues such as trade, tariffs or migration, then, an adversarial approach and debates as to which 'side' is likely to benefit or suffer most from Brexit may not sit well with questions of defence and security. In the scenario that Brexit proves advantageous for UK security, as per the arguments of Leave proponents, for example, by boosting control over UK borders and freeing London to invest more in NATO, the net effect for the UK could still be deleterious if its withdrawal from the EU were to also leave the European neighbourhood fragmented, more inward-looking and less secure. The same would be true were EU defence integration to move forward and prosper without the UK's veto, but with Europe's closest ally, the UK, suffering deep military cutbacks due to economic uncertainty and difficulty trading after a punishing experience in Brexit negotiations.

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[523] Ghez et al. (2017, ch.2)

9.1.3. Unlike other areas of policy, the UK is seen as a net contributor to European security and defence. This perception raises difficult questions for both sides about whether, when and how to leverage this in wider Brexit negotiations

Given the UK's military, intelligence and security capabilities and expertise, many stakeholders perceive these as areas where Britain has been a net contributor to Europe – even if the UK has been more disengaged on certain issues, for instance CSDP missions, in recent years. The UK is Europe's largest defence spender, one of only two nuclear powers, and in possession of high-end equipment and global connections (not least with the US) that other EU member states lack. There is thus an inevitable temptation for the UK to use defence and security cooperation as potential leverage in Brexit negotiations to secure more favourable terms elsewhere, for instance on immigration or the single market. EU leaders have of course argued against any such transactional view, both because cooperation remains in the common interest, and as the EU may want to focus on those areas where it has most bargaining power.

However, lots of uncertainties need to be considered, despite this temptation. Experts consulted in this study noted that the value of UK contributions to defence and security is based on perception, not an objective quantification. The UK and the EU may have differing perceptions of their relative strengths in this area, as well as of the degree to which negotiating goals are prioritised or not over outcomes in other policy fields. Within the EU, similarly, member states are likely to have very different views of the issue and the UK's significance; Ireland has different national interests in security cooperation with the UK than Croatia, for example, while the Baltic States and Italy place contrasting levels of emphasis on collective defence or the migrant crisis. There is thus a risk that the UK could overplay its hand, if it has misjudged the importance ascribed by its negotiating partners to continued UK–EU defence and security cooperation.

Furthermore, there are risks associated with the degree and the timing with which defence and security issues enter into Brexit negotiations. Many stakeholders suggested that the UK should move early on to demonstrate its continuing commitment to supporting European defence and security, for instance through making clear it will not veto planned steps towards EU defence integration, or by reaffirming and investing further into Europol, bilateral partnerships and NATO. This would help minimise the risk of any disruption to important cooperative mechanisms and generate goodwill for the UK from EU partners which could be beneficial later in negotiations. Conversely, it could also restrict the UK's room for manoeuvre further down the line. Holding off on reaffirming the UK's commitments, however, risks losing goodwill, introducing additional damaging uncertainty to long-term planning and investments, and potentially leaving defence and security cooperation vulnerable to unravelling (despite common interests on both sides) if wider Brexit negotiations turn sour over time.

In addition, policymakers on both sides will be wary of any perception that defence and security is becoming overly transactional, given the likelihood this could provoke a domestic and international political backlash. If the UK is to be involved in future EU CSDP missions and so on, however, new political narratives may be needed to justify this involvement to post-Brexit public audiences, both those more Eurosceptic in the UK and those in Europe seeking to move forward with EU-only integration. This could be particularly difficult if Brexit negotiations create resentments between negotiating partners;

the UK electorate may be increasingly reluctant to (in its view) subsidise European security through higher defence spending by British taxpayers, for instance, if the UK economy were to suffer as a result of a punitive post-Brexit trade deal with the EU.

Given these concerns, a number of stakeholders raised the possibility that policymakers could try somehow to insulate agreements on defence and security from the thornier economic and political issues to be negotiated, as a means of preventing them from being undermined to all parties' detriment. While the UK and EU could agree to separate security-related issues from other policy disputes, informally, creating a more formalised 'firewall' between different policy areas would likely depend on the structure and format of the UK's eventual Brexit deal (which remains without precedent). One possibility, for instance, would be for the UK and EU to push for a more limited type of Brexit deal: for instance, a stripped-back withdrawal agreement focused only on those areas such as trade that are the exclusive competences of the EU (as with Common Commercial Policy arrangements),[524] which would be comparatively limited in scope and require only a qualified majority, rather than a more comprehensive 'mixed agreement' that would require all 27 EU members to agree.[525] This would open up the possibility of the UK and EU then concluding separate deals on post-Brexit arrangements in other functional areas (either sequentially or in parallel), including a deal for defence and security cooperation that would be less exposed to any veto or spoiler behaviour from individual states on unrelated issues.

9.1.4. Managing the interdependencies and complex timelines of Brexit alongside other potential shocks will strain the UK and EU's political, institutional and intellectual capacity for proactive strategy-making and collective action

Organising the process of Brexit will be a major challenge in and of itself. It will require the UK to rebuild lost capabilities (e.g. trade negotiating skills) and pose a major administrative burden on bureaucracies, legislatures and executives across both Britain and Europe, which have finite human, financial and political capital to devote to Brexit alongside other issues or potential future crises. Competing interests of different parties and the problematic timelines of elections in France and Germany and at the EU level create scheduling issues for when and how to proceed with issues that could be interdependent with progress elsewhere. These difficulties have been reflected already in the debates about when the UK should trigger Article 50, an important but comparatively clear choice compared to some of the political dilemmas that may come in the course of negotiations.

Furthermore, Brexit adds an additional lens through which other policy decisions must be considered. In the UK, this has already been seen in public debates over French and Chinese involvement in Hinkley Point C. How might a seemingly unrelated energy policy decision impact on the French approach to Brexit talks? How might it affect the chances of a post-Brexit trade deal with China? How might it constrain future freedom of action based on domestic political considerations? These sorts of questions

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[524] Flavier and Platon (2016)

[525] van der Loo and Blockmans (2016)

could tax policy and decisionmakers during a period of complex, shifting circumstances and deep uncertainty.

Indeed, many experts interviewed for this study expressed concern that this all could undermine the UK and Europe's ability to develop proactive and effective strategy-making in the near and medium term (regardless of the wider merits or risks of Brexit). One concern is that the UK and/or the EU could be forced into a state of constant 'crisis management', with short-term urgent decisions and the politics of Brexit negotiations reducing the ambition and the capacity to think more strategically about an engaged global leadership role. There is also uncertainty and concern about the best mix between 'top-down' and 'bottom-up' decisionmaking. Political leaders may not be best placed for the highly technical task of unpicking or reshaping institutional and operational-level arrangements between the EU and UK; at the same time, seemingly technical decisions 'at the coal face' of defence and security cooperation could have unintended, unpredictable and cascading political consequences for post-Brexit relations, given the complexity, sensitivity and unprecedented nature of the situation.

Many stakeholders noted that the UK and EU may well have to face these challenges in parallel not only with ongoing problems (e.g. the migrant crisis), but also new and as yet unforeseen 'strategic shocks'. Given interviews for this study took place in the final months of the US presidential election, many experts raised the question of whether the UK, EU and NATO had sufficient intellectual and organisational capacity to handle the change brought about by Brexit alongside that of any overhaul in US policy resulting from a victory for Donald Trump. Other examples raised included the potential for a major terrorist attack, economic or financial crisis, or external opportunism or aggression, perhaps by Russia. Worse, some experts feared that adversaries would actively seek to exploit the West's temporary inward focus on Brexit and diminished ability to think about other possible 'Black Swans' – making further strategic shocks potentially more damaging.[526]

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[526] The term 'Black Swan' is a metaphor used to describe unexpected, hard-to-predict and highly impactful events that appear as outliers, but in fact play a dominant role in history given their magnitude and consequence. See: Taleb (2007)

9.2. Towards a framework for strategic decisionmaking in the context of deep uncertainty and lessons learned for 'the next Brexit'

The UK's decision to leave the EU has thus provoked a period of deep uncertainty. This represents a challenge to policymakers and the research community that supports them.

This report has sought to signpost throughout some of the key outstanding questions and areas for further investigation. Many of these fall into the following areas of consideration across a sliding scale from reflection on the past to prediction of the future:

- **Historical analysis:** What precedents or analogous past situations could provide useful lessons for the UK and EU in dealing with Brexit?

- **Evaluation of the status quo:** How beneficial or effective has UK membership of different EU initiatives and institutions been (e.g. Europol, EDA)? How should this influence decisions on whether to pursue continued collaboration after Brexit? How might the UK's departure create new opportunities and risks for both the UK and EU?

- **Options analysis and benchmarking:** What are the strengths and weaknesses of different potential models for the UK and EU after Brexit? What trade-offs are involved in each? How does the UK compare to other countries using different extant models, e.g. Norway, Switzerland?

- **Policy and negotiation planning:** How best to achieve the desired ends for the UK and/or Europe from upcoming Brexit negotiations and the post-Brexit settlement?

- **Forecasting and prediction:** What possible futures exist as a result of Brexit? What will the consequences be for economic performance, election results, or other specific issues?

Throughout the study, many stakeholders thus discussed how and whether institutions could have done more to prepare for the questions and decisions thrown up by Brexit. In the UK, the Government did not engage in any contingency planning for the eventuality of losing the EU referendum, outside of some limited efforts by HM Treasury and the Bank of England to plan for any immediate financial shocks from a Brexit vote.[527] This contrasts with the approach to General Elections, where the civil service produces a range of different briefings and plans for both the incumbent government and the opposition, so as to ensure a smooth and speedy transition no matter the result.[528]

Within the UK Parliament, the Joint Committee on the National Security Strategy has also strongly criticised the lack of consideration of the possible consequences of Brexit in the latest 2015 SDSR, arguing that this placed politics over security.[529] Experts also noted the lack of academic or other research on the subject ahead of the referendum, a challenge also encountered ahead of the 2014 vote on Scottish

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[527] Besch and Black (2016)

[528] The UK Parliament's Public Administration and Constitutional Affairs Committee has launched an inquiry into the lessons that can be learned for future referendums, including a review of whether government planning for the possibility of a Leave victory was adequate, and whether the civil service should adopt a model similar to General Elections, with contingency planning for both possible outcomes.

[529] Foster (2016)

independence (see Chapter 5).[530] At the same time, going forward the UK Government and EU leaders face the task of striking a delicate political balance between exposing their plans and negotiation strategies to parliamentary and public scrutiny, while also retaining freedom of manoeuvre and confidentiality ahead of talks, as the new UK Prime Minister has argued.[531]

9.2.1. Tools and techniques already exist for ensuring robust decisionmaking in the face of deep uncertainty, as is the case for defence and security after Brexit

Indeed, Brexit has shown the potential fragility of some of the basic assumptions underpinning strategy and policy planning in the UK, EU and more widely. This raises questions about what could be 'the next Brexit' – if the election of Donald Trump as US President has not already claimed that mantle.[532] A number of stakeholders expressed concern about other upcoming election outcomes and the rise of populism. Others feared leaders could be insufficiently worried about Scottish independence, disengagement within NATO, or the risk of other EU member states following the UK's example.

One potential response to this context of deep uncertainty is to try to project possible futures. Certainly, many techniques for doing so exist – governments and indeed military organisations invest significant effort in horizon-scanning and futures studies. The UK MOD for instance produces its Global Strategic Trends analysis looking out to 2045,[533] and the UK Government maintains a 'Futures Toolkit' of different futures methodologies.[534] Other European[535] and US agencies conduct similar work, as do the private sector, think tanks and academia.[536]

Alternative tools exist, however, aimed not at predicting the *one or several most likely futures*, but rather at interrogating the assumptions that underpin these predictions (and could prove false, as with the belief that Brexit would not occur). They then seek to construct strategies that would be effective *across the greatest range of different plausible futures*. This analytical approach is known as 'robust decisionmaking' (RDM) and has been applied across numerous policy areas such as technology foresight, energy, resources planning and resilience. There are also specific techniques developed in relation to military planning: in the 1990s, for example, RAND first developed an approach for the US Army called 'assumption-based planning' for strategy-making in the context of very high uncertainty.[537] A brief description of this

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[530] Dorman (2014)

[531] Mardell (2016)

[532] Bershidsky (2016)

[533] UK Ministry of Defence (2014)

[534] Cabinet Office and Government Office for Science (2014)

[535] One EU-level example is the European Strategy and Policy Analysis System (ESPAS), which provides a framework for collective long-term strategic thinking and research across EU institutions. Previous RAND research for this platform includes Hoorens et al. (2013).

[536] The US National Intelligence Council produces its own Global Trends Report every four years, with the sixth iteration of the report (looking out to 2035) due in December 2016, in time to inform the new US President.

[537] Dewar et al. (1993), Dewar (2002)

method and an indication of the way in which such an RDM approach could be applied to the issue of Brexit are shown in Annex B.

It is clear that work is only just beginning on providing answers to the pressing and long-term questions thrown up by the uncertainty of the UK's decision to leave the EU. This is true of defence and security matters and more widely. Given the criticisms made by many stakeholders and political leaders of the uncertain evidence presented by both sides in the UK referendum campaign, many interviewees felt that Brexit should serve as an opportunity to reconsider the ways in which research and analysis are used to inform public debate.

9.2.2. Finally, Brexit exposed a deep divide between many policymakers in Westminster and Brussels and the general public, with implications for how to conduct public debates over issues such as defence and security

It is important finally to emphasise the point made by many interviewees for this study, as well as political leaders and others responding to the UK's referendum result: the Brexit vote exposed a divide between so-called 'policy elites' in Brussels and Westminster – with debate over the balance between 'experts' and public will an important feature of the referendum campaign[538] – and the general public, who may sometimes prioritise rather different issues (e.g. immigration) to the democratic institutions that represent them.[539] Brexit may provide lessons and warnings for other countries with significant populations within society that may not feel their voice is adequately heard by the current politics; similar trends can also be discerned in the unexpected political rise and eventual election to the US presidency of Donald Trump.[540]

For some stakeholders, the Brexit vote entails a need to reopen national conversations about the identity, role and ambition in the world of both the UK and the EU. It also raises as yet unanswered questions about how policymakers, the military and the research community can better engage with the public and inform political debate. Much analysis has focused on how 'ways' and 'means' might be affected by Brexit; but what 'ends' do the general public want the UK armed forces or EU defence integration to pursue in a post-Brexit world?

This RAND study shares the limitations of many others in the research community, focusing as it is does on the opinions and concerns of senior military, policy and academic experts. Further investigation is needed of public preferences and priorities, and thus the type of defence and security cooperation the public would wish to see and the trade-offs they are willing to accept in Brexit negotiations. What balance should be struck, for instance, between controls on immigration and trade, or between privacy, liberty and security in Europe?[541] Building sustainable post-Brexit solutions for defence and security could require not only compromise and continued engagement between the UK and EU, but also deeper

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[538] Mance (2016)

[539] Hockley (2016)

[540] Economist (2016f)

[541] For one example involving stated preference experiments with 26,000 EU citizens, see Patil et al. (2015)

engagement within societies to reach out to different audiences, testing and communicating the value of initiatives like Europol membership or EU defence integration to everyday lives, fears and aspirations.

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Annex A: Study objectives, scope and method

This RAND internally funded study aims to provide independent, objective analysis of the following research questions:

- What might be the defence and security implications of the UK leaving the EU for the UK, Europe, or globally?
- What steps could policymakers in the UK, Europe and globally take in the short term to address, mitigate or extract the most benefit from the implications of Brexit for defence and security?
- What research questions merit closest attention by defence and security policymakers and the research community in the context of deep uncertainty about Brexit?

It is intended to identify those specific policy areas, strategic concerns or military capabilities that might be most affected by Brexit, as well as to explore and define the spectrum of possible outcomes in each area. The study does not seek to provide predictions or present firm answers about the future after Brexit but to identify those issues most sensitive to potential change and the credible outcomes in each – as well as the drivers, challenges and interdependencies that will determine how any change unfolds. It is intended that this work should help policymakers both inside and outside the UK to understand the key questions provoked by Brexit, and thus to inform how defence and security actors begin to plan for, mitigate and address these uncertainties as the UK begins negotiations to leave the EU.

## A1 The study considers implications at the national, European and global level

This research sought to identify potential implications for the UK, for the EU and more widely:

- **National focus:** strategy, policy and spending; defence and security capabilities; regional issues
- **Regional focus:** EU institutions (e.g. Europol); non-EU bodies; bilateral arrangements
- **Global focus:** NATO; UK–US cooperation; other alliances.

A2 The RAND study team used a structured methodology combining literature review, sensitivity analysis and stakeholder engagement

To assess the potential defence and security implications of the UK's vote, the RAND study team used a structured multi-method approach, combining literature review, sensitivity analysis and wide stakeholder engagement. This approach comprised four phases, as detailed in Figure A.1.

Figure A.1 Overview of research approach
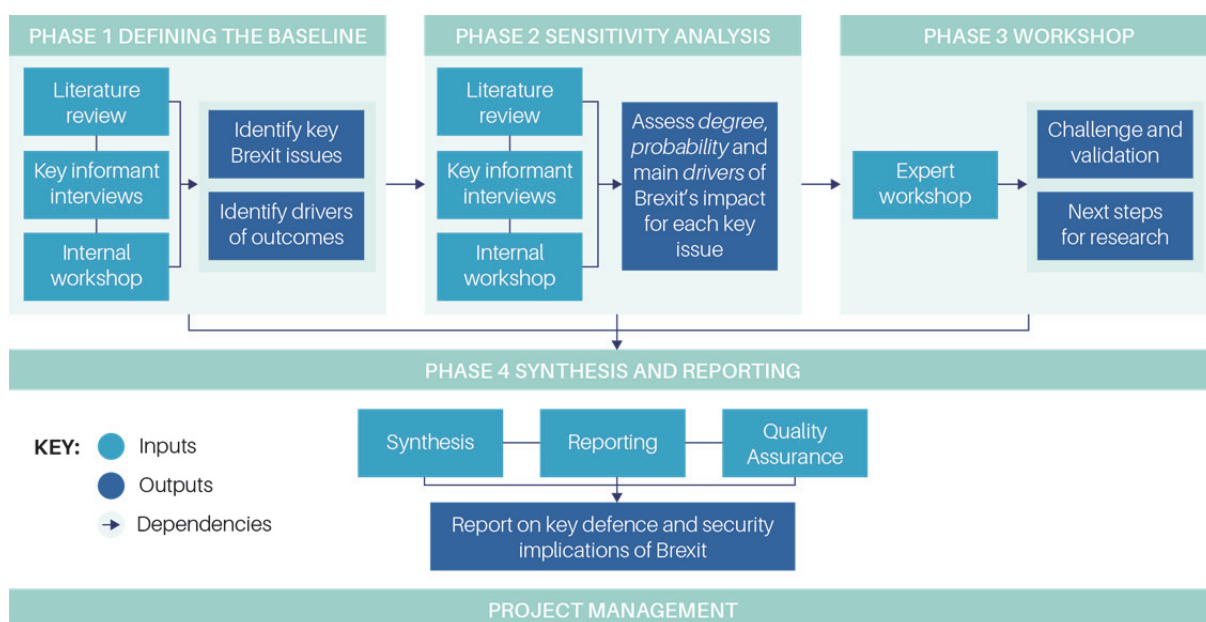
Phase 1: Defining the baseline

Before any assessment could be made of which issues might be affected by Brexit, it was important to first define what it is that the UK does as a defence and security actor. To do so, the study team conducted a review of relevant policy documents and other (e.g. academic) sources, as well as engaging with internal senior experts. This process used the most recent National Security Strategy and Strategic Defence and Security Review (SDSR 2015) and the UK Counterterrorism Strategy (CONTEST) as its starting point, before moving to consider the full range of other relevant strategic-level policy guidance from the UK, EU and non-EU institutions (e.g. NATO, United Nations [UN]).

Examples of sources used in defining the baseline

- National Security Strategy and Strategic Defence and Security Review 2015
- Defence Planning Assumptions
- MOD Single Departmental Plan 2015–20
- Defence Equipment Plan
- Defence Growth Partnership
- UK Counterterrorism Strategy (CONTEST)
- UK Cyber Security Strategy
- EU Global Strategy

- EU Common Security and Defence Policy (Treaty of Lisbon, Petersberg Tasks, etc.)
- EU Defence Directives
- EU institutions (e.g. EDA, Europol)
- Letter of Intent (LoI) on defence procurement
- NATO
- Five Eyes Treaty
- Five Power Defence Arrangements
- United Nations

It is important to define what is meant by 'defence and security'. The most recent SDSR takes a broad view, including everything from nuclear deterrence, military action and intelligence-gathering through to economic, energy and environmental security. To bound the scope of this study, the RAND team focused in particular on those functional areas included in National Security Objective 1: 'Protect our People'. These include the full spectrum of military, counterterrorism, cybersecurity and resilience-building instruments, as well as support for the defence industry and research and innovation. The focus, then, was on those responsibilities and tools of government on which the UK MOD, Home Office or intelligence services take the lead. Wider issues of 'soft power' (e.g. international development aid, or the influence of the BBC World Service) or 'economic security' were considered, but do not form the core of this analysis.

The future of UK foreign policy and economic performance after Brexit are complex and important topics currently affected by deep uncertainty and therefore merit more focused examination than this defence- and security-focused study can provide.

To define the 'baseline' across each of these functional areas, the study team identified the following:

- **Roles and responsibilities:** What are the UK's obligations, roles and responsibilities in this area? Where do these derive from (e.g. national policy, a formal bi- or multilateral treaty, or a non-binding political arrangement or norm)?
- **Commitments:** What are the UK's current and planned commitments in this area?
- **Capabilities:** What capabilities (e.g. funding, equipment, number of troops) does the UK contribute in this area?

For each of these elements, the RAND study team considered the degree to which each role, commitment or capability could be sensitive to change as a result of the UK's departure from the EU. This assessment used the following criteria:

- **Directly affected:** those issues that are formally contingent on the UK's membership of the EU (e.g. involvement in setting EU Common Security and Defence Policy).
- **Indirectly affected:** those issues that are not formally contingent on the UK's membership of the EU, but may be affected by Brexit (e.g. economic impact on defence spending, political impact on bilateral defence and security partnerships with European allies).
- **Not likely to be affected:** those issues that are not likely to be substantially affected, as either a sovereign UK policy issue or dependent on non-EU ties (e.g. with US).

In addition, the team conducted an initial analysis of the potential drivers – that is, those independent variables (e.g. economic performance, domestic politics or international influence) that shape the ability of the UK to deliver upon its objectives in each area. All information was collated in a data extraction matrix and subject to internal challenge and review by senior RAND experts with extensive experience of UK and European defence and security policy, as well as through an internal study team workshop.

Phase 2: Sensitivity analysis

In the second phase, the RAND study team developed a series of hypotheses for each functional area (e.g. nuclear deterrence, counterterrorism) to help understand the spectrum of credible potential outcomes in each as a result of Brexit. This process did not seek to predict the future, but rather to define the 'left and right of the arc' or scope of potential change.

To do so, the RAND team developed a series of outcomes analysis memos for different issues – over 30 in total – to describe the potential changes that could occur and the drivers that would shape them. This analysis drew on a literature review of publicly available sources. This included academic and peer-reviewed literature, specialist databases and portals (e.g. IHS Jane's), as well as public statements by relevant senior officials and political, military or police leaders in the UK, Europe and globally.

In addition, the different options and hypotheses were tested and expanded upon through some 42 semi-structured interviews with expert stakeholders from the UK, Europe and the US.[542] These experts ranged across national government, EU, NATO, military, policing, intelligence agency, think-tank and academic backgrounds, including various different nationalities. Individuals were selected based on strategic, policy and operational expertise, as well as prior work in this area, aiming to represent a diversity of national, political and institutional views on the merits or risks of Brexit.

A full list of experts is provided in Annex C.

Phase 3: Workshop

To provide additional opportunity for validation and challenge, RAND convened an expert workshop at a London venue on 16 September 2016. This half-day workshop involved a further 11 external experts either currently or formerly in senior positions in UK Government, the military, NATO, intelligence services, the defence industry and academia. Full details on participants are included in Annex C. This workshop discussed the potential outcomes in three key areas: the UK and EU's international roles as defence and security actors; the underpinning capabilities that support these; and the specific challenges facing counterterrorism and information sharing.

In addition, there was a particular focus on:

- Examining the **drivers of potential outcomes** for defence and security after Brexit, as well as the interdependencies between this field and the wider negotiations to leave the EU.
- Identifying the **immediate and short-term actions** that UK, EU and other policymakers can take to mitigate the risks and maximise the benefits of Brexit for defence and security.
- Outlining the **key research questions** that the research community (academic, think tank, other) needs to investigate to support policymaking and positive outcomes for defence and security.

Phase 4: Synthesis and reporting

The final phase of research was to synthesise all inputs and findings from the literature review, key informant interviews and expert workshop. The final report was subjected to review through RAND's internal Quality Assurance (QA) process, more information on which can be found online.

A3 Several important constraints applied to the conduct of this work

It is important to note that the findings presented in this RAND study are subject to a number of constraints both on scope and the efficacy of the research method:

- **Deep uncertainty about the future:** The future direction of policy, strategy and global affairs is inherently uncertain. The outcomes of Brexit will be shaped not only by decisionmakers in the UK, Europe and elsewhere, but also by external and as yet unforeseen events, with the potential for unpredictable interdependencies between developments in different policy areas.

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[542] Semi-structured interviews combine a robust pre-prepared interview protocol with opportunities for follow-on questions and further exploration of key issues where needed.

- **Limited scope:** The study is confined to examining the implications of Brexit for defence and security. It does not consider directly or in detail the wider diplomatic, economic, political or social ramifications of the UK leaving the EU – all issues which are inevitably interconnected.
- **Stakeholder engagement:** While the RAND study team engaged with over 50 senior experts from a range of backgrounds, as well as open-source literature, the insights and views of these experts are likely to represent unintended individual and institutional biases.
- **Practical constraints:** This RAND internally funded study was conducted by a multinational team of diverse political, professional and academic backgrounds and subject to QA review. However, it was conducted within a tight timeframe (July–October 2016) and with finite resources.

Given these limitations, the reader is urged to consider that the findings presented in this report are not intended to define a set vision for what the future of defence and security looks like after Brexit. Rather, they are intended to provide an independent, structured and analytical assessment of those key issues and questions that policymakers and the research community must begin to examine in more detail in order to shape the most positive outcomes from Britain's decision to leave the EU.

Annex B: Outline of potential assumption-based planning approach to Brexit

There are various structured methods aimed at enabling robust decisionmaking amid great uncertainty. One such example is 'assumption-based planning', an outline of which is shown in Figure B.1 below. This robust decisionmaking (RDM) approach was originally developed for the US Army as a tool to support military planning and strategy-making in the context of very high uncertainty.

Figure B.1 Outline of potential assumption-based planning approach to Brexit
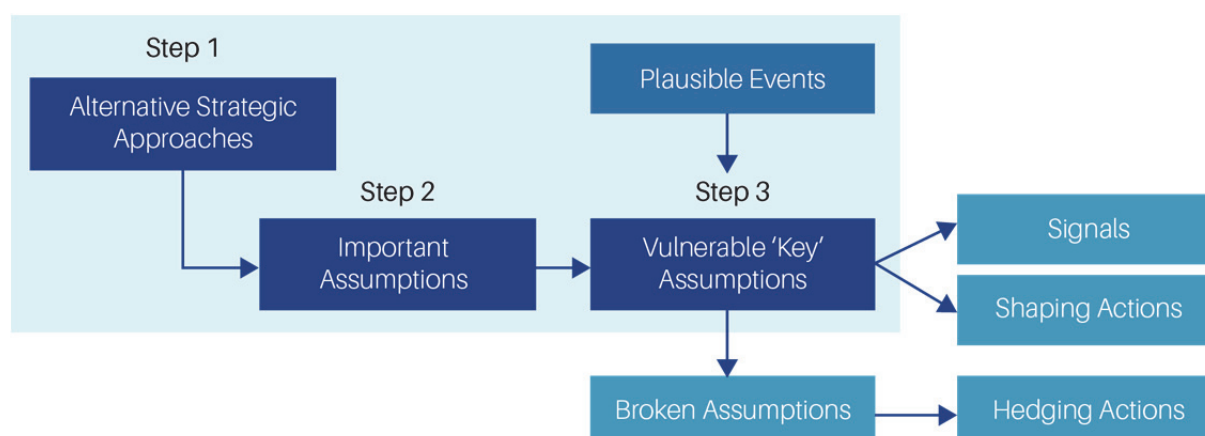
Assumption-based planning offers the potential to be used as a framework for thinking about Brexit negotiations, allowing policymakers to:

- **Define alternative strategic approaches:** What is the strategic vision or end-state that the UK/EU wants to achieve? What possible approaches and strategies could be pursued to do so?
- **Identify important and 'vulnerable' assumptions:** What explicit or implicit assumptions have policymakers made in drawing up these strategies and plans? Do they assume certain political or economic conditions, or preferences and constraints on the actions of their own party or others? Which of these assumptions might be subject to erosion or future change? Most importantly, which are the 'load-bearing' assumptions upon which successful future outcomes depend, but which might be vulnerable to being broken or proven wrong in future?
- **Consider effect of plausible events:** What are the possible effects of major plausible events on important assumptions? Of known or plausible future issues, which could involve a change in circumstances that would invalidate key assumptions and thus jeopardise a strategy's outcomes?

- **Identify and monitor potential signals of broken assumptions:** What would be the signal that an important assumption underpinning a plan is about to or has already been broken? What would be the reliable metrics to monitor and what is the threshold past which the risk of broken assumptions is judged sufficient to alter strategies or plans (e.g. economic data, political polling, the diplomatic and strategic signalling of international partners and potential adversaries).

- **Outline 'shaping actions' to maximise positive outcomes:** Given the potential vulnerability of a strategy's assumptions and different plausible events, what proactive actions can be taken to reinforce vulnerable assumptions (e.g. if assuming cooperation from a partner, proactively investing in deepening ties with that ally, or committing to provide necessary long-term funding to key institutions to reduce short-termist decisionmaking in the face of economic uncertainty)?

- **Implement 'hedging actions' to mitigate negative effects:** What more passive actions can be taken to mitigate the negative effects when assumptions do prove false and future outcomes suffer (e.g. reducing reliance on EU institutions to diversify in case future access is diminished)?

Such an approach could also be applied to making UK and EU strategy more resilient against other uncertainties and potential 'strategic shocks' like Brexit, for instance by considering:

- If Brexit was a 'vulnerable' assumption underpinning pre-referendum strategic security plans in the UK, Europe and NATO, what other assumptions might also be at risk?

- Are current plans robust across the range of plausible futures, given the additional uncertainty created by Brexit?

- What short-term shaping and hedging actions can policymakers take to derive the best possible future outcomes from other potential shocks, for instance possible US disengagement, mass terror attacks, economic crisis, environmental hazard, EU disintegration or Scottish independence?

Annex C: List of stakeholders

This annex provides further information on the stakeholders consulted through key informant interviews and the expert workshop. In addition to those listed in the tables below, a number of stakeholders requested that their contributions be made anonymous and thus have not been named. This includes senior military and civilian officials currently serving in a range of UK, European and US institutions.

Table C.1 List of selected interviewees

Name	Position	Organisation
Knud Bartels	General (retd.); former Chairman of the NATO Military Committee (2011–15); former Danish Chief of Defence	NATO, Royal Danish Army
Sophia Besch	Research Fellow	Centre for European Reform (CER)
Ian Bond	Director of Foreign Policy	CER; formerly FCO, NATO
Vincenzo Camporini	General (retd.); former Italian Chief of the Defence General Staff	Italian Air Force
Inge Ceuppens	Project Officer Dual-Use Technologies	EDA
Claire Chick	Defence Analyst	Franco-British Council
Lindsey Clutterbuck	Former Senior Research Leader, RAND Europe; retired counterterrorism police officer	RAND Europe, King's College London, New Scotland Yard,
Jonathon Conder	Head of Strategy	Marshall Aerospace
Paul Cornish	Former Research Group Director, Defence, Security and Infrastructure	RAND Europe, Chatham House
Tim Cross	Major General (retd.); former commander of British forces in Iraq	British Army
Paul Davies	Partner	Latham & Watkins
James de Waal	Senior Consulting Fellow, International Security	Chatham House
Giovanni Faleg	Associate Researcher	Centre for European Policy Studies

		(CEPS), World Bank
Jon Freeman	Research Group Director, Innovation, Health and Science	RAND Europe; formerly Dstl, UK MOD
Jan Gaspers	Head of Research, European China Policy Unit	Mercator Institute for China
Benoit Gomis	Associate Fellow	Chatham House, IHS Jane's
Christophe Goussot	Specialist in Anglo-French cooperation	Délégation aux affaires stratégiques
Bill Hughes	Former Director General UK Serious and Organised Crime Agency (SOCA)	SOCA
Rem Korteweg	Senior Research Fellow	CER
Anand Menon	Professor, Director of UK in a Changing Europe Programme	King's College London
Tim Oliver	Dahrendorf Fellow	LSE, New York University, School of Advanced International Studies
Sir David Omand	Former Director of GCHQ; now Visiting Professor, King's College London	GCHQ
Max-Peter Ratzel	Former Director of Europol	Europol
Tristram Riley-Smith	Associate Fellow, Centre for Science and Policy	University of Cambridge
Jonathan David Shaw	Major General (retd.); former Assistant Chief of Defence Staff (International Security Policy)	British Army
Sir Richard Shirreff	General (retd.); former Deputy Supreme Allied Commander Europe (DSACEUR)	NATO, British Army
Luis Simon	Professor of International Security, Institute for European Studies	Vrije Universiteit Brussel
Brooks Tigner	Chief Policy Analyst, EU/NATO affairs correspondent	Security Europe, IHS Jane's
Richard Whitman	Professor of Politics and International Relations	University of Kent, Chatham House
Nick Witney	Former Chief Executive of the EDA; Senior Policy Fellow, ECFR	European Council on Foreign Relations; formerly EDA
Stuart Young	Head of Centre for Defence Acquisition	Cranfield University

Table C.2 List of selected workshop participants

Name	Position	Organisation
Sir Anthony Dymock	Vice Admiral (retd.); former UK Military Representative to NATO	NATO, Royal Navy
Stewart Herron	Civil Servant	UK MOD Development, Concepts and Doctrine Centre (DCDC)
David Howarth	Professor of Law and Public Policy; former Member of Parliament	University of Cambridge, Electoral Commission
Tim Lawrenson	Director General, Europe	BAE Systems
Jocelyn Mawdsley	Senior Lecturer, Editor of *European Security*	Newcastle University
Tom McKane	Former Director General for Strategy and for Security Policy, MOD; Senior Associate Fellow	UK MOD, Royal United Services Institute, London School of Economics (LSE)
Sir Kevin Tebbit	Former Director of GCHQ; former Permanent Under Secretary of State for UK MOD	GCHQ, UK MOD