

The New Front Line:

Security in a changing world

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by Ian Kearns and Ken Gude

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Contents

About ippr	3
ippr Commission on National Security	3
About the authors	4
Acknowledgements	4
Comments and feedback	4
Executive summary	5
1. Introduction	9
2. Drivers and effects of a changed strategic landscape i) Globalisation and power diffusion	11 18 19 22
3. Implications of a changed strategic landscape	27 29
4. Conclusion	36
References	37
Appendix: The new front line of national security policy	41

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About the authors

Ian Kearns is Deputy Chair of the Commission on National Security in the 21st Century, Deputy Director of ippr and is currently leading the Institute's international and security programme. He has a broad range of experience in the private sector, as a former Director in the Global Government Industry practice at Electronic Data Systems (EDS), and in academia, as former Director of the Graduate Programme in International Studies and Lecturer in Politics at the University of Sheffield.

Ken Gude is a Visiting Fellow at ippr and Senior Adviser to the Commission on National Security in the 21st Century. He is currently the Associate Director of the International Rights and Responsibility Program at the Center for American Progress and has previously worked for several leading American think tanks, including the Center for National Security Studies and the Council on Foreign Relations.

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The views in this working paper are those of the authors alone and are being published here in the hope of advancing public debate. They do not represent the views of the Commission panel or the views of any sponsoring organisation.

Comments and feedback

We welcome written comments on all sections and aspects of the material presented here, and these should be sent in the first instance to the Commission's Deputy Chair, Ian Kearns, on i.kearns@ippr.org. The Commission will also be running a series of targeted calls for evidence throughout 2008 and more details of these can be found at www.ippr.org/security

Executive summary

This paper analyses the key changes taking place in the national and international security landscape and assesses their implications for policy, examining the context within which a national security strategy must now be forged. It is a submission to ippr's independent Commission on National Security in the 21st Century, capturing some of the early deliberations of the Commission. However, it should not at this stage be taken to represent the views of the Commission itself.

Drivers and effects of a changed strategic landscape

The paper identifies five drivers of change and their effects:

- i) Globalisation and power diffusion
- ii) Global poverty and failing states
- iii) Climate change
- iv) The growth of political Islam
- v) Socio-economic vulnerability.

As a result, it becomes clear that the contemporary security landscape is about much more than terrorism alone.

i) Globalisation and power diffusion

A globalisation-driven diffusion of power is underway in three senses.

The first is a relative diffusion of power within and among the community of states. This is visible in the rise of China and India, in the emergence of a wide range of newly important energy states and regions (including the Caspian Sea region, central Asia, Nigeria, Iran, Qatar, Algeria and Venezuela) and in the potential rise of new nuclear powers (not just via Iran and North Korea but also through the regional nuclear arms races they might provoke). This element of power diffusion is creating new centres of power, new regions of potential tension and conflict, and raises fundamental questions over the extent to which important international institutions still reflect the realities of global power.

The **second** dimension of power diffusion is from state to non-state actors, and to terrorist groups and organised crime networks in particular. This is driven by a process of technology dispersal and is evident in the increased destructive potential of such groups (a particular worry being the potential link between terrorist groups and access to weapons of mass destruction) and in their access to communications and encryption technologies which amplify their voice, extend their organisational reach and increase their capacity for evading law enforcement. Power diffusion to non-state actors raises questions over what was previously seen as a state monopoly on the use of devastating force. It also, particularly through corruption, raises questions about the capacity of organised crime networks to change the very character of states, turning some of them into pariah territories.

Third, an unplanned increase in inter-state power-sharing is considered in the form of increased security interdependence, both in terms of global interdependence (on issues such as climate change) and in terms of the specifics of the UK's interface with the globalised world economy. New vulnerabilities are identified here, on energy security, on drug smuggling into the UK, on the vulnerability of key strategic trade routes and on our exposure to a new pandemic. On all these issues, the key point made is that the UK is reliant for its security not only on decisions taken at home but on decisions taken elsewhere and by others.

ii) Global poverty and failing states

The second driver of change identified relates to the clutch of issues in the 'security-development' nexus. This is the point at which global poverty, inequality, violent conflict, and the phenomenon of weak and failing states interact, to devastating effect. Poverty kills more people than political violence, and is a driver of conflict and instability in many parts of the developing world. While not all weak and failing states are poor, many of them are, and poverty is a key factor in the proliferation of ungoverned and corruptly governed spaces in the international system. These in turn, as Afghanistan

and Somalia have shown, can become safe havens for terrorist and organised crime activity. In this context, the strong ignore the weak at their peril and for wealthier countries like the UK, moral imperatives to address global poverty have now been joined by narrower security interests.

iii) Climate change

Even under mid-range IPCC temperature increase scenarios, climate change is set to have a number of profound implications in the next two to three decades. China will face severe water stress and declining food production in important regions, at the same time as facing huge pressure to maintain very high levels of economic growth. How it responds to these pressures could be one of the defining features of the international security landscape for decades to come. South Asia, particularly Bangladesh, will be badly affected by the shrinkage of the Himalayan glaciers, possibly causing huge flows of environmental refugees across the region's borders, and resulting in regional instability. A new 'hydrological security complex' may develop in the Middle East as water dependency relationships, particularly for Israel, may become new sources of tension in an already volatile region. North, East and West Africa will all be badly affected by water stress, placing additional strain on some weak and failing states and possibly causing population movements across the Sahara and into Southern Europe as a result.

The UK itself will also be affected, in areas such as East Anglia that will be prone to storm surges and floods. Important military assets, such as naval and RAF bases, may also be at risk, as might overseas assets such as the supply and logistics base at Diego Garcia in the Indian Ocean.

Climate change, in short, is likely to accentuate a number of existing problems on the security agenda, and add new difficulties to those already present. As a security issue, it may quickly come to dwarf the issue of terrorism.

iv) The growth of political Islam

Our fourth driver of change is political Islam, which we define here as a political movement using religion for cover rather than as a religious movement engaged in politics. This movement, in its extreme forms, divides the world into categories of good (those who believe in the Islamists' interpretation of Islam) and evil (countries such as the UK, the US and France). The political programme of groups that subscribe to this ideology tends to be based on accusations of the manipulation of the Muslim world by both these countries directly and by the apostate rulers they are said to impose on predominantly Muslim countries. The Islamists' objectives therefore focus on the removal of such apostate rulers, the ending of malign interference in the affairs of the Muslim world, and even, for some, on the overthrow of the entire system of liberal democracy in the West.

These movements make appeals to the growing Muslim population in Europe and to those interested in possible conversion to the Islamists' version of Islam, and may connect with concerns over social exclusion, Islamophobia and identity crises experienced by some second and third generation Muslims living in the West. We argue that underlying radicalisation processes are not well understood and policy responses as yet, are not highly nuanced and well targeted.

v) Socio-economic vulnerability

The issue of socio-economic vulnerability, our fifth driver, is rising up the security agenda, partly as a consequence of changes to UK business practices (moving to lean production, reduced inventories, just in time delivery), partly as a result of stretched global supply chains and partly as a consequence of some changes to our own domestic infrastructure. The result is the emergence of a more tightly coupled society, increasingly reliant on a critical infrastructure that has little spare capacity. This exposes the UK to possible severe consequences in the event of failures in infrastructure brought about by terrorism, accident or severe weather incident, as the floods of summer 2007 made clear. Changes in ownership and control structures in relation to infrastructure also create governance challenges (around 80 per cent of important UK infrastructure is owned by the private sector).

Conclusions: where does all this leave us?

First, the landscape described is one in which the power to control the security environment is slipping

beyond the reach of governments acting alone. This is true at the global level on issues like climate change and the growth of ungoverned spaces, and it is true at home on issues like protection of a critical national infrastructure that the Government no longer owns.

Second, and consistent with this development, we increasingly live in a world of shared destinies in which the grievance, policy failure or insecurity of one quickly becomes the insecurity and policy problem of others. In this context security must be common to all or is unlikely to be delivered for any.

Third, and given the above, it is clear that the core challenge of security policy today is to enhance and extend our mechanisms of governance such that they better map on to and reflect the current realities of global power and better address the security concerns of all.

Implications of a changed strategic landscape

Below we address the implications that flow from this analysis.

The new front line: delimiting the terrain of security policy

We need to broaden the terrain currently classified as relevant to security policy. A concern with defending the UK against external military attack is still important but must now be nested within concern for more issues, more threats and risks, a wider range of actors, and also many more levels of analysis (from the global to the local). It is also argued that old notions of the security front line no longer work and that some front lines now exist overseas in places like Afghanistan, while some also exist at the local community level here at home. Many front lines involve the military, but others involve economic actors, community groups, and private sector businesses too. The new terrain of security policy is therefore more diverse and complex than the old.

Integrated power and collaborative security: a new strategic approach

A rethink in overall strategic approach is also required. It is not just that power is being diffused more widely and that the range of challenges is becoming broader and more complex, but that the requirements of projecting influence in these circumstances have changed too.

Below we summarise five principles that underpin UK policy responses in these circumstances:

- Principle 1: Adopt the notion of integrated power, that is, a more integrated use of a wider range of policy instruments, from military and policing instruments at one end of the spectrum to economic, social and cultural policy instruments at the other.
- Principle 2: Work in partnership with others, not just at multilateral level but also between different actors within the same state and between state actors and actors from the private and voluntary sector. In an era in which power is being diffused across a wider range of actors, influence will be maximised by those able to orchestrate and facilitate a widely distributed response.
- Principle 3: Commit to legitimacy of action. Partnership requires an agreed objective and vision across many actors. This itself can only be built on a widely perceived basis of legitimacy. Although it is not always easy to achieve widespread agreement, it is worth the effort as legitimacy acts as an influence multiplier, turning potential influence in the security environment into actual influence as many more actors pull in the same direction.
- Principle 4: Move to more open policymaking. Legitimacy is about process, not just substance. It can only be demonstrated if all actors feel agenda-setting approaches and decision-making processes are open. Official actors and multilateral partners must therefore look to share more information and to open up decision-making processes if they want to be effective in current circumstances.
- Principle 5: Be open to institutional reform. Given the need to think differently about how to influence the security environment, a commitment to institutional reform will be essential. Old institutional operating procedures and boundaries should not be allowed to stifle necessary innovation.

Questions for a national security strategy

A number of apparently pressing policy questions can be identified given the preceding analysis of the security environment. One set is related to anticipatory action on the sources of future possible threats and risks, and another is related to areas of current vulnerability.

Anticipatory questions focus on:

- How best to reform key international institutions and how best to strengthen a rules-based international order
- The linkages between climate change and other elements of the security agenda, both at home and abroad
- The steps that might be necessary to strengthen the nuclear non-proliferation regime
- The links between national energy strategy and international security, including on security of energy supply, and the security issues that may be raised by an international expansion in civil nuclear power
- The requirements of a political strategy to defeat the challenge of political Islam
- How best to tackle the poverty and inequality that are key factors in many failed and weak states and in much conflict and instability in the developing world
- How best to enhance our capacities for conflict prevention and post-conflict intervention in failed and failing states and conflict zones
- How best to prepare for the danger of a new disease pandemic.

Questions on current vulnerabilities focus on:

- How best to reduce the UK's socio-economic vulnerability and to build national and local resilience
- · How best to integrate policy instruments in the fight against transnational organised crime
- The security of strategic trade routes
- The security of global stocks of fissile material.

By identifying such a wide range of questions, the paper hopes to frame some of the forward debate on the development of the UK's first national security strategy.

1. Introduction

Over the last twenty years the UK and international security environment has changed dramatically. The end of the Cold War and the horrific attacks of 9/11 are but two developments among many that have signalled the arrival of a new 21st century landscape. New processes and drivers, from globalisation to climate change, and from the growth of political Islam to a more infrastructure-reliant society have come to the fore and now challenge both outdated analytical frameworks and old policy prescriptions. Power itself is on the move, being diffused more widely within and among the community of states and out to a wider group of actors including private businesses, terrorist groups and organised crime networks. In the developing world, interactive cycles of poverty, conflict and instability are plaguing many areas, creating ungoverned and corruptly governed spaces which in turn become safe havens for those who would do us harm. The scale of underlying change is huge, and the consequences becoming more and more apparent.

Policymakers are working hard to adapt and to keep up with the pace of change but the difficulties presented are significant and the progress uneven. As a result, while many of the efforts already underway are to be commended, and the Government's commitment to the development and publication of a UK national security strategy for the very first time is to be welcomed, now, more than ever before, the need for constructive external challenge is great.

The ippr Commission on National Security in the 21st Century, which has now met several times under the co-chairmanship of Lord Robertson of Port Ellen and Lord Ashdown of Norton-sub-Hamdon, has been set up precisely to provide such challenge through the development of an independently arrived-at national security strategy for the United Kingdom.

Purpose of this paper

In this ippr discussion paper, which is a submission to the Commission from the Deputy Chair and Commission Secretary and not an expression of the views of the Commission itself, we capture some of the emerging themes from the Commission's early deliberations. In doing so, we take stock of the changes occurring and offer an account of the many challenges they now present. We also assess the implications of change both for the scope of security policy itself and for the strategic priorities that may now need to be addressed. As such, this is not so much a paper expressing views on what the UK's national security strategy should now be, as a paper analysing the context within which the UK's national security strategy ought now to be forged.

Structure of the paper

The material that follows comes in two main parts. In Part 2 we present an account of contemporary security conditions. We address shifts in the global distribution of power, issues related to terrorism, the changing role of both state and non-state actors, and security relevant features of economic interdependence. We also examine the linkages between global poverty, inequality and conflict and the national security implications of a world increasingly threatened by climate change.

In this part of the paper, our objective is to show that the range and character of today's security challenges includes but goes beyond a traditional concern for the military defence of our home territory. In describing a much wider landscape, we relocate the debate on security policy to new and different terrain and provide, in the process, the basis for much needed reflection on how we might change strategy and policy in response.

This is followed, in Part 3, with a more detailed assessment of the implications of the analysis presented. We offer a new account of the terrain of security policy, which opens up the field to many more actors, issues and levels of analysis than can be captured by a more traditional approach. A concern with global poverty, with critical infrastructure protection and with domestic public safety from pandemic diseases and natural disasters is added, for example, to more traditional military and diplomatic concerns. Next we set out our thoughts on the character of the overall strategic response required in the new circumstances, before going on to identify some of the key questions to which we believe any forward-looking national security strategy must now be sensitive.

Emerging themes

Three themes emerge as the paper develops. The first is that we need to rethink our notion of what does and does not constitute the front line in the battle for security. Indeed, if there is one primary distinguishing feature of the new environment from the old it is that traditional notions of a security front line no longer apply. Today we face multiple front lines, across a much wider range of issues and threats, some outside of our own territory at the other side of the world or at global level, and others down at local community level here at home. The highly complex task of a security strategy in this environment is to direct activity in a coherent way across all issues, fronts and levels of action at the same time.

Second, the paper argues that public authorities at all levels from the local to the global are finding it harder to maintain sufficient control over the rapidly changing security environment. Power is either slipping, or in some cases has already slipped, beyond them. The key challenge of the times, therefore, relates to how best to strengthen our governance mechanisms such that they are better able to maintain and, where necessary, regain control over that environment at all levels.

Third, the paper spells out the need for common security, or a need to be interested not just in our own security but also in the security of others. This need is not altruistic but grounded in a belief that we now live in a world of genuinely shared destinies in which the grievance, insecurity or policy failure of one quickly becomes the insecurity and policy problem of others. In this context, a collaborative approach to security policy, built on a wider and more effectively integrated range of policy instruments but also drawing in the efforts of a widely distributed range of actors, is likely to be the key to success. Here, the stress is on national governments, international organisations, regional bodies, NGOs, community groups, local authorities and individual citizens needing to pull together to deliver the desired outcomes in a collaborative process. Governments no longer simply deliver national security to, or on behalf of the rest of us in this environment, but must also facilitate, coordinate and orchestrate the activities of many other actors that are now relevant to policy success. To put it another way, we argue that an increase in the social depth of security policy can contribute to its ultimate reach and effectiveness.

The Commission going forward

The ideas presented in this paper are a work in progress and the intention in publishing is to stimulate, and to focus, further discussion. The views expressed here, to reiterate, capture the flavour and character of some of the Commission's early deliberations but are the views of the authors only and not the views of the Commission itself. The Commission will publish an interim report later in 2008 and a final report in 2009, setting out its views and offering an independently developed national security strategy for the United Kingdom.

2. Drivers and effects of a changed strategic landscape

In this part of the paper we present our account of the key drivers of the contemporary security environment. We do this through a treatment of **five core themes**. These are:

- i) Globalisation and power diffusion
- ii) Poverty and failing states
- iii) Climate change
- iv) The growth of political Islam
- v) Socio-economic vulnerability.

We believe that individually, each of these captures both an important driver of change and an important set of effects and that when taken together they amount to a valuable framework for thinking about the security environment as a whole. In the material that follows, the theme of globalisation and power diffusion is dealt with at greater length than each of the others (primarily as a result of its complexity), but all, in our view, have equal significance.

i) Globalisation and power diffusion

A key feature of the security landscape today is an ongoing process of power diffusion.¹ Power diffusion is occurring largely as a consequence of globalisation and fundamentally is linked to some of globalisation's underlying features, namely technology advance and dispersal, improved communications, and reduced transportation costs. It is visible in several respects:

- First, and perhaps most obviously, it is visible in a relative redistribution of power within and across the community of states.
- Second, it is reflected in the increased importance of a range of non-state actors such as global businesses, terrorist groups, transnational criminal networks and some transnational political movements.
- Third, it is evident in the unplanned growth of power-sharing between states, such that the security of one now often depends on decisions taken in and by others. (Keohane and Nye 1973)

We deal with each of these in turn below.

Power diffusion within and across the community of states

Power diffusion within and across the community of states relates first to a relative redistribution of power from the Atlantic seaboard to Asia and the Pacific. This is not, in the short term at least, about a significant shift in the military balance: given the demise of the Soviet Union, no one state or even collection of states will rival the military power of the United States in the immediate future. This dimension of power diffusion is, rather, economics led and is signalled principally by the rise of China and India.

China's increased power is a product of two related developments. The first is its sustained and rapid economic growth which, over the last 20 years, has averaged an annual rate of just below 9 per cent, a figure comparable to Japan's average 10 per cent annual growth rate during its boom years of 1955 to 1972. China's Gross Domestic Product (GDP) is now, as a consequence, the world's fourth largest behind the United States, Japan, and Germany.² Second, China's increasing economic power is a function of its huge foreign currency reserves which have been built on the back of its seemingly endless supply of low-cost labour, a consequent rise in its manufacturing sector, and the unprecedented

^{1.} By power in this context, we mean the resources and capacities that may potentially be used to achieve influence over the security environment. In this section of the paper, we discuss the relative distribution of such resources and capacities among actors in the international system. In Section 3 we return to the issue of which resources and capacities are thought most important in current circumstances, and to how they might best be combined for maximum effect.

^{2.} Though in GDP per capita terms, in 2006, it lagged behind Lebanon, Kazakhstan and Armenia. All figures based on US Bureau of Labor Statistics and Human Development Report, 2006.

trade surpluses that have followed. China's foreign currency reserves soared past US\$1 trillion in early 2007 and kept racing up to more than \$1.3 trillion by the middle of the year. Reserves of this scale effectively give the Chinese government the power to dump dollars on world markets, forcing a crash in the value of the dollar and potentially putting the US and global economy into recession.³

India, for its part, is also enjoying an enhanced power position based on its own recent rapid economic growth and on its potential to sustain a high growth rate far into the future due to its massive and young population. Current projections have India's economy surpassing Britain's by 2020 and the now famous Goldman Sachs BRIC analysis predicts that by 2050 its per capita GDP will have multiplied 35 times (Goldman Sachs 2003).

These are profound developments, though it is also important to sound a note of caution. Despite current economic trends in both China and India, the continued rise of both cannot and should not be taken for granted. Each country has enormous challenges. China must continue to grow to lift its masses out of poverty, has to deal with pervasive environmental problems, and must answer fundamental questions about the sustainability of Communist Party rule in the long term. India too, has a massive task to improve the lot of its poor, has significant weaknesses in its education system (it has a literacy rate of only 60 per cent) and high HIV/AIDS prevalence in certain states. Both China and India, moreover, must navigate difficult security challenges, China in relation to Taiwan, and India in its dispute with Pakistan over Kashmir.

That said, even on the basis of the growth achieved to date, it is already possible to discern two geopolitical consequences of the rise of China and India.

First, it is possible to see the rise of both as stimulating a shift in great power rivalry from the largely European stage in the last century, to the global stage in this one. Perhaps the clearest sign of this was the recent and controversial nuclear deal between the Bush administration and the Indian government. This deal effectively condoned Indian development and use of a range of nuclear technologies outside of a full international inspection regime and was rightly criticised by many for potentially dealing a serious blow to the nuclear non-proliferation regime. It has been justified by its supporters however as a deal designed to draw India closer to the West, helping to balance the rise of Chinese power in the process.

Second, whatever the future holds for China and India, both already now hold pivotal positions in relation to issues such as climate change which, as will be outlined later, is an increasingly significant driver of the international security landscape. China surpassed the US as the world's largest emitter of greenhouse gases in 2007 and it is no exaggeration to say that without the cooperation of both China and India, a successful response to the challenge of climate change cannot be found. Were we already to be witnessing the high point of China and India's relative rise at this point, therefore, the world would still be a profoundly changed place, whatever one predicts for each of them in future.

Beyond the rise of China and India, a further but related set of developments driving a new distribution of power among the community of states concerns energy. A new cadre of potentially powerful energy states and regions is emerging on the back of ongoing changes in the international energy order. On the one hand, as China and India have grown, they have become major consumers of energy and this has had a significant tightening effect on world energy markets, driving up prices, raising the spectre of increased competition and even conflict over scarce energy resources in the decades ahead, and placing renewed emphasis on the issue of energy security.

On the other hand, the Russian economy, on the back of its extensive natural energy resources, has been one major beneficiary of this, such that it is now enjoying annual GDP growth at 7 per cent, currency reserves up more than 600 per cent in four years, exports up, and inflation down. Russia, as

^{3.} This would be unlikely, however, because China's manufacturing base is tied to consumer demand in Western economies and because the Chinese Communist Party's grip on power is dependent on continued economic growth and rising living standards for the more than 400 million Chinese living in real poverty (for an account of this see Hutton 2007) .

several recent events have shown, is not averse to flexing its political and military muscles against this new situation. For example, it has temporarily cut off gas supplies to Ukraine and resumed long-range strategic bomber patrols. Other states and regions too are increasing in importance as energy markets change, the Caspian Sea region, the former Soviet states of central Asia, Iran, Qatar, Nigeria and Venezuela among them. This all creates new centres of power in the international system, new potential flashpoints between states in need of energy supplies, and new areas of strategic interest and significance for all the major powers.

Third, in terms of the issues we highlight as drivers of power diffusion among the community of states, we come to the spread of nuclear weapons technology. Even though Israel developed its own nuclear capability outside the nuclear non-proliferation regime, this regime remained relatively stable until the late 1990s, with the five declared nuclear powers (the US, Britain, Russia, China and France) largely maintaining a monopoly over nuclear weapons capabilities up to that point.

The last decade, however, has witnessed a disturbing trend towards wider state proliferation. India and Pakistan each conducted a series of nuclear weapons tests in 1998, bringing the total of acknowledged nuclear weapons states to seven. North Korea resumed the reprocessing of plutonium in 2002 at a facility that had been under International Atomic Energy Agency (IAEA) inspection since 1994. The North Koreans, who were previously believed to have developed enough nuclear fuel to make two bombs, now possess enough material to construct two bombs per year. In 2006, moreover, North Korea conducted a low-yield nuclear test, becoming the eighth acknowledged member of the nuclear club, although it has now once again suspended reprocessing activity at its Yongbyon nuclear reactor. In Iran, meanwhile, the government is believed to be pursuing a nuclear weapons programme, even though it maintains that its efforts are purely intended to produce peaceful nuclear energy. Western intelligence agencies and independent analysts believe that on its current course, Iran is from two to ten years away from obtaining a nuclear weapon.

These developments have spurred at least another eleven countries to hedge against an Iranian bomb and to seek assistance from the International Atomic Energy Agency (IAEA) to develop their own nuclear energy programs. Egypt, Turkey, and Saudi Arabia, all Sunni Muslim countries fearful that mastery of nuclear technology by Shia Iran could entrench the Islamic Republic as a regional hegemonic power, are leading this new wave of nuclear development. Turkey has pledged to build three new reactors, Egypt four, and Saudi Arabia has pushed the five other members of the Gulf Cooperation Council to pursue nuclear technology (Cirincione and Leventner 2007). If current trends are not reversed, by 2015 the perpetually volatile Middle East could have two nuclear-weapons states (Israel and Iran) and a dozen other countries with scores of nuclear reactors requiring large amounts of nuclear fuel. These are profound shifts affecting the stability of an already troubled region.

Even more fundamentally, however, the proliferation of nuclear technologies and weapons represents a significant additional modification to the wider relative distribution of power among states in the international system. When seen in combination with the other changes described in this section, this represents a shift to a new and potentially far less stable era of inter-state relations and also, importantly, to one in which a range of international institutions and regimes from the UN Security Council to the Nuclear Non-Proliferation Treaty no longer appear to reflect or capture the realities of global power.

Power diffusion to non-state actors

The second evident dimension of power diffusion that we observe is that involving a relative diffusion of power from state to non-state actors. Some of this diffusion has been driven by states themselves through use of private military firms. Much of it, however, has occurred in spite of, and not because of the views and decisions of states. Terrorist groups, groups engaged in transnational organised crime, and some transnational political movements, particularly in the Middle East, have all been visible beneficiaries of this wider process in recent years. In this section, we focus primarily on this latter group of actors, believing they are of more immediate and pressing security concern.

To take terrorist groups first, these have obviously been of increased significance since 9/11, the point

at which a new form of 'super-terrorism' took centre stage in international affairs (Freedman 2002). They are a long-term and structural challenge, however, whatever their ideological orientation, for two underlying reasons.

The first concerns their increasingly destructive nature and potential. This is evidenced by the fact that the level of violence in acts of terrorism has been increasing in recent decades. The bombing of the World Trade Center on 26 February 1993 took six lives and injured 1,000. Huge bombs at the US embassies in Kenya and Tanzania in August 1998 killed 220 and wounded 4,000 between them. The events of 11 September 2001 saw 2,986 people lose their lives as three airliners flew into the Pentagon in Washington and both towers of the World Trade Center in New York.

The trend, therefore, is clear. It may not be smooth and annual death tolls from terrorism are not going up at an even rate year on year, but the record now stands at nearly 3,000 deaths for a single terrorist operation carried out on a single day. In this context, Pluta and Zimmerman were right to recently conclude that 'few psychological barriers to true mass-casualty terrorism remain' (Pluta and Zimmerman 2006: 66). In terms of future potential, moreover, the key worry is that terrorist groups will gain access to weapons of mass destruction and to a nuclear weapon in particular. Some, such as Robin Frost in a recent Adelphi paper, have dismissed this as an unrealistic possibility, arguing that 'the risk of nuclear terrorism, especially true nuclear terrorism employing bombs powered by nuclear fission, is overstated' (Frost 2005: 7). But this seems an extraordinarily complacent position to take when one considers the wider context.

First, we know that some terrorist groups have a clear intent to access weapons of mass destruction, including nuclear weapons and materials, if at all possible. This is certainly true of Al Qaeda. Drawing on inside experience and senior intelligence sources, former US Assistant Secretary of Defence Graham Allison notes that Osama Bin Laden tried to acquire Highly Enriched Uranium (HEU) from South Africa as early as 1992 and also that Bin Laden and other senior Al Qaeda representatives met with senior figures from the Pakistani nuclear weapons programme in 2001 (Allison 2006). Materials discovered in Al Qaeda safe houses in Afghanistan, moreover, show that Al Qaeda officials spent time researching the processes required to build a nuclear weapon and also understood the possible shortcuts that could be taken in building a crude nuclear device. Other groups beyond Al Qaeda, such as Jaish-e-Mohammed (JEM), a group focused on the Kashmir conflict but with reported links to the Pakistani establishment, and Hezbollah, with its close links to Iran, cannot be ruled out as organisations also seeking the nuclear option.

If demand for this option exists then so too, worryingly, does potential supply. The danger here comes in two forms, namely that terrorist groups will illegally acquire either a ready-made nuclear weapon, a so-called 'loose nuke', or the fissile material required to make one. Controversy has raged on the issue of loose nukes ever since Alexander Lebed, the former national security adviser to President Yeltsin, confided to both public and private audiences in the United States in 1997 that the Russian government could not account for 84 one-kiloton Soviet suitcase nuclear devices (Allison 2006). Since that time, despite some improvements in security around Russia's nuclear facilities, only just over 50 per cent of Russia's nuclear weapons and materials have undergone a comprehensive security upgrade (Nuclear Threat Initiative 2006).

On the second threat, that terrorist groups will get their hands on weapons grade fissile material, the picture is hardly more reassuring. To achieve a nuclear explosion, a minimum of 15.9kg of Highly Enriched Uranium or 4.1kg of plutonium is required.⁴ A recent strategic dossier on nuclear blackmarkets by the International Institute for Strategic Studies, using highly conservative estimates drawn from the International Atomic Energy Agency (IAEA) and the Database on Nuclear Smuggling, Theft and Orphan Radiation Sources (DSTO) stated baldly that: 'The total amount of HEU and plutonium seized in state-confirmed and other highly credible incidents registered in the period 1991-2006 is

^{4.} These amounts apply if a beryllium reflector is used in the device. Without such a reflector, more fissile material is needed.

roughly 38kg′ (IISS 2007: 126). Not all of this 38kg was weapons grade material but around 8kg of it was, and this represents only the recovered amounts of bomb-relevant material from *known* attempts at smuggling in recent years.⁵ By definition, it does not tell us the amount of nuclear material stolen but not detected by law enforcement agencies over the same period and we cannot retrospectively calculate what that amount might be since there is no global inventory of HEU and plutonium and it is not known exactly how much plutonium and HEU has been produced since 1945 (Pluta and Zimmerman 2006).

The point about all of these developments is that, without further significant effort to address the trends and challenges described, they point to a 21st century in which it is highly unlikely that state actors will retain their monopoly on the use of devastating force.

A second development that is enhancing the relative power of terrorist groups resides in the advantages now being bestowed upon them by digital technology and communications. These have amplified the voice, extended the organisational reach, and enhanced the law enforcement evasion capabilities of terrorist groups. Satellite communications have also shrunk distance and made it much easier for terrorist groups to both make and sustain cross-border connections. The Internet has become a key place for the recruitment, radicalisation and mobilisation of many young extremists and, for those seeking to make the switch from extremism to operational terrorism, a key knowledge-sharing tool and aid for attack-coordination and planning (Ryan 2007). Strong encryption tools, meanwhile, available more cheaply and easily than ever before, are facilitating terrorist use of such communications channels in a secure and secret environment (Ministry of Defence 2007). This last development in particular represents a significant shift in relative power from state to non-state actors since, only three decades ago, strong encryption tools required such particular financial and computing resources that they effectively remained the preserve of states.

Turning to organised crime networks, these too are becoming more prominent and threatening. Increasingly, they are operating across borders because declining transport costs, improved global communications and the increased cross-border flows of both people and goods makes this far easier than ever before. The sheer scale of criminal activity is also increasing, partly because of the extended geographical reach of the criminal networks themselves, partly because for some, particularly in the developing world, criminal activity is seen as one potential route out of poverty and partly because in some patrimonial states there is now an attitude that national resources are there to be exploited for the benefit of the corrupt few in power. Consequently, the United Nations Secretary General's High Level Panel on Threats, Challenges and Changes rightly identified, in a report in 2004, transnational organised crime as one of the major security challenges facing the world (United Nations 2004).

The illicit drugs trade is the most lucrative of the activities underway (according to the United Nations Office on Drugs and Crime, the overall turnover of the worldwide illicit trade in drugs alone now stands at around \$300bn annually [UNODC 2006]), though the variety of criminal activities is also widening. As the UN's Antonio Mazzitelli recently pointed out, 'criminal activities such as trafficking in people, stolen vehicles, natural resources, firearms and contraband, counterfeiting and intellectual piracy, smuggling of migrants, and cybercrime all feature on the menu of services offered' (Mazzitelli 2007: 1074).

Laundering of money and corruption are the two further essential features of this activity, the first to allow criminals to benefit from the revenues raised and the second to reduce the risk of capture by law enforcement agencies and to increase influence over political decisions in countries of operation. Transnational organised crime therefore flourishes most where state institutions are open to corruption, where enforcement of the rule of law is weak and where borders are porous. Even more importantly from the point of view of understanding the contemporary national security environment, criminal networks not only locate themselves in areas that have some of these characteristics, such as

^{5.} For weapons purposes, HEU needs to be enriched to at least 80 per cent or above and more normally to 90 per cent or above.

in West Africa, but do themselves also have the potential to create and sustain pariah states⁶ which, no matter what their formal arrangements of governance are, actually serve as safe havens for criminal gangs and their activities. This is a serious situation, both because the states in question can effectively spread instability throughout the regions in which they are located and because there are also links between criminal networks and terrorist groups, with the former often providing money laundering and other financial services to the latter as well as assisting in the illicit trafficking of goods that may be of value to them.

Whereas terrorist groups are challenging a state monopoly on the use of devastating force and are increasingly, therefore, not finding state borders a hindrance, transnational organised crime groups are changing the very character of some states in the international system, turning them into vehicles for private profit and spreading instability and misery in the process.

A third and final set of non-state actors we believe it important to highlight are the transnational political movements that have come to exert importance influence on international affairs in recent years. One such movement is Hezbollah, a particularly important organisation in the context of the contemporary Middle East.

Hezbollah, an Islamist political group formed in 1982 to resist western colonialism in Lebanon and across the wider region, to engage in armed struggle against Israel and to work towards the establishment of a Lebanese Islamic Republic, runs schools, hospitals and media services, and has implemented many development programmes in areas in which it is operational. Its so-called 'Martyr's Institute' gives financial assistance to the families of those who die in conflict and, following the July 2006 war against Israel, Hezbollah has been extremely active in the reconstruction process, often doing more on this front than the Lebanese government itself. Hezbollah, in other words, and despite the narrow coverage of its activities in the West, pays much attention to a wide range of social welfare activities as well as to the conflict with Israel (Salem 2006).

In highlighting this group, the point we make is not, of course, a political one in support of it. Hezbollah has an objectionable policy platform on many issues and is less than fully constructive in relation to bringing peace and stability to the Middle East. The point we make, rather, is the analytical one that in conditions of conflict and weak, absent or ineffectual state institutions, transnational political movements such as Hezbollah can and do emerge to fill the vacuum and to play significant roles in the international security environment. They also often do so on the basis of a carefully cultivated, deep-rooted and often long-term relationship of legitimacy with the populations they claim to represent. Some transnational political actors with social power, in other words, have become serious players in international politics. While they might have state backers (in this case Syria and Iran) they are not entirely in the pockets of their benefactors. As such, they cannot easily be bypassed or ignored when thinking about policy responses and, in this case, they are a populist challenge to the legitimacy of many West-backed state actors in the Middle East.

Non-state actors today, therefore, enjoy increased power and influence whether they are terrorist groups, transnational criminal gangs or transnational political movements active on the international stage. Some of these actors are acquiring some of the power attributes of states, are altering the character of some states and, far more effectively than in the past, are often influencing, undermining, destabilising and even questioning the legitimacy of states. This adds a new set of dynamics and challenges to the international security environment.

Power diffusion beyond state borders: security interdependence

The third and final dimension of power diffusion we highlight relates to more power-sharing between states in the form of increased security interdependence. This itself comes in two forms. The first relates to a set of challenges that are truly global in nature and where consequently only solutions of

^{6.} By pariah states, we mean ones that essentially behave as outcasts, alienated from most other states and accepted norms of international behaviour.

global reach and with all the major powers involved will do. Climate change mitigation, or attempts at effective control of global stocks of fissile material, would be emblematic issues in this category: there is a strong sense on these issues that the community of states either sinks or swims together.

The second form, however, relates to the specific though different vulnerabilities presented to each state as a by-product of its own economic interdependence with today's globalised world economy. In the case of the UK, there are at least four such vulnerabilities.

First, in terms of energy supplies, the UK is advancing into a period of less security of supply than it has experienced in recent decades, as it moves from being a net energy exporter to a net energy importer. Norway is currently our most important energy partner as a major supplier of both oil and gas (Norway accounted for 75 per cent of UK oil imports in 2005). However, in the years ahead Russia, the Caspian Sea region, Nigeria, Algeria, and the Middle East, are all likely to become more important suppliers to the UK. Our key European trading partners, meanwhile, are also witnessing shifts in their energy supply base. The International Energy Agency, for example, 'predicts that the biggest supplier of gas to Europe in 2030 will be Africa, followed by Russia and the Middle East' (Bird 2007: 12; IEA 2006). These changes increase our vulnerability to events in, and pressure from, a wide range of supplier countries.

Second, our increasing reliance on trade (in 2006, trade accounted for 60 per cent of the UK's GDP) makes the security of key strategic trade routes more important for both Britain and the EU than ever before. One such strategic trade route of growing importance is the already massive and rapidly expanding maritime freight route linking the economies of Asia to those of Europe (see *Financial Times* 2007b). Any significant disruption to this or other routes, brought on by maritime terrorism or other events, could have massive economic consequences for the UK and indeed for the EU as a whole (see Richardson 2004).

Third, transnational crime is a major source of vulnerability for the UK, coming on the back of the vastly increased movement of both people and goods across our borders. We cannot and should not rule out collaboration between criminal gangs active across our borders and terrorist groups intent on smuggling harmful materials into the UK. Such collaboration could have very serious security consequences. The potential economic impact of such criminal activity is also great, however. Tax revenues at the border, for example, currently amount to £22 billion per annum, or around 5 per cent of the total tax take of around £420 billion. In this context, successful large-scale cross-border fraud could have a serious impact on the public purse (Cabinet Office 2007).

An estimated 25-35 tonnes of heroin, meanwhile, enters the UK annually along with 35-45 tonnes of cocaine and both contribute to a drugs problem that is estimated to cost £15.4 billion a year in the form of law enforcement, crime and health-related costs (ibid: 22). There are also social vulnerabilities. Activities such as drug smuggling impact directly on our communities in the form of social breakdown and a reduced sense of public safety.

Fourth and last, given our position as a global hub for people movement in an era of people movement on an unprecedented scale, the UK is in an exposed position in relation to threats such as an influenza pandemic brought in from the outside. A pandemic is now considered a biological certainty, the only uncertainties being over the strain involved, the severity of the outcome and the timing of the outbreak. Many experts believe that H5N1 bird flu is the strain to worry about and this, as we know, can kill human beings (globally, there were 79 fatalities in 2006 alone). If H5N1 were to mutate into a virus that could be passed not only from birds to humans but also directly between human beings, that would be a potentially catastrophic development. Recent studies have suggested that, 'in contrast to seasonal influenza, which primarily involves lung infection, the H5N1 virus might

^{7.} The current annual flow of more than 218 million passenger journeys across UK borders is expected to increase to 450 million by 2030. Total freight flows are also now massive, with around 440 million tonnes of freight flowing across our borders each year, a figure likely to increase to 580 million tonnes by 2030 (Cabinet Office 2007).

be disseminated throughout the body and affect multiple organs thanks in part to a condition of the immune system known as a cytokine storm. This is a significant finding since cytokine storms help to explain why the 1918-19 pandemic was so deadly' (Osterholm 2007: 50). Consequently, in assessing the likely outcome of a pandemic, a recent study by the Lowy Institute for International Policy (McKibbin 2006) found that 'were a pandemic as severe as that of 1918-19 to occur, over 142 million people would die and the world's GDP would suffer a loss of some US\$4.4 trillion' (McKibbin quoted in Osterholm 2007: 48).

Our readiness and level of protection from such an event is inadequate but more than that, it is also intricately tied up with and reliant upon the public and animal health systems and freedom of movement strategies adopted by many other countries and not only on the strategies we put in place here in the UK.

In fact, in all of the forms of vulnerability described in this section, the key point to note is a shift in the power to address policy challenges away from the individual state level and towards either the global level on the one hand (vertical shift) or to another state, or group of states on the other (horizontal shift). This applies to climate change, to the supply of energy, to the security of our trade routes, to law enforcement activities overseas on organised crime and terrorism and to precautions taken against a new pandemic. The outcome of security interdependence, in short, is a world in which the security of one state and its people is more dependent than ever before on decisions, actions and events unfolding elsewhere in others.

ii) Poverty and failing states

Our second driver of change in the security landscape relates to global economic conditions and to a clutch of issues around what is most often called the 'security-development nexus'. This is the point at which global poverty, inequality, violent conflict, and the phenomenon of weak and failing states interact, to devastating effect.

Poverty itself has been high on the international agenda in recent years thanks in no small part to the British government and, globally, thanks to the high profile given to attempts to meet the Millenium Development Goals. There have been some real and quantifiable successes too. The number of people living in abject poverty on less than US\$1 per day, for example, has more than halved, falling from 40.1 per cent of the world's population in 1981 to 18.1 per cent in 2004 (World Bank 2007). An estimated 135 million people were pulled out of poverty in the period 1999 to 2004 alone. Much of this effort, however, has been concentrated in the economic miracles in China and other parts of rapidly developing East Asia, rather than being evenly spread (Sachs *et al* 2007). Consequently, according to the United Nations Development Programme, almost 50 per cent of the world's children were still living in poverty in 2005. Indeed, the term 'developing country' is still a misnomer when applied to some of the world's poorest countries, as more than three billion people are living on less than US\$2 a day, with little immediate hope of major improvement.

This level of continued poverty is central to our arguments for three reasons.

First, poverty is a major threat to human life. In any given year in which there is an absence of a major global conflict, poverty directly accounts for more loss of human life than political violence and this in itself provides a powerful argument for thinking about security in terms that go well beyond the traditional focus on external military attack.⁸ While nearly 3,000 people died in the attacks of 9/11, for example, preventable disease induced by poverty claims ten times that number of children *every day*. By that measure, our efforts to combat poverty have so far been a dismal failure and as a result, in moral terms at least, the legitimacy of the current international economic order must be questionable at best (Rice 2007).

^{8.} This is one of the major reasons for which many analysts have called for the adoption of a 'human security' perspective when thinking about security policy, a perspective that we support and return to later.

Second, poverty on this scale is a major concern because it is now a growing threat to international peace and stability. There is a direct relationship between a country's per capita GDP and its susceptibility to civil conflict. Evidence shows that if a country ranks in the fiftieth percentile of per capita GDP, it has a 7.5 per cent risk of civil conflict, half of the level for countries that rank in the tenth percentile (Collier *et al* 2004). Poverty is also, importantly, a key driver of the phenomenon of weak and failing states, itself a growing and corrosive problem on the international stage. Weak states lack the capacity to prevent violent conflict, to govern legitimately, to meet basic human needs and to foster sustainable and equitable economic growth (Weinstein *et al* 2004). Not all weak states are poor, but the entire top ten in *Foreign Policy* magazine's Failed State Index rank in the bottom third of states in terms of per capita GDP, and poverty is clearly a key factor in these ungoverned or badly governed spaces (*Foreign Policy* 2007). Such spaces themselves serve as active or passive incubators of instability that can spill over into neighbouring countries and whole regions in the form of economic disruption, refugee flows, and the spread of armed conflict across internationally recognised borders.

An elevated risk of conflict is, in fact, one of the most significant effects of weak and failing states and this is now also reflected in changing patterns of conflict around the world. Rather than the interstate wars that marked much of modern history through to World War II, conflict patterns over the last sixty years have been characterised more by intra-state and civil conflict. Ninety-five per cent of all conflicts are now of this kind (Human Security Centre 2005). Civil conflicts last longer, moreover, and are harder to resolve than inter-state wars, often locking countries into a 'conflict trap' of mutually reinforcing poverty and conflict leading to a process described by the World Bank as 'development in reverse' (World Bank 2003).

Third, this combination of poverty with weak and failing states is a concern because it is now providing a direct threat to our own security. President John F. Kennedy's statement, in his inaugural address in 1961, that 'if a free society cannot help the many who are poor, it cannot save the few who are rich' (Kennedy 1961) is truer today than it was nearly five decades ago. This is because terrorist groups and criminal networks, both of which often have global reach, can and do now take advantage of weak and failing states. Even with thousands of NATO troops now in Afghanistan, that country still produced 87 per cent of the world's heroin in 2005 (UNODC 2005). Of course, drugs have not been the only dangerous export emerging from that country since terrorists used the safe-haven granted by the Taliban to set in motion the attacks of 9/11. Somalia's total lack of national governance has also, in recent times, allowed that country to be used as a primary base of operations and shelter for terrorists active throughout East Africa. Several of the individuals suspected of involvement in the bombings of US embassies in Kenya and Tanzania in 1998, for example, are believed to still be at large in Somalia (Payne 2007).

Morality, concerns over wider international peace and stability, and over our own physical security, therefore, all make poverty and the attendant growth of weak and failing states a significant driver of the current international security landscape. As a result, for developed and wealthier countries such as the UK, the long-standing moral imperative to tackle the issues in the security development nexus has been joined by an imperative based on self-interest.

iii) Climate change and resource scarcity

A third and more recently emerged driver of change in the international security environment is climate change. This is likely to have a major shaping influence on international affairs in the decades ahead, though precisely how and to what extent will depend on the level of global warming that actually occurs. The Fourth Assessment Report of the International Panel on Climate Change (IPCC) produced a range of future temperature scenarios, based on assumptions about population growth, patterns of economic development, and the development and adoption of new energy technologies (IPCC 2007). These scenarios show best-estimate projections of a global average temperature increase this century in the range of 1.8°C to 4.0°C. In the material that follows, we base our discussion on the likely impact of the mid-range scenario, which suggests a best-estimate temperature increase of 2.8°C during the course of the century and an increase in the next two decades of 1.5°C to 2°C. Under this

scenario, a number of developments in key regions from East to South Asia, the Middle East and on through much of Africa will likely impact the international system.

First, the IPCC projects that **China** will be at great risk from climate change, particularly coming under pressure in relation to water stress, stating that: 'In parts of China, the rise in temperatures and decreases in precipitation, along with increasing water use have caused water shortages that led to drying up of lakes and rivers' (IPCC 2007: 477). China's own first national report on climate change, released in late 2006, also foretold a coming food production crisis, with as much as a one-third decrease of key crop yields by 2030 (Li 2007). A further worry for the regime must also be the country's vulnerability to sea level rise, since many of its highly populated cities are situated on the coast.

The projected impacts of climate change on China may play a big role in shaping both the character and stability of Communist Party rule in the years ahead. In the last few years, concerns over environmental issues have provoked thousands of Chinese citizens to demonstrate across the country, and the potential impacts of climate change are now high in the minds of the Chinese people. A 2006 poll conducted in China by the Chicago Council on Global Affairs and WorldPublicOpinion.org found 80 per cent of respondents agreed that within ten years global warming could pose an important threat to their country's 'vital interest' (Chicago Council on Global Affairs 2006). Key questions for the Chinese leadership therefore are whether it can maintain robust economic growth while responding to these demands for environmental improvements and whether it can do so to such a degree and at such pace as to avoid the need for repressive measures. How the regime handles these challenges could have a profound effect a large part of international affairs in the decades to come.

Another area likely to be seriously affected by climate change in the near and medium term is the **Himalayan region of Asia**, and this will likely impact nearly all of the sub-continent (IPCC 2007). The Himalayan glaciers are the largest body of ice outside the Polar ice caps, occupying approximately 500,000 km², and they are receding at an alarming rate, far faster than any other glacial area in the world. Under current IPCC projections, there is a very high chance they could disappear altogether by 2035 and a virtual certainty that they will shrink by at least 80 per cent to cover only 100,000 km². This will have the effect of depriving the Indus, Ganges, and Brahmaputra river systems of their main source of water, likely making those rivers seasonal and bringing massive changes in agricultural food production, declining crop yields, and severe water stress. At the same time, rising sea levels will also harm freshwater ecosystems in the many 'mega-deltas' in the region, further stressing agriculture and food supplies dependent on fishing.

It is highly likely that these developments will put stress on Bangladesh to such an extent that the wider stability of South Asia is threatened. The population of Bangladesh is exploding (it is projected to nearly double to 250 million by 2035) as climate change destroys a significant portion of the country's already limited habitable land, forcing many people to move inland and to seek a stable environment without regard to the region's many contested borders (Barnett 2001). India, which will also face climate stress although not as severe as its neighbour's, is already bracing itself against a wave of Bangladeshi environmental migrants by constructing an eight-foot-high iron fence along the 2,100-mile India-Bangladesh border (Joehnk 2007).

Turning to the **Middle East**, the already complex politics of that region will be complicated further by what some have described as a new 'hydrological security complex' (Schultz 1995). The Middle East region is home to 6.3 per cent of the world's population but only 1.4 per cent of the world's renewable fresh water. The water that is available, moreover, is concentrated in only a few countries, namely Turkey, Iran, Iraq and Syria. A complex set of water dependency relationships therefore exists and is set to get worse, with Israel in one of the most vulnerable positions of all states in the region (Campbell *et al* 2007). Israel will have fewer than 500 cubic metres of water per capita by 2025; 1000 cubic metres per capita is considered the minimum reasonable amount for a developed country (Homer-Dixon *et al* 1993). Much of that meagre water supply is also located in politically fraught territory: one third of it in the Golan Heights and another third in the mountain aquifer that underlies the West Bank. This could add further flash-points to the Israeli-Syrian and Israeli-Palestinian relationships and water scarcity in general could become a significant new driver of tension and

conflict in the region (Bitar 2005).

In **Africa**, higher temperatures and lesser and more seasonal rainfall will also place up to 250 million more Africans under severe water stress by 2020. This will affect East, West and North Africa, the latter suffering a rapid and severe decline in potable water, possibly by as much as 50 per cent up to 2050. East Africa will likely see up to 20 per cent more winter rain causing flooding and soil erosion, while at the same time the summer months will be significantly dryer resulting in severe droughts and additional stress on agricultural regions (Case 2006). Agricultural production makes up nearly half of East Africa's GDP and employs four out of every five workers in the region. Any loss in so vital an economic sector could have devastating consequences on the region's overall economic and political development (ibid). West Africa, for its part, is already suffering a severe problem of desertification: approximately 1,350 square miles of Nigerian land turns to desert each year, uprooting farmers and herdsman and causing internal migration towards coastal areas (Podesta and Ogden 2007). As a result, by 2020, migration in the region will create a West African urban sprawl of 50 million inhabitants that extends from Accra in Ghana across the breadth of the Niger River delta, though even this relief will be temporary for those concerned since the entire area is also at major risk from sea level rise (McCarthy 2006, IPCC 2007).

This set of developments in Africa, in some of the world's poorest regions, may well add further stress to the existing conditions of poverty and conflict described in the previous section. Climate events themselves are likely to claim human lives on a very significant scale but migration flows are also likely to be a further factor overwhelming the capacity of state authorities to respond in a number of areas. This may be a particularly acute problem in East Africa where the concentration of weak or failing states is already high and numerous unresolved political disputes characterise the region. In short, climate change may be a significant driver of further state failure in Africa.

Moving closer to home, many of the climate pressures and impacts described above point to significant international migratory pressures and it cannot be assumed that these flows of people will stay within the regions most directly affected. Indeed, it is highly likely that some of these flows of people will be directed at the West and at the European Union and the UK in particular. British colonial and family ties to South Asia, for example, mean that flows from Bangladesh and the surrounding area must be anticipated. Water stress, massive population displacement and the ongoing mix of conflict and poverty in Africa will also mean that Southern Europe grows as an EU entry point of choice for many seeking to escape the challenges and difficulties of life in Africa. This will likely present additional challenges to social unity in the EU, even as EU member states turn to migrant labour as a response to their own demographic and labour market challenges.

In the **UK**, there are also likely to be direct effects, as much of low-lying East Anglia in particular is likely to be at increased risk of flooding. Observed measurements have shown that the sea-level off the East Anglian coast is rising by an average 4.5mm per year, which, combined with 1.5mm per year of isostatic adjustment (ground level sinking), is leading to a 6mm per year sea level rise in the region (Edwards 2005). Increased winds and storms in the North Sea will also likely cause more powerful storm surges that could breach coastal defences, flooding inland areas. These changes to the physical environment of the UK are likely to be small relative to some other areas in the world, but still significant.

Several important military assets will also be at risk from environmental damage. Sea level rise could negatively affect the South Coast naval bases at Portsmouth and Devonport. The Ministry of Defence is currently modelling the impact of climate change on these bases (Liddell 2007), and although no serious damage is predicted over the next 20-25 years, the IPCC predicts that sea level rise along the English coastline could be up to 50 per cent higher than the global average, which under worst-case scenarios could severely disrupt operations at these bases in current operating conditions. Increased flooding could also jeopardise several RAF bases, namely Valley on the Isle of Anglesey off Wales and two bases in East Anglia currently used by the US Air Force, Lakenheath and Mildenhall (Ministry of Defence 2006). Each of these three airfields is only 10 metres above sea level leaving them highly vulnerable to flooding. Among the UK's overseas military assets, the naval station at Diego Garcia, a tiny atoll in the Indian Ocean only one metre above sea level at its highest point, is in more immediate danger from rising sea levels. The Center for Naval Analysis in the United States warned in a 2007

report that the base, a major forward logistics hub for both British and American forces operating in the Persian Gulf and Middle East region, could be lost to sea level rise (Center for Naval Analysis 2007).

To re-cap, climate change is set to have direct consequences for the UK both here at home and in relation to important overseas assets, is likely to provoke new inter-state tensions and to generate new sources and instances of state failure, particularly in Africa, and may even play a major role in shaping the character and outlook of a major power like China. It may also put added pressure on social unity in developed countries in a context in which that unity is already under strain. This all amounts to a very significant destabilising pressure in a number of important states and regions around the world and in terms of its security consequences, may yet come to dwarf and over-shadow the currently high-profile issue of terrorism.

iv) The growth of political Islam

The fourth and penultimate driver of the contemporary security landscape that we highlight is the growth of political Islam, or Islamism. This now represents both an immediate threat to public safety and a long-term political challenge to Western liberal democracies. Though its origins can be traced back over many centuries, in its modern form political Islam owes its development to writers and thinkers active in the mid-20th century, such as Abul Ala Maududi in South Asia and Sayyid Qutb in Egypt (for a thorough analysis of the origins and development of political Islam see Roy 2004 and Burke 2003). The movements these men spawned, Jamaat-e-Islami and the Muslim Brotherhood, were the vanguard in what Maududi openly described as 'a revolutionary doctrine and system that seeks to overthrow governments' (Maududi quoted in Husain 2007). Modern Islamism, then, is best viewed as a political movement that utilises a particular interpretation of religion rather than as a fundamentalist religious movement that at times practises politics. Neither Maududi, nor Qutb, nor others of note like them, were even trained clerics or theologians.

In terms of its ideological content, Islamism is based on a division of the world into conflicting camps of good and evil. Good, in this storyline, are the 'true' Muslims fully devoted to the Islamists' interpretation of Islam. Evil on the other hand, consists in a group of countries including the United States, the United Kingdom, France, and Russia which are said to rig the international system against Muslims and to use a network of apostate rulers in the Islamic world to plunder its resources and keep its citizens subdued. Consequently, Islamist political objectives relate to the removal of such apostate rulers from the Muslim world, to the introduction of more truly Islamic (under their interpretation) societies, to the removal of Western interference in Muslim affairs and for some, at the extreme, to the complete overthrow of Western liberal society in its entirety.

In more recent times and in some manifestations, Islamism has of course become violent, in the form of Al Qaeda and Al Qaeda-inspired networks, and in the form of other groups not linked to Al Qaeda in any way. A key turning point in relation to Islamist violence appears to have been the Soviet invasion of Afghanistan. Islamist organisations issued a call to Muslims everywhere to help in resisting the Soviet occupation. Thousands answered that call and, further radicalised by the experience, subsequently returned to their home countries with the view that violence constituted a legitimate form of political expression (Mamdani 2005). A psychological threshold had been crossed and violence became a means to achieve revolutionary political objectives in places such as Algeria, Egypt, Yemen, Chechnya, Indonesia, and the Philippines (Bergen and Reynolds 2005).

As we know, political Islam today, even in its violent forms, has also now extended its reach into Western liberal democracies directly, beyond countries that are predominantly populated by Muslims. It seeks to target and to recruit both the growing Muslim population in Europe and those non-Muslims who may be susceptible to conversion to the Islamist's particular interpretation of the religion of Islam.

^{9.} There is a debate to be had on the right language to use to capture this phenomenon. We are still reflecting on this but for the purposes of this paper, the key point to note is that we are describing a political and not a religious phenomenon.

Organisationally and politically, political Islam is not homogeneous and its adherents can best be described as existing in a series of concentric circles. At the centre is a small group of hard-core radicals committed to orchestrating violent action in furtherance of their political agenda, though members of this group are not often the perpetrators of the violence themselves. In the next, larger, circle, are the foot-soldiers most likely to commit acts of violence. Beyond this group, in a larger circle still, are the members of the most radical Islamist organisations from whose ranks the foot-soldiers of Islamist violence can most easily be drawn. Then, at the outer edges, there are the members of most other Islamist organisations who pursue Islamist political objectives but do so by working through existing political systems rather than through attempts to violently overthrow them. Finally, and at least partially moving beyond those who can be described in any real sense as believers in the Islamist political message, there may be a tacit circle of support (Saggar 2006, Klausen 2007).

In the UK context this tacit circle of support has been captured in opinion poll questionnaire responses. A Populus poll of attitudes among British Muslims carried out for *The Times* at the height of the Danish cartoons controversy, for example, had 7 per cent of a weighted sample agreeing with the statement that: 'There are circumstances in which I would condone suicide bombings on UK soil' (Saggar 2006: 314). This figure approximates to over 100,000 Muslims living in the UK. A further ICM poll showed that a fifth of respondents 'had some sympathy with the feelings and motives of those who carried out the London attacks' (ICM/Sunday Telegraph 2006). Finally, a survey of Muslim students in the UK, by the Federation of Student Islamic Societies, showed 4 per cent unable to condemn the 7/7 2005 attacks on London, a further 11 per cent refusing to back or condemn the attacks and 20 per cent saying that they would not report a possible suicide bomber in their ranks to the police (FOSIS 2005).

Despite the seriousness of this situation and of the Islamist challenge as we have described it here, in both security and political terms, policymakers still do not have a good understanding of what is driving it. One contextual factor that may have assisted its growth in Western countries is the decline and collapse of revolutionary leftist politics in recent decades, which has effectively left political Islam as the predominant repository for radical political expression. Another potential factor is the genuine sense of political grievance felt by many Muslims. This centres on Western foreign policy and, to be more specific, on perceptions of injustice and humiliation in relation to the Israel-Palestine question, on perceptions of a loss of effective control of the natural energy resources of the Middle East in particular, and on perceptions of the Western role in the maintenance and support of oppressive and autocratic regimes in several predominantly Muslim countries.

Some analysts have further noted a sense of alienation among Muslim communities living in the West. This appears to be an issue among second- and third-generation Muslim citizens in particular and may be grounded not just in opposition to much Western foreign policy in the Middle East but in a complex mix of factors including perceived social exclusion on grounds of race and strong concerns over Islamophobia. As Shiv Malik's recent piece of investigative journalism into some of those involved in the attacks of 7/7 in London also makes clear, for some young Muslims in the UK there may also be a particularly acute crisis of identity in which neither the dominant cultural values of the parent population, nor the mainstream culture of the new 'home' country is seen as appealing (Malik 2007).

The truth, however, is that we are insufficiently clear about what the underlying causes of the growth in political Islam are, even at this high level of generality. Moreover, the radicalisation processes, for those moving from tacit circle of support to full acceptance of the Islamist world view, and from radicalised politics to active engagement in political violence are both, if anything, even less well understood. The personal accounts of those who have been involved in Islamist politics and have then pulled back, such as Ed Husain (Husain 2007), have provided valuable insight here, but the literature points to a wide range of possible factors in the radicalisation process including personal relationships, psychological factors, social group dynamics, and the particular communication opportunities of the internet, and the overall picture remains confused.

Making public policy in this context is not easy. The Islamists' use of religion to mask the political nature of their project has put Western liberal democratic regimes in a difficult position as they seek

to preserve a commitment to tolerance and diversity in their own societies on the one hand while addressing the Islamist challenge without appearing to demonise followers of the Islamic faith on the other.

The policy challenge itself is also complex. One key challenge for government is how best to protect citizens from the Islamist threat without introducing security measures that inadvertently expand the outer circles of support for Islamist groups or push more people from the outer circles of support towards the violent core. Another challenge is to understand how best to proactively shrink the outer circles, both at home and internationally, to such an extent that those in the inner core become so isolated that it is difficult for them to continue operations. Both are profoundly difficult and, without an improved understanding of the radicalisation process, almost impossible. Only limited progress is likely to be made in the short term therefore, and the Islamist challenge is likely to remain a key driver of both the domestic and international security agenda for a long time to come.

v) Socio-economic vulnerability

Our fifth driver of change in the security environment is socio-economic vulnerability. This has risen up the security agenda partly as a result of recent changes in the structure of the UK economy, partly as a consequence of changes to the condition of some elements of our critical national infrastructure, and partly as a consequence of the increased threat of terrorism and/or disruptive climate events.

When it comes to the structure of our economy and its businesses, over the last decade a great deal of work has been done to encourage British companies to adopt a lean approach to business operations. Moving to 'just in time' manufacturing, squeezing out stock, removing warehousing and intermediaries, shedding excess staff, all of these developments have substantially improved the competitiveness of the UK economy. At the same time, the supply chains of British businesses have become stretched as a consequence of globalisation. This has itself brought efficiency gains and has increased the range of products and services available to the UK consumer. However, as Jim Norton has pointed out, 'there is a ghost at this particular feast' (Norton 2008). Running lean, more diverse and stretched supply chains makes excellent business sense but it assumes that the basic infrastructure in the UK and beyond, in energy, communications, and transportation, is secure and reliable. The more efficiently we operate, the less slack there is in the system to cope with major disruption.

Sadly, the assumption of a secure and reliable infrastructure is not a safe one. Just as our organisations have improved their collective efficiency and thus their dependence on supporting infrastructure, we have made infrastructure decisions that increase our vulnerability to disruption. In communications, for example, there has been a shift from secure private mobile systems to shared (non-resilient) public mobile communications in some key sectors. Effective communication in the event of extra pressure being placed on the mobile network in an emergency, therefore, cannot be quaranteed.

There is concern, also, over a lack of storage facilities for gas, just as access to our own North Sea supplies runs down, and an equivalent concern over a lack of investment in local and regional electricity distribution, which has resulted in increased failures and the loss of some key skills and subcontractors.

In other sectors, we operate close to capacity limits in ways that could have severe consequences. In the event of a flu pandemic, for example, a reasonable assumption would be that up to 20 per cent of the UK's Heavy Goods Vehicle drivers would be unavailable, a figure large enough to cripple the national food supply, leave supermarket shelves empty, and possibly cause civil unrest.

Weaknesses in one area of our infrastructure, moreover, can lead to breakdown in others because several key elements of the critical national infrastructure are interdependent. Power, transport, communications, water, and broadcasting for example, could all be badly affected by a loss of electricity supply, the latter causing a cascading effect into each of the others. When parts of the US and Canada suffered the largest electric power outage in their history on 14 August 2003, 50 million people lost power, 4 million people lost water, and many railroads and airports were shut down (Doshi

et al 2007). In the UK, the summer floods of 2007, though on a much smaller scale, also demonstrated the point.

Terrorist organisations appear to have noticed this vulnerability too. In March 2004, police raided the home of Omar Khyam, the 24-year-old ringleader of the so-called Operation Crevice terrorist plot and found CD-ROMs with detailed plans of Britain's electricity and gas systems. According to a *New York Times* report later in 2006, Khyam was also recorded talking about a planned simultaneous attack on Britain's gas, electricity, and water systems (Wolsey 2007).

The cascade effects of a loss of key infrastructure, whether brought on by severe weather, terrorist attack or simple maintenance failures, would obviously also go far beyond an impact on other infrastructure sectors themselves. Few organisations or services in the UK would be able to function effectively for long in such circumstances. Given this, the Cabinet Office Civil Contingencies Secretariat has previously published planning guidance that asks key organisations to prepare for:

- Loss of mains electricity supply for up to three days locally or 24 hours regionally
- Loss of water supply for up to three days
- · Loss of the public switched telephone network for up to three days
- Disruption to fuel supply for up to ten days
- · Significant disruption to transport for up to ten days
- · Access denied to main premises for up to three months.

However, it is unclear how many organisations could really claim to have plans in place to cope with these guidelines and making progress in this whole area is difficult in governance terms. David Omand, for example, has noted that 80 per cent of the UK's critical national infrastructure is in private sector hands, not all of it even owned by UK companies. Even within the sectors defined as core parts of the critical national infrastructure, there remains a significant challenge to coordinate activity across many different sectors and this challenge only multiplies when one considers the need to plan for wider business and organisational resilience throughout the entire economy and society. Given these circumstances, the issues of critical national infrastructure protection, business and organisational resilience, and emergency planning and preparedness have taken on new security policy prominence.

Drivers and effects: conclusion

We have attempted in this part of the paper to capture the multiple and interacting drivers shaping the current security landscape. Both individually and collectively globalisation, poverty, climate change, the growth of political Islam and socio-economic vulnerability are creating a new set of dynamics and a new set of challenges for policymakers to deal with. The distribution of power between states is changing and this *may* mean more instability and conflict in the years ahead if the process of change is not well managed. Non-state actors are increasingly important too, both in their own right, and due to their capacity to influence the very character and behaviour of states.

Poverty, inequality and conflict are interacting in parts of the developing world to create instability and a growing problem of ungoverned and corruptly governed spaces. These in turn are becoming jumping-off points for terrorist groups and transnational criminal gangs intent on exporting harm to the UK and other locations. We are witnessing environmental damage and resource stress on energy, water and food sources in particular with a potential for such damage and stress not only to become independent drivers of tension and conflict but also to fuel other related but distinct dynamics of inter-state rivalry and political conflict in the years ahead. Coming closer to home, we have witnessed the emergence of a range of new and changed socioeconomic vulnerabilities within the UK, partly as a result of our interface with the global economy and partly as a result of the changes to domestic business practices, economic systems and infrastructures that together make up the more tightly coupled society that we have described.

We draw three conclusions from this analysis.

First, to some extent and in relative terms, we believe we are witnessing a downgrading of the ability of state institutions to control the security environment and to provide public protection. Power has moved to new locations and the mechanisms of accountable public control have not moved with it. This is evident in the potential end to state monopolisation of weapons of mass destruction, in the reduced capacity of individual states to deliver their own security in a world of interdependence and in the proliferation of ungoverned and corruptly governed spaces in the international system. State actors have literally lost primary control of some territories and environments as the earlier discussion of failed states, pariah states and encryption-protected parts of the internet makes clear. On some issues, moreover, such as climate change, where we have not yet been able to construct effective multilateral governance frameworks, there is even a question mark over the current capacity of the entire community of states, acting collectively, to deliver what is necessary for security.

Second, and consistent with this development, it follows that no individual state or government, no matter how preponderant, has the power to guarantee its own security. We now live in a world of shared destinies in which insecurities or policy failings in one part of the system quickly generate policy problems and insecurities in others. In this environment, we rely on each other for security and security must be common to all individuals, communities and states or else it will not likely be delivered for any.

Third, and against this background, it is clear that the core challenge for security policy today relates to how best to enhance and extend our mechanisms of governance such that they better reflect and map on to the current realities and locations of power, bringing a renewed measure of influence and control over the security environment as a result.

In Part 3 of the paper, we address the implications of this overall analysis. We argue that there is a need to articulate and to adopt a new, more collaborative, approach to security policy, and we set out a range of substantive questions to which we believe any national security strategy must now be sensitive. First, however, we turn to a redefinition of the terrain of security policy itself, such that it better captures what is, in effect, a new and more complex frontline in the battle for national security and public safety.

3. Implications of a changed strategic landscape

The new front line: delimiting the terrain of security policy

Not surprisingly, given the changes we have described, there has been much debate in scholarly and policy circles in recent years about the need to rethink the concept of security. Since the 1980s, in fact, academics have sought a more elastic definition of security that could encompass environmental, economic, human rights and other factors. These attempts, though analytically impressive in many cases, have for the most part come up against the buffers of a still influential traditional view of national security policy which is more restrictive in scope.

The traditional view stresses the primary role of states, the importance of state sovereignty, inter-state competition, and the central importance of military issues and military force. It retains its influence for the obvious reason that, whatever else may be relevant, security between states is a necessary condition for wider human security and because the security pressures central to the logic of a largely anarchic international state system still cast a long shadow over much of international affairs. States too of course, also retain some crucial capacity for action in response to many of the wider risks and threats that we have already described.

That said, we believe that when seen against the current world situation, there are major weaknesses with this approach that make it timely and necessary to get beyond it. First, it lacks sufficient descriptive and explanatory power in relation to contemporary events. While it is relevant to some debates, such as that over the North Korean and Iranian nuclear programmes and the possible regional nuclear arms races that may be provoked as a result of them, its privileging of state actors and the inter-state level of analysis means it misses the relevance and importance of many non-state actors operating at a variety of different levels. Terrorist groups, private sector bodies, international organisations and NGOs are all cases in point. Second, the traditional view also privileges some issues (the military) and some strategic drivers (the balance of power and inter-state competition) over others and again, the result is to miss much of importance. Wider social and economic issues are underplayed, as are key strategic drivers of contemporary events such as globalisation and climate change. The traditional conception of security policy, in short, leaves too much out.

These weaknesses suggest an urgent need to reconceptualise and redefine the terrain of security policy to get beyond the privileged actors, issues, levels of analysis, and drivers of strategic change tied up with the traditional approach. This is not to say the traditional approach should be entirely discarded, but to say that it now needs to be nested within a wider view of the relevant terrain.

One way of approaching this is to adopt the notion of 'human security' (Human Security Centre 2005, Commission on Human Security 2003). In answer to the central question of whom or what is to be made secure and from what range of risks and threats, human security analysts make people, not states, the referent object of policy and define as relevant any risks and threats with a capacity to put people's security in doubt. This has two effects. First, it expands radically the range of issues defined as security issues, since people suffer menaces that include but go well beyond the threat of external military attack. Human security includes protection of citizens from environmental pollution, transnational terrorism, massive and sudden population movements, and long-term conditions of oppression and deprivation. Second, it explicitly rejects an actor-led approach to defining the terrain of security policy in favour of an issue-led approach. In other words, the terrain of national security policy is not defined primarily by what the military, the police, the intelligence services and the key security-related government ministries do. Rather, it is defined and delimited by reference to the issues that represent the most potent threats and risks to the security and public safety of people. Traditional security institutions are clearly crucial to the terrain, but they are not in and of themselves the embodiment of it.

In the Appendix, we have combined this general outlook with the specifics of the analysis presented in Section 2 of the paper to offer, in tabular form, a new delimitation of the terrain of national security policy today. This lists the issues we believe to be central, defines many different state and non-state

actors as relevant, and distinguishes between five different levels of activity in and across which those actors may be active (the sub-national, national, bi-lateral, regional and global).

Other advantages of this approach

As well as bringing the entire security agenda into one analytical framework, this approach has four other advantages.

First, it makes clear that we need to rethink traditional notions of what and where the front line is in the battle for security. If direct threats to the safety of our country and its citizens can come out of failed or pariah states such as Afghanistan, then the actions of British troops in places like Helmand Province must clearly still be seen as actions in the front-line defence of the United Kingdom. If poverty, inequality within states and conflict are all key drivers of the existence of failed and pariah states in the first place, however, then so too must actions to tackle global poverty, to address economic inequities and to prevent, contain and recover from conflicts in other parts of the world Similarly, while the inter-state military balance remains a front-line issue in a world of change today, it is joined (in a context where climate change is set to become a key driver of resource competition and inter-state conflict), by climate change mitigation and adaptation measures as front-line security issues too.

Even within our own society, where the counter-terrorist efforts of the police and security services represent a clear front line in the defence of us all, our notion of what and where the front line is must change. The police and security services rely on citizens, local community organisations and businesses to both challenge the process of radicalisation in the first place and to help minimise the extent of disruption in the event of a successful attack.

In this context the activities of citizens, local community groups and businesses within our country and on our own territory themselves constitute activities at the security front line. The single biggest distinguishing feature of the new front line from the old, therefore, is that there is not just one front line and not just one type of threat to be faced but many. Some threats and front lines lie outside of our own society, at global or regional level, and some within, at local level. Some relate to military issues and some to economic, environmental or natural phenomena. An effective security strategy in this context must be simultaneously sensitive to the many issues, fronts and levels of activity, while seeking to build a coordinated response from the many relevant actors, across all.

Second, as well as facilitating analysis of a single issue across multiple levels, the approach set out also facilitates the analysis of a group of issues at a single level. That is to say, for example, that it allows both the analysis of the terrorist threat and the actions required to meet it at all levels from the subnational to the global but also allows UK policymakers to see all the issues facing them at, say, the regional level.

Third, and as a consequence of this, the framework makes it easy to group issues and to study the linkages between them, as well as to see the range of actors whose contribution to an effective response might need to be joined up. On terrorism and failed states, to give an example, it makes clear that elements of foreign policy, overseas intervention and domestic counter-terrorism policy might need to be joined up to ensure that the former does not undermine or render the latter ineffective.

Finally, this approach can allow us to think about individual security-related institutions and organisations within the widest conception of their strategic environment. This means the role, purpose, and function of each institution can be reframed and reassessed against this background. To take the role of the military for example, the Appendix makes clear that military institutions now take part not only in traditional activities such as the defence of home territory, overseas combat operations, and aiding the civil power in time of emergency, but must also play a role in conflict prevention, international peacekeeping, and post-conflict reconstruction efforts around the world.

For these reasons, we believe the table in the Appendix defines and delimits the scope of security policy reasonably well. It is a work in progress but captures the key issues, the levels of analysis and the actors that are most relevant. That said, it is important to be clear about what this issue-led

approach, as we have set it out, is not. The Appendix may embody a way of delimiting the terrain of security policy but it is not a tool for prioritising between the issues identified themselves. This prioritisation remains a matter of strategic judgement.

There is, furthermore, a debate to be had around the margins on which issues should and should not be included in the framework. Some human security analysts make no distinction between security policy, health policy, development policy+ and environment policy while others concentrate only on political violence. In our delimitation of the terrain we have included but gone beyond political violence to include issues such as global poverty, the threat of disease, and the potential of climate events to destroy critical national infrastructure. Even where our focus is on elements of violent conflict, we describe the policy challenges in such a way as to include an awareness of issues like poverty and climate change as key drivers of it. Some will argue that this is to go too wide, others that it is not wide enough. We believe it strikes the right balance of concern with long-term drivers and short-term, pressing threats.

Integrated power and collaborative security: a new strategic approach

If, as we have argued, we live in a world of shared destinies, where the front line is made up of many complex issues, of multiple relevant actors, and of many levels of action, and if the central challenge for policy today is to enhance and to extend our mechanisms of governance over the relevant terrain, then a number of implications flow from this in terms of the overall strategic orientation now required. It is not just that power itself has become more widely diffused among actors in the security environment or that the range of issues and drivers has become more varied and complex, but that what is required to have influence over that environment has itself changed too.

This is not just about a wider range of policy instruments being relevant to security policy today (though this is clearly one conclusion that does need to be drawn), but also about influence requiring a distributed and coordinated response across a wide range of actors. This is a necessity in a system that has many centres of power and a high level of security interdependence and this realisation itself implies the need for a collaborative approach to security policy.

In this section, we briefly set out what we believe are the core principles of an approach to policymaking that is both sensitive to the use of a wider range of policy instruments and collaborative in overall approach.

Principle 1: Adopt the notion of integrated power

We believe a far wider range of instruments must now be seen as relevant to security policy and that these instruments must be more effectively integrated to achieve maximum effect. There has been an ongoing debate on this issue in recent years, centring on notions of hard and soft power, where 'hard power refers essentially to the exercise of military force and/or the threatened use of such force for purposes of coercive diplomacy and soft power refers to economic leverage and influence accrued through trade and aid, diplomatic cooperation and cultural exchange' (Khana 2008: 378-9).

Given the range and complexity of the security challenges we face, and the diverse nature of today's front line, we believe a choice between these two approaches is a false one. The question is not so much which instruments are most effective and most required *per se*, but which combination of them will be most successful and in which circumstances. We need, in other words to think not in terms of hard or soft power, but in terms of integrated power (Center for American Progress 2006). This means, to give just two examples, being committed to a better linkage of military, economic, social and cultural policy instruments in any activity focused on restoring governance to a failed or failing state on the one hand, and being committed to better coordination of intelligence, policing, and local community policy instruments used to combat radicalisation and terrorism at home on the other. It also means sometimes integrating instruments across the traditional domestic and foreign policy divide, such that elements of policy from both domains form part of a wider strategic response to challenges that do not respect borders, such as transnational organised crime.

Principle 2: Work in partnership with others

At the heart of a collaborative approach to security policy will also be a new commitment to working in partnership. This is clearly necessary at international level, through fresh attempts at multilateral cooperation across a wide range of issues. To be successful, however, we need to move beyond the arrangements forged in the post-World War II period.

The genius of the multilateral international system that survived, and some would say won, the Cold War, was its foundation on a network of capable states working together to create an alliance greater than the sum of its parts. That alliance still exists today, but the threats arrayed against it are more diffuse and the breadth of its contributing members does not match the scope of the challenge. Complicating matters further, the general dissatisfaction with American leadership under the Bush administration may have eroded the necessary political will to work collaboratively to address the world's problems.

However, the formula upon which our earlier successes were built is still valid and the security challenges we described in Part 2 of the paper must now inspire and consolidate a new age of multilateral partnerships. As power shifts away from the Atlantic seaboard, these new partnerships must reach beyond traditional boundaries and draw new and emerging powers into the collaborative system of common security.

Partnership working, moreover, now needs to be about much more than enhanced multilateral cooperation among states. Depending on the issue at hand, partnerships will be required not just at global and regional level between states but also often between different institutions and elements within the same state (across central and local levels and across different functional responsibilities) and between public sector actors and private and voluntary sector bodies. This is an obvious necessity on issues such as protection of the critical national infrastructure, where many private sector players are involved, and on issues such as counter-terrorism, where the security services and the police will be much more effective if working in close partnership with members of the communities they are trying to serve and protect.

Principle 3: Commit to legitimacy of action

Such partnerships can only be sustained through a voluntary commitment to action and a voluntary commitment to action will not be forthcoming from a wide range of actors if defining problems, objectives and decision-making processes are not seen as legitimate. No government can or should be denied the right to take unilateral action to protect its citizens from a clear and imminent danger, but the lesson to draw from the context we have described is clear: establishing the widely perceived legitimacy of any action will mobilise more partners with more resources and will more often be a route to security policy effectiveness than a barrier to it. Legitimacy, in other words, is a major source of power and acts almost as a force multiplier, turning potential power resources into greater actual influence over the environment.

That said, in substantive terms widely perceived notions of legitimacy will not be easy to deliver. Others clearly will have different views on what is and is not legitimate and it cannot be simply assumed that there will always be widespread acceptance that UK government actions are legitimate. Indeed, there are already significant challenges to the legitimacy of certain aspects of a prevailing order with which the UK, as a wealthy and influential country, is still very much associated. These stretch from questions over the moral sustainability of current levels of global inequality to questions over the distribution of decision–making rights in important international bodies like the UN Security Council. They include concerns over the apparent hypocrisy of Western democratic regimes providing support to non-democratic regimes in the Middle East and elsewhere, and encompass issues related to social exclusion, accusations of Islamophobia, and the legitimacy or otherwise of additional police powers to crack down on terrorists here at home.

Nevertheless, despite these real tensions and difficulties, in the long term, if we undervalue political legitimacy and alienate potential partners either elsewhere in the international community or within our own society here at home, our capacity to influence the security environment and therefore to

deliver the security, well-being and public safety of our people will most likely be eroded, not enhanced. If the price of additional legitimacy is being self-reflective and flexible on the issues without compromising our basic values, therefore, this is a price well worth paying.

Principle 4: Move to more open policymaking

Legitimacy, of course, is about process as well as substance. If policy success is likely to come down to the breadth and quality of the partnerships that can be built and if partnership working requires a major investment in shared notions of legitimacy, it is highly unlikely that any of this can be achieved while old models of information secrecy and closed decision-making remain in place, either domestically or internationally. While there will always be a need for secret operations and to protect the anonymity of some sources, and while the specifics of particular security arrangements should always be managed on a strictly need-to-know basis, much security policymaking today is too remote and closed off from the wider range of actors that could not only enjoy but also contribute to it.

Governments, in any case, no longer themselves own and control all of the relevant and necessary expertise and assets required in the making of an effective security policy. From emergency planning to climate change and from the protection of critical national infrastructure to counter-terrorism, citizens, private businesses and international organisations can all add value to the policymaking process.

This all raises difficult questions for those in official positions, particularly in relation to how much information to share and where, when and how to open up particular decision-making processes. Again, however, the effort should be rewarded as more partners have a greater sense of buy-in to both the process and the substance of policy, and more partners actively play a role in policy implementation. Added social depth in the decision-making process should, in other words, contribute to greater policy reach and effectiveness.

Principle 5: Be open to institutional reform

Finally, given the need to think differently about the requirements of influence in the new security environment, the need to integrate policy instruments together more effectively and the need to open up policymaking to a wider range of influences, it seems clear that the period ahead will also need to be one of significant institutional reform. Organisations at all levels (see the Appendix) should already be asking questions about how their roles have changed, whether they currently have the right skills to perform their necessary tasks and which other organisations they should now be partnered with. It is not simply, however, that the same old institutions need to change the way they behave but that some new institutions may also need to be created and old ones scrapped in the period ahead. This is never easy, but existing institutional boundaries should not be allowed to stifle and limit the necessary innovation required in current circumstances.

We are aware that some, as ever, will say that the principles we have outlined here are merely liberal niceties, fine in word but impossible to apply in practice. In our view, however, in the changed security landscape of today, some commitment to these principles is a strategic necessity, not a liberal nicety. We would also stress what a commitment to integrated power and collaborative security is not. It is not an excuse for inaction in the face of mounting threats. There will still be times and places when government has to take difficult decisions, on behalf of us all, to act largely in isolation from others where it perceives the threat to be serious enough to justify it. The point, however, is that such instances should be a last resort and be kept to an absolute minimum since the price paid in terms of lost legitimacy and lost influence is high and getting higher.

Questions for a national security strategy

The ultimate objective of any national security strategy for the UK must be to clearly provide the country and its people with the best protection possible against the full range of threats and risks facing us. Delivering on this requires, as David Omand has pointed out, '(a) taking anticipatory action to influence directly the sources of major risks facing society and at the same time (b) taking steps to reduce society's vulnerability to the types of disruptive phenomena that we may face' (Omand 2007: 1).

We turn, finally, to a discussion of the pressing policy questions to which any forward-looking national security strategy ought now be sensitive. We first examine questions relevant to anticipatory action on future possible sources of threat and risk and then move on to the identification of issues relevant to a reduction in our current vulnerabilities. Our approach throughout is not to offer policy solutions but to table questions. In a world of change as profound as this, dwelling on the questions that ought to be asked is just as valuable an exercise as speculating, no matter how thoughtfully, on the nature of the answers that ought to be found.

Questions related to anticipatory action

The reform of key international institutions

If the 21st century is seeing a diffusion of relative power away from the Atlantic Seaboard to Asia and elsewhere, and if this process itself, if badly managed, becomes a source of international instability in future, then a pressing issue is how best to draw the emerging powers into the already existing structures of the international system in an orderly way. In a world in which security must be built collaboratively if it is to be built at all, this will be a critically important task but also a highly delicate and difficult one. The emerging powers may not feel that their interests have been well looked after in recent decades by the preponderant powers of the late 20th century and may not be well disposed to looking after our interests now that their own strength gives them a greater voice. Nevertheless, the issue must be addressed.

At the heart of this is a series of questions related to the reform of key international institutions:

- What kind of UN reform will not only best accommodate newly emerging powers but also, as a result, contribute to the increased effectiveness of the UN system?
- How should reform of decision-making structures in the International Monetary Fund and World Bank proceed such that a wider range of voices and interests are heard when the agendas, priorities, and approach of such organisations are being shaped?
- How can the membership of the G8 be best opened up and its reach and legitimacy consequently extended?

The strengthening of a rules-based international order

A further, related set of questions relates to how best to create a rules-based international order. This will be a key feature of any attempt to build legitimacy of action into the international security arena. There are several pressing questions at the forefront of the debate on how to best go about this, such as:

- How can the reach and effectiveness of the International Criminal Court be further extended?
- How can the legal frameworks that are intended to protect human rights be more deeply enshrined and more effectively enforced?
- What are the next steps required to further embed the Responsibility to Protect, both as a widely
 accepted modification to more traditional notions of state sovereignty and as a legitimate basis
 upon which the international community may intervene in the domestic affairs of a state failing
 to fulfil its responsibilities?

Climate change

- At home, are forward-looking climate change impact assessments being fully taken into account
 in planning decisions, particularly as these relate to critical national infrastructure investments,
 the location of important military and security assets, and future community safety?
- Are sufficient protections being put in place to deal with weather events that already appear to be becoming more volatile? Significant questions have already been asked in relation to how recent flooding events impacted on GCHQ.
- In order to politically and symbolically bolster the UK's active contribution to international climate change mitigation diplomacy, ought we now to elevate climate change to the status of a clear

- threat to national and international security and to use our diplomatic influence to ensure that climate change and its emerging effects receive sustained attention within the UN Security Council?
- Is the international community investing enough in developing its understanding of where climate change impacts will be felt first and hardest and, as a corollary, of how climate change effects will impact on already existing zones of conflict and failed or failing states?
- Should the UK, with its international partners, be doing much more to strengthen climate change
 adaptation capacities in the countries and areas likely to be most seriously affected, not just as a
 human solidarity measure but as a front-line defence of international stability and effective
 governance in the years ahead?

Nuclear non-proliferation

- Given concerns over a new wave of state-based nuclear proliferation, and a lack of belief among non-nuclear weapon states in the seriousness of intent to disarm among the existing nuclear powers, ought we now to be actively pursuing a vigorous programme of multilateral denuclearisation among the current possessor states?
- Is the lack of real progress and high level attention on this issue in the recent past undermining the political, if not the legal, legitimacy of attempts to prevent further proliferation in cases such as Iran and North Korea?

Energy policy and international security

- Given the tightening of international energy markets, and the potential for future competition
 and even conflict over scarce fossil fuel resources, ought we now to be taking far stronger
 measures to coordinate and manage international supply and demand for energy? The expansion
 of renewable, low-carbon, energy supplies is obviously a key implicit feature of the ongoing
 Kyoto process but ought we now to be attempting a significant and internationally coordinated
 improvement in energy efficiency to ease or at least limit competitive demand for fossil fuels in
 the decades ahead?
- Ought we also to be actively seeking the creation of an international nuclear fuel bank, such that
 those countries wishing to adopt nuclear power for either climate change mitigation or security
 of energy supply reasons are able to do so without the result being a major international
 expansion and dispersal of enrichment and reprocessing activities? The latter outcome itself
 would be a serious nuclear proliferation risk and a blow to the Non-Proliferation Treaty.

The challenge of political Islam

British military and intelligence services, along with those of many of our allies, are active overseas and our police and intelligence services are active here at home in attempts to contain Islamist violence. Given the nature of the political project being pursued by the Islamists, however, it seems appropriate to now ask what the elements of a coherent strategy to defeat them politically, both overseas and at home, might be:

- Should we be doing more to support the growing calls for political and economic reform in some predominantly Muslim countries, particularly in the Middle East?
- Is the reliance of many Western economies on oil and gas from that region a barrier to support for reform and if so, is a shift to less energy reliance on some of the autocratic regimes involved a key prerequisite of a changed Western relationship with the Middle East?
- Can more be done in the field of economic collaboration with Muslim countries such that their economic prospects within the globalised world economy improve?
- Should we be building a more nuanced understanding of the range of opinions contained within the Islamist movement, broadly defined, and should we be seeking out dialogue with those Islamists committed to non-violent political methods?
- Within the UK, ought we to be conducting a root and branch investigation not just into the tactics and methods of Islamist groups but of the radicalisation process itself, such that a more

nuanced public policy response can be built on the back of it? Should we be looking at closer integration of intelligence and policing work with elements of social policy, labour market interventions and local community capacity-building measures to more coherently address some of the socio-economic context that may be relevant to the radicalisation process?

• What more should we be doing to ensure that newly arrived immigrants are more effectively integrated into British society such that they do not become isolated, alienated and vulnerable to radicalisation?

Tackling poverty and inequality

- Given the increasingly visible and morally indefensible level of global poverty and economic
 inequality and the complex links between poverty, inequality, conflict and failed states, is it now
 time to see stronger moves to a fairer global economic order not only as moral imperative but as
 an important investment in international stability and in our own long-term security?
- How can aid, trade, investment and climate change adaptation assistance instruments be more
 effectively combined with conflict prevention and post-conflict intervention measures to
 positively impact those countries most at risk of state failure?
- Should we now be seeking to strengthen further the contribution of the European Union to efforts to widen the circle of economic opportunity to areas of the former Soviet Union, North Africa and the Middle East and if so, how?

Pandemics

• Given concerns over a possible new influenza pandemic, and London's status as a hub for global people movement, should we be investing more, with international partners, in the search for a universal flu vaccine that could save tens of millions of lives? Should we also be extending the UK front line in the fight against a possible pandemic by assisting more with animal health protection measures in possible pandemic source regions such as South East Asia?

Questions related to current vulnerabilities

Turning to the issue of action to reduce current vulnerabilities, key issues and questions that flow from the preceding analysis relate to socio-economic vulnerability, transnational organised crime, the security of strategic trade routes and the security of materials that may be of interest and value to terrorists.

Socio-economic vulnerability

The Government has already done much to think about emergency planning and protection of the critical national infrastructure but key questions remain:

- How much of the UK's critical national infrastructure is connected to, and reliant upon, infrastructure beyond our borders and how strong are the international arrangements to protect such infrastructure from disruption? Should we be doing more to address concerns in this area?
- How much of the 80 per cent of UK critical national infrastructure that is in private hands is owned and operated by companies headquartered outside of the UKand what, if any, are the policy implications and challenges associated with this?
- What more can be done to stimulate better business continuity planning, not only in the critical national infrastructure sectors, but more widely across sectors and throughout the business organisations, large and small, that collectively make up the life-blood of the UK economy?
- What kinds of new public-private partnerships are best suited to delivering on the needs of a more resilient UK economy and society?
- In the long term, what would a more resilient society look like, in terms of the nature and distribution of critical infrastructure and the roles played by government, businesses and

- citizens? Are some infrastructure strategies and designs inherently more resilient than others? Should we, for example, be developing a more widely distributed energy generation infrastructure such that disruptions to any one generating plant would only have limited impact?
- How can the Government more effectively plan for and facilitate a key role for citizens in emergencies? Time and again in emergency situations, it is not only what the emergency services do but what citizens do for each other that has made an important difference to eventual outcomes.

Transnational organised crime

- Given the massive scale of transnational organised crime and its significance to international
 stability and to security on our own streets, ought we now to be exploring a more multi-layered,
 holistic strategy in response? At the level of foreign and development policy, could we be doing
 more to use soft economic power instruments to impact corrupt states, both at the level of their
 elites and at the level of the poor who are tempted into organised crime as a route out of
 poverty?
- The promise of EU membership, of access to EU markets, and of access to associated flows of aid and investment has, for example, been used to good effect in some countries in Eastern Europe. Is this a model that could be replicated elsewhere, and if so, through which institutional vehicles?
- Should we massively and rapidly expand the role of Joint Investigation Teams across international jurisdictions to ensure that borders do not effectively undermine efforts to investigate crime, to build strong cases and to achieve successful convictions of the criminals involved?

Security of strategic trade routes

The UK government has recently published a welcome paper on border security (Cabinet Office 2007), including the security of our ports. Given our status as a major trading nation, further questions still need to be asked:

- Are we alert enough to the potential hazards and threats to international maritime security?
- Should we be doing more to diversify strategic trade routes, particularly in the growing
 relationship between Europe and Asia, such that we would not be as exposed to any sudden and
 massive disruption to the growing Asia-Europe maritime routes? Should we, for example, in
 collaboration with our EU partners, be assisting in the development of the central Asian transport
 infrastructure, such that it better connects the EU with China along what might be called a new
 Silk Road?

The security of fissile material

There is a significant worry that terrorist groups are seeking to acquire either a nuclear weapon or the fissile material required to make one. The UK is currently active on this issue, in initiatives such as the Global Threat Reduction Partnership, through the G8, but fissile material is still not being made secure fast enough.

• Given that it is the essential ingredient in a nuclear bomb and given the threat of nuclear terrorism, ought we now to be ramping up our activities in this area or, to paraphrase Graham Allison, since terrorist organisations are racing to get a bomb, ought not we be racing to stop them? (Allison 2006).

4. Conclusion

We have sought in this paper not to spell out what the UK's national security strategy should be, but to analyse the wider context within which that strategy ought now to be forged. In so doing, we have identified key drivers of change and their effects on the security landscape, we have offered a view on what these might mean for the nature and diversity of the security policy challenges being faced today, and we have set out an overall strategic approach which we believe this wider context now needs to call forth. We have also tabled a set of pressing questions that, in our view, now need to be addressed.

We should finally, perhaps, make note of the things we have not done. We have not given an account of the values that ought to underpin and shape UK policy, though our call to a commitment to legitimacy of action in Section 3 is rich in normative implications. We have also not provided an account of the unique assets and points of leverage that the UK might be able to bring to bear on the challenges described. Other omissions include a treatment of current policy initiatives and of the many areas of activity that the UK and its allies abroad are quickly getting better at. Much learning is ongoing, for example, in areas such as intervention in post-conflict zones and on issues such as counter-measures in relation to terrorist financing.

These are big omissions and all are issues that will be addressed in the interim report of the ippr Commission on National Security later this year. We do not believe, however, that the absence of a treatment of them here fatally undermines the value of the material that is presented. One does not need to be a believer in a blueprint approach to strategy to think that an overview investigation into the wider context of strategic thinking is a valuable exercise in and of itself. We hope, therefore, that as a contribution in this latter area, this paper is a worthwhile contribution to ongoing policy debate.

References

Allison G (2006) *Nuclear Terrorism: The Risks and Consequences of the Ultimate Disaster* London: Constable

Barnett J (2001) Security and Climate Change, Working Paper 7 Canterbury: Tyndall Centre

Bergen P and Reynolds A (2005) 'Blowback Revisited', *Foreign Affairs*, 84, November/December 2005, pp2-4

Bitar M (2005) Water and the Palestinian-Israeli Conflict: Competition or Cooperation? Washington DC: Foundation for Middle East Peace

Bird J (2007) *Energy Security in the UK* London: Institute for Public Policy Research, available at: www.ippr.org.uk/publicationsandreports/publication.asp?id=555

Burke J (2003) Al Qaeda: Casting a Shadow of Terror London: I.B. Tauris & Co Ltd

Cabinet Office (2007) Security in a Global Hub: Establishing the UK's New Border Arrangements London: Cabinet Office

Cabinet Office (2008) Food: An Analysis of the Issues London: Cabinet Office

Campbell K, Gulledge J, McNeill J R, Podesta J, Ogden P, Fuerth L, Woolsey J, Lennon A, Smith J, Weitz R, and Mix D (2007) *The Age of Consequences: The Foreign Policy and National Security Implications of Climate Change* Washington DC: Center for Strategic and International Studies

Case M (2006) Climate Change Impacts on East Africa: A Review of the Scientific Literature Gland: World Wide Fund For Nature

Center for American Progress (CAP) (2006) *Integrated Power: A National Security Strategy for the 21st Century* Washington DC: Center for American Progress

Center for Naval Analysis (CNA) (2007) *National Security and the Threat of Climate Change* Washington DC: CNA

Chatham House (2007) *UK Food Supply in the 21st Century: The New Dynamic,* Briefing Paper, London: Chatham House

Chicago Council on Global Affairs and WorldPublicOpinion.org (2007) 'Poll Finds Worldwide Agreement that Climate Change is a Threat', 13 March

Cirincione J and Leventer U (2007) 'The Middle East's nuclear surge', *International Herald Tribune*, 13 August

Collier P, Hoeffler A and Soderbom M (2004) 'On the Duration of Civil War', *Journal of Peace Research*, 41(3), pp253-273

Commission on Human Security (2003) *Human Security Now* New York: Commission on Human Security

Council on Foreign Relations (2007) 'Hamas: Backgrounder', June 8, available at: www.cfr.org/publication/8968/

Doshi V, Schulman G and Gabaldon D (2007) 'Lights, Water, Motion!', *Strategy + Business*, No. 46, Spring

Edwards C (2005) East Anglian Coastal and Estuarine Flood Management and Strategies and Recreational Boating Royal Yachting Association East, Technical Bulletin no. 1, December 2005, available at: www.rnsyc.org.uk/docs/ecnews/eststrats.pdf

Elbe S (2003) Strategic Implications of HIV/AIDS London: International Institute for Strategic Studies

European Monitoring Centre on Racism and Xenophobia (EUMC) (2006) 'Muslims in the European

Union: Discrimination and Islamophobia', Vienna: European Monitoring Centre on Racism and Xenophobia, available at: http://eumc.europa.eu/eumc/material/pub/muslim/Manifestations_EN.pdf

Federation of Student Islamic Societies in the UK and Ireland (FOSIS) (2005) *The Voice of Muslim Students: A Report into the Perceptions and Attitudes of Muslim Students Following the July 7th London Attacks* London: FOSIS, available at www.fosis.org.uk/sac/FullReport.pdf

Financial Times (2007a) 'Bread and Butter Issue: Rising Prices May Herald the First Global Food Shortage Since 1970s', 24 October

Financial Times (2007b) 'Strategic Trade Routes: Asia to Europe', Special Report, 10 December, available at: http://media.ft.com/cms/69786bb0-a71d-11dc-a25a-0000779fd2ac.pdf

Foreign Policy (2007) 'The Failed States Index', Foreign Policy, July/August 2007

Freedman L (2002) Superterrorism: Policy Responses London: Blackwell

Freedman L (2004) 'The New Security Equation', Conflict, Security and Development, 4:3, pp. 245-259

French H (2005) 'Anger in China Rises Over Threat to Environment,' New York Times, 19 July

Frost RM (2005) *Nuclear Terrorism After 9/11*, Adelphi Paper 378, London: International Institute for Strategic Studies

Goldman Sachs (2003) Dreaming with BRICs: The Path to 2050, Global Economics Paper, No. 99

Homer-Dixon TF, Boutwell JH and Rathgens G (1993) 'Environmental Change and Violent Conflict', Scientific America, 1993: 38, 44

Human Security Centre (2005) *Human Security Report 2005* Vancouver: Human Security Centre, University of British Columbia

Husain E (2007) The Islamist London: Penguin

Hutton W (2007) *The Writing on the Wall: China and the West in the 21st Century* London: Little Brown

ICM/Sunday Telegraph (2006) Poll of Muslim public attitudes, 19 February 2006

Intergovernmental Panel on Climate Change (IPCC) (2007) Fourth Assessment Report Geneva: IPCC

International Energy Agency (IEA) (2006) World Energy Outlook 2006 Paris: IEA

International Institute for Strategic Studies (2007) *Nuclear Black Markets: Pakistan, A.Q. Khan and Proliferation Networks* London: IISS

Joehnk T (2007) 'The Great Wall of India,' The Economist: The World in 2007, March

Kennedy JF (1961) Inaugural Address, Washington DC, 20 January 1961, available at: www.jfklibrary.org/Historical+Resources/Archives/Reference+Desk/Speeches/JFK /003POF03Inaugural01201961.htm

Keohane R and Nye J (1973) Power and Interdependence, 3rd Edition, London: Longman

Khana P (2008) *The Second World: Empires and Influence in The New Global Order* Penguin, forthcoming

Klausen J (2007) *British Counter-Terrorism After the July 2005 Attacks* Washington DC: US Institute for Peace

Li L (2007) 'China Releases First National Report on Climate Change', World Watch Institute, 11 January

Liddell H (2007) British High Commissioner to Australia, Speech to National Federal Council Business Breakfast, 4 August

Malik S (2007) 'My Brother the Bomber', Prospect, June, issue 135, pp30-41

Mamdani M (2005) 'Whither Political Islam', Foreign Affairs, January/February 2005, 84, pp148-155

Mazzitelli A (2007) 'Transnational Organized Crime in West Africa: The Additional Challenge,' *International Affairs* Volume 83, Issue 6 pp.1071-1090

McKibbin W (2006) *Global macroeconomic consequences of pandemic influenza* Sydney: Lowy Institute, available at: www.lowyinstitute.org/Publication.asp?pid=345

Mepham D and Gero M (2004) *Promoting Effective States: A Progressive Policy Response to Failed and Failing States* London: ippr and Freidrich Ebert Stiftung

McCarthy M (2006) 'Climate Change Will Cause Refugee Crisis', The Independent, 20 October, 2006

Ministry of Defence (2006) 'Climate Change and Defence: What's the Deal?', *Defence News*, 13 October

Ministry of Defence (2007) Global Strategic Trends 2007-2036, Shrivenham: Development, Concepts and Doctrine Centre

Norton J (2008) 'The Crisis in Our Critical National Infrastructure', *Public Policy Research*, December 2007 – February 2008, Vol 14, issue 4, pp244-247

Nuclear Threat Initiative (2006) 2006 Annual Report, Washington DC: NTI, available at www.nti.org/b_aboutnti/annual_report_2006.pdf

Omand D (2007) *The International Aspects of Societal Resilience: Framing the Issues*, conference paper, available on request from ippr

Osterholm M (2007) 'Unprepared for a Pandemic', Foreign Affairs, 86, March/April 2007, pp47-57

Payne A (2007) Living in a Less Unequal World London: ippr

Pew Global Attitudes Survey (2006) 'Muslims in Europe: economic worries top concerns about religious and cultural identity', Washington DC: Pew Research Centre, available at http://pewglobal.org/reports/display.php?ReportID=254

Pluta AM and Zimmerman PD (2006) 'Nuclear Terrorism: A Disheartening Dissent', *Survival*, 48:2, pp55-69

Podesta J and Ogden P (2007) Global Warning Washington DC: Center for American Progress

Richardson M (2004) *A Time Bomb for Global Trade: Maritime Related Terrorism in an Age of Weapons of Mass Destruction* Singapore: Institute of Southeast Asian Studies

Rice E (2007) Poverty Breeds Insecurity Washington DC: Brookings Institute

Roy O (2004) Globalized Islam: The Search for a New Ummah New York: Columbia University Press

Ryan J (2007) *Countering Militant Islamist Radicalisation on the Internet: A User Driven Strategy to Recover the Web* Dublin: Institute of European Affairs

Sachs JD, Hindrey L and Smith GE (2007) *Revamping US Foreign Assistance* Washington DC: The HELP Commission

Saggar S (2006) 'The One Per Cent World: Managing the Myth of Muslim Religious Extremism', *The Political Quarterly*, Vol. 77, No. 3, July-September, pp314-327

Salem P (2006) 'The Future of Lebanon' Foreign Affairs, Volume 85, No. 6, November/December

Schultz M (1995) 'Turkey, Syria, and Iraq: A Hyrdopolitical Security Complex', in Ohlsson L (ed.) *Hydropolitics: Conflicts Over Water as a Development Constraint* London: Zed Books

United Nations (2004) A More Secure World: Our Shared Responsibility, report of the High Level Panel on Threats, Challenges and Change New York: United Nations Department for Public Information

United Nations Development Programme (2005) *Human Development Report 2005: International Cooperation at a Crossroads: Aid, Trade and Security in an Unequal World* New York: UNDP

United Nations Development Programme (2006) *Human Development Report 2006: Beyond Scarcity: Power, Poverty and the Global Water Crisis* New York: UNDP

United Nations Office on Drugs and Crime (UNODC) (2005) *Summary Findings of Opium Trends in Afghanistan*, 2005 New York: United Nations

United Nations Office on Drugs and Crime (UNODC) (2006) 2006 World Drug Report New York: United Nations

Weinstein JM, Porter JE, and Eizenstadt SE (2004) *On the Brink, Weak States and U.S. National Security* Washington DC: Centre for Global Development

Wolsey RJ (2007) 'Beyond Vulnerability', *Strategy and Business*, No.46, available at www.strategy-business.com/press/article/07104?gko=a8c38&tid=230&pg=all

Woods N (2007) *Power Shift: Do We Need Better Global Economic Institutions?* London: Institute for Public Policy Research, available at: www.ippr.org.uk/publicationsandreports/publication.asp?id=521

World Bank (2003) *Breaking the Conflict Trap: Civil War and Development Policy* New York: United Nations

World Bank (2007) World Development Indicators 2007 New York: United Nations

Appendix: The new front line of national security policy

Level of policy action and actors involved

Issue	Policy challenge	Sub-national	UK national	UK bilateral relationships	Euro/Atlantic regional	Global
External military attack on the UK	Not an immediate threat. But obvious requirement to be ready for defence of national territory.		Armed Forces		NATO Alliance; EU	UN Security Council
Breakdown of international security institutions	Ensure legitimacy and effectiveness of key institutions such as UN Security Council.		Foreign and Commonwealth Office (FCO)	Permanent 5 (UK, US, France, Russia, China) plus India and possibly Brazil.	EU (possible EU seat on Security Council).	UN Secretary General; Security Council, other parts of the UN system.
Terrorism	Understand challenge and the radicalisation process. Create policies to win hearts and minds; prevent attacks on UK soil (through intelligence work/policing/protection of UK borders; build domestic consensus around counterterrorism strategy; combat the terrorism/organised crime interface.	Local Authorities (e.g. Preventing Political Extremism Pilots); Police Constabularies, including the Met; Police Community Tensions teams; community and religious groups; individual citizens.	Home Office; Cabinet Office; Intelligence Services; GCHQ; Serious and Organised Crime Agency; Border Police; Transport Police; organisations protecting critical national infrastructure; Armed Forces as aid to civil power.	United States and other allied countries (intelligence service cooperation). Intelligence sharing relationships with countries in the Middle East.	EU counter-terrorism strategy; Europol. EU diplomacy on Middle East Conflict; EU policy on Turkish entry to the Union.	Interpol; G8 Counter- Terrorism Cooperation.
Failed and failing states	Eliminate terrorist safe havens; build governance capacity in other failed and failing states through development and climate change adaptation assistance, conflict prevention measures, peace-building, post-conflict reconstruction.	UK based development and aid NGOs such as Oxfam, Save the Children.	FCO; Armed Forces; Ministry of Defence (MoD); Department for International Development (DfID); Police.		EU (Human Security Force?) NATO (as in Afghanistan)	UN Security Council; other regional bodies, such as African Union, acting under UN mandates; G8; International Monetary Fund (IMF)/World Bank; World Trade Organisation (WTO).
Humanitarian intervention	Prevent genocide and human rights abuses; respond to emergency situations.	UK based development and aid NGOs such as Oxfam, Save the Children.	Armed Forces; MoD; DfID.		EU; NATO	UN Security Council
Weapons of mass destruction proliferation	Prevent proliferation of nuclear, chemical, biological and radiological weapons to either state or non-state actors.	Actors and institutions securing nuclear facilities and materials within the UK.	FCO/MoD work on counter- proliferation; Department for Business, Enterprise & Regulatory Reform (BERR).	With United States and Russia, to encourage denuclearisation efforts.	EU nuclear exports control regime; EU counter-proliferation efforts.	International Atomic Energy Agency; Nuclear Non- Proliferation Treaty; Nuclear Suppliers Group; G8 Cooperative Threat Reduction Programme; Proliferation Security Initiative.

Issue	Policy challenge	Sub-national	UK national	UK bilateral relationships	Euro/Atlantic regional	Global
Climate change	Prevention of further global warming through post-Kyoto global agreement; adaptation to climate changes already inevitable, both for basic human survival and to ease conflict, migration and failed state pressures.	Individual businesses and business groups; Local Authorities; energy consumers	Department for Environment, Food and Rural Affairs (DEFRA), BERR, Environment Agency.	United States, India, China	EU (Emissions Trading Scheme)	Kyoto Process; Intergovernmental Panel on Climate Change
Energy security	Ensure security of supply, minimum exposure to unstable regions and climate change mitigation.	Energy companies; energy consumers.	DEFRA, BERR, FCO.	With supplier countries (Norway, Russia, Nigeria, Algeria, Caspian Sea region and others).	EU	OPEC, International Energy Agency
Global poverty	Reduce it and widen the circle of economic opportunity both for its own sake and to remove a key background factor to conflict and failed states.	UK-based development, aid, and poverty reduction NGOs.	DfID, FCO, Treasury.		EU (trade and aid policy)	World Bank; IMF; WTO; increasingly important private foundations.
Socio-economic resilience	Protect critical national and international infrastructure from terrorist attacks, climate events and accidents; ensure strong emergency planning and preparedness; ensure strong business resilience and recovery.	Local authorities; regional government offices; private sector companies in key infrastructure sectors and throughout economy; community groups.	Cabinet Office Civil Contingencies Secretariat; Home Office; BERR; Confederation of British Industry/Institute of Directors.		EU coordination on critical national infrastructure issues	Global Corporations; UN (on some issues, such as space infrastructure).
Disease/bio-security	Prevent, contain and if necessary eliminate serious disease outbreak, whether occurring naturally, or as result of bio-terrorism.	Local authorities and local emergency services; transport authorities; local media.	Cabinet Office Civil Contingencies Secretariat; Health Protection Agency. Possibly the armed forces as aid to civil power. Border police. National media.	Forward activity in possible source countries, such as Vietnam and other countries in South East Asia.	EU public health coordination	World Health Organisation
Transnational organised crime	To limit scale in overseas source countries; tighten UK border to make penetration of UK more difficult; achieve prosecutions where possible.	Local communities; Police Constabularies, including the Met.	Home Office; Cabinet Office; Intelligence Services; Serious and Organised Crime Agency; Border Police; Transport Police. FCO for assistance on source country policy (e.g. in West Africa).	Arrangements with individual countries on extradition and joint investigation teams.	Europol; EU for use of wider economic policy instruments aimed at tackling international corruption.	Interpol