



GLOBSEC NATO ADAPTATION INITIATIVE

**One Alliance?
Change Drivers
in a New Strategic Environment**

The GLOBSEC NATO Adaptation Initiative, led by **General (Retd) John R. Allen**, is GLOBSEC's foremost contribution to debates about the future of the Alliance. Given the substantial changes within the global security environment, GLOBSEC has undertaken a year-long project, following its annual Spring conference and the July NATO Summit in Warsaw, to explore challenges faced by the Alliance in adapting to a very different strategic environment than that of any time since the end of the Cold War. The Initiative envisages a series of policy papers which will address the nature of NATO adaptation and the challenges it must overcome if it is to remain a viable and credible alliance for the peace and stability in the transatlantic area. The policy papers published within the GLOBSEC NATO Adaptation Initiative are authored by the Initiative's Steering Committee members: **General (Retd) John R. Allen, Admiral (Retd) Giampaolo di Paola, General (Retd) Wolf Langheld, Professor Julian Lindley-French, Ambassador Tomáš Valášek, Ambassador Alexander Vershbow** and other acclaimed authorities from the field of global security and strategy. The aim of the involvement of such a wide array of experts is to reinforce the unique partnership between policy-makers, military leaders and leading academics and commentators. These policy papers will prelude and result with the publication of the Initiative's Steering Committee Recommendation Two Pager and the Main Report to be launched in October 2017. The Interim Report will be released during the GLOBSEC 2017 Bratislava Forum.

These outputs will be augmented by shorter policy papers (on cybersecurity, A2/AD capability, intelligence, and threats emanating from the South) prepared by the GLOBSEC Policy Institute between January and October 2017.

www.cepolicy.org/projects/globsec-nato-adaptation-initiative

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One Alliance? Change Drivers in a New Strategic Environment

Initial Report

Steering Committee of the GLOBSEC NATO Adaptation Initiative

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“The idea that the future will be different from the present is so repellent for our conventional way of thinking and for our behaviour that, at least the vast majority of us, if not all, pose great resistance to acting on it in practice. The difficulty is not so much in embracing new ideas, but rather in abandoning the old ones...” John Maynard Keynes, 1937

Abstract

This paper establishes the risks, challenges, threats, and indeed opportunities the Adapted Alliance must both contend with and seize if NATO is to fulfil its mission to secure and defend the citizens of its twenty-nine nations in the twenty-first century. Implicit in that ‘challenge’ is a simple truism; the Alliance will only ever ‘adapt’ if the sheer scope and extent of strategic change is properly understood, embraced and acted upon with strategies put in place that render NATO truly fit for twenty-first century purpose. The nature of the changed strategic environment is such that the legitimate use of Allied force and/or influence has a vital role to play as a deterrent, a defence, and through several forms of tailored engagement. However, if the Adapted Alliance is to be effective, the European Allies must ease the global burden on the United States and create forces and resources that will enable them to become effective ‘first responders’ in and around Europe. Much of that effort will fall to the European Union, in partnership with the Alliance, and rest upon a continuum of ambition and effort between the three pillars of the 2010 NATO Strategic Concept: collective defence, crisis management, and co-operative security. The Alliance needs a Harmel 2.0.

Executive Summary

Harmel 2.0: Fifty years ago Pierre Harmel presented a report to the Alliance that changed NATO strategy. This paper prepares the ground for what will be, in effect, a “Harmel 2.0” report which will be published in late 2017. This Interim Report establishes the risks, challenges, threats, and indeed opportunities, the Adapted Alliance must both contend with and seize if NATO is to fulfil its mission to secure and defend the citizens of its twenty-nine nations in the twenty-first century.

The Challenge: Adaptation seeks to establish a credible, 360-degree approach to security and defence in the twenty-first century. Therefore, Adaptation must also maintain and reinforce the strategic and political cohesion between the Allies, some of which are focussed on the risks and threats to NATO’s east, others on the very different, but equally substantial threats to NATO’s south, as well as the growing challenge the Alliance faces to its north.

Global megatrends: A major and implied challenge for Adaptation will be to help future-proof NATO by getting ahead of change-driving megatrends. Alliance members need a better understanding of the specific challenges and opportunities faced by NATO to establish the extent and scope of the radical change taking place in the strategic environment.

NATO today: The challenge of the Warsaw Summit was to better link political and military requirements with resources, to drive Alliance prioritisation. Therefore, the Alliance sees 2017 as the year for implementing the Warsaw Summit commitments across the conflict spectrum and through the 360-degree threat and risk horizon, as NATO adapts to the ever-changing character of conflict.

The paradox of NATO’s strategic environment: In an age of uncertainty, sound investment is the very commodity that, by promoting security, dilutes and in time banishes uncertainty. Conversely, investment failure, simply by ceding the field to others, accelerates and exaggerates uncertainty and thus guarantees negative strategic political consequences. Implicit in the global megatrends are change factors that make the need for the Alliance as strong as ever, whilst they erode the power of its pillars – its member nations. Russia is an essentially defensive power, led by a regime in Moscow that, in certain respects, seeks to ‘turn the clock back’ by re-establishing the unquestioned control and power of the state. Across the Middle East and North Africa (MENA), there has been a dramatic failure of government and governance which has profound implications for the security and defence of the Alliance, particularly those Allies in the south. Climate change and the opening of the so-called ‘Northeast Passage’, along with the discovery of huge hydrocarbon reserves within the Arctic Circle, threaten to turn NATO’s High North into a contested region.

The NATO-EU strategic partnership: The need for a deep and effective NATO-EU strategic partnership has never been greater. And yet, both NATO and the EU are facing centripetal forces. Indeed, if Brexit leads to profound political split between Britain and many of its European partners then the implications for the Adapted Alliance would be profound.

New Technologies and the Twenty-First Century Character of War: New technologies and advanced science could lead to game-changing breakthroughs in the conflict space by NATO’s adversaries. In the past NATO and its members have tended to enjoy the ‘luxury’ of being able to confront threats in isolation, or at least sequentially, firm in the belief they enjoy comparative technological advantage. Today, that advantage is fast eroding as adversaries and enemies exploit hybrid warfare and prepare for future hyper-war.

Defence Investment: The Alliance needs a clearly established NATO system for identifying common and harmonised equipment requirements. It is vital that increased investment is co-ordinated across the entirety of the requirements identified, which in turn must be based on a NATO strategy designed from the outset to meet the threats and challenges posed by a dangerous strategic environment. If not, the additional resources generated by meeting the Defence Investment Plan, and its goal of 2 percent of GDP per annum to be spent on defence, of which 20 percent must be spent on new equipment, would be ineffective.

NATO’s ‘Ten Year Rule’: A step change in Alliance thinking and acting can only come from a better common understanding of NATO’s place in the world. Many Allies do not believe a major war could

happen within a decade and are, consequently, unwilling to engage in the kind of ten year plus NATO strategy required to deter, stabilise, engage, and, if needs be, fight a war.

Next steps: The GLOBSEC NATO Adaptation Initiative is committed to producing Harmel 2.0 which is scheduled to be released in late 2017 close to the 50th anniversary of the 1967 Harmel report. Without such ambition NATO's adaptation will fall short in a strategic environment that is at best unforgiving, and at worst potentially catastrophic.

Some ages past forgave mediocrity. This is no such age.

Supporting Papers

This project has relied in large part on research and writing done by members of the Steering Committee, experts, and scholars. In addition to this Initial Report below is the list of companion papers written in support of this project.

Steering Committee Scoping Paper. *NATO in a Changing Strategic Environment: The Questions NATO Adaptation Must Address*, by the Steering Committee

The Political Adaptation of the Alliance, by Alexander Vershbow

The Military Adaptation of the Alliance, by Karl-Heinz Kamp and Wolf Langheld

Comprehensive NATO, by Stefano Stefanini and John Allen

Ten Messages for Affording and Equipping the Adapted Alliance, by Giampaolo di Paola and Julian Lindley-French

Reanimating NATO's Warfighting Mind-set: Eight Steps to Increase the Alliance's Political-Military Agility, by Ian J. Brzezinski and Tomas Valasek

Integrated Deterrence: NATO's 'First Reset' Strategy, by Paul Cornish

The GLOBSEC One Alliance Adaptation Vision

“NATO also continues to adapt its processes and structures to ensure that it is adaptable by design and inherently flexible, resilient, and responsive to any threat. To this end, NATO continued to rigorously pursue improvements to better integrate resources and work strands, including by adopting modern and innovative approaches and ways of working. These efforts will help improve prioritisation and better align resources so that the workforce, both civilian and military, is well placed to support the achievement of NATO’s top priorities”.

Secretary-General Jens Stoltenberg, NATO Annual Report 2016, March 2017¹

Defence, deterrence, and dialogue

The Warsaw Summit Communiqué states: “NATO’s essential mission is unchanged: to ensure that the Alliance remains an unparalleled community of freedom, peace, security, and shared values, including individual liberty, human rights, democracy, and the rule of law”.² Given that context, *One Alliance* Adaptation must return to the first principles of collective Alliance security and defence policy. Warsaw’s essential contribution was to drive forward a new defence and deterrence posture and to enable NATO to better project stability. As such, Adaptation is about re-positing and re-positioning the role and purpose of NATO in a new and rapidly changing strategic environment and by setting military adaptation against the big strategic picture that is fast emerging. It is also about enhancing the military capabilities and capacities of the member nations the Alliance serves, and the further reform and strengthening of Alliance decision-making, command and force structures.

Adaptation must ultimately concern the strategic mind-set of NATO leaders and citizens alike, and focus on the renewal of a credible link between the power and influence the Alliance must generate in a strategic environment that has changed radically since the beginning of the twenty-first century, and which demands resilient societies as much as projectable power. A new balance must thus be struck between the projection of power and the protection of people, in an age when the diffusion of power, the rise of technology, and the changing nature of societies render classical ideas of defence obsolete. Adaptation will thus require leaders to think big and far about the future of NATO and its partnerships. It will also require the Allies to spend more on defence and better integrate both forces and resources if the Alliance is to be properly equipped and prepared for the coming challenges. That means an Alliance committed to expanding NATO’s political capacities and missions to better shape the security environment, project stability to countries along the Alliance’s periphery, and counter disinformation, propaganda and influence operations aimed at undermining the societies of Allies.

1 See (2017) “Foreword”, “The Secretary-General’s Annual Report 2016”, 13 March, 2017 http://www.nato.int/cps/en/natohq/opinions_142149.htm#sg10

2 “Warsaw Summit Communiqué: Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Warsaw 8-9 July 2016”. (Brussels: NATO) All subsequent references to the Communiqué are from this cited source. Hereafter referred to for the purposes of this report as ‘Warsaw’.

Introduction

Fifty years ago Pierre Harmel of Belgium led the landmark December 1967, “Report of the Council on the Future Tasks of the Alliance” which re-established and re-affirmed the need for NATO, and properly established at the core of the Alliance the twin strategic purposes of deterrence and dialogue, whilst enshrining Flexible Response as the guiding principle of collective defence. Back in 1967 the Alliance faced similar questions of purpose, mission, structure and cost as it does today, albeit in a very different strategic environment.

This paper prepares the ground for what will be, in effect, *Harmel 2.0*, which will be published in late 2017. This Interim Report establishes the risks, challenges, threats, and indeed the opportunities the Adapted Alliance must both contend with and seize if NATO is to fulfil its mission to secure and defend the citizens of its twenty-nine nations in the twenty-first century. As such the paper seeks to set expectations for the final report of the Steering Committee; *Harmel 2.0*.

Whilst the July 2016 NATO Warsaw Summit properly established NATO Adaptation as the core mission of the ‘new’ Alliance there is as yet little or no strategy in place to realise the change NATO needs to embrace. At best, a *modus vivendi* can be said to exist between those who wish to see the Alliance return to a warfighting concept of defence and deterrence more traditionally associated with the Alliance during the Cold War, and those that believe the far more pressing challenge is posed by the partial collapse of the state order across much of the Middle East and North Africa (MENA) and the twin threats to the Alliance of massive forced migrations allied to terrorism that seeks to create chaos in the heartlands of the Alliance.

The Scope of this Paper

This bridging paper exists midway between the Scoping Paper, that in November 2016 established the questions that an Adapted NATO must answer, and *Harmel 2.0*. The scope and ambition of this project matches that of Harmel; to re-define the mission of NATO by basing the Adaptation of the Alliance on sound analysis of the change-drivers generated by a strategic environment that has possibly changed faster since 2000 than at any time in history, certainly the history of the Atlantic Alliance.

The final report will lay out all the policy prescriptions that the Steering Committee has been developing during the year of this undertaking. To that end, this paper focuses on the three main challenges this project has established: Russia; instability to the south of the Alliance and the Salafi Islamist terrorism it is helping to spawn; and the impact of new ‘game-changing’ technologies and science with which the Alliance must contend but also seek to exploit.

Megatrends

Global Megatrends

Before any analysis of the scope of NATO Adaptation can proceed, a better understanding is needed of the specific challenges and opportunities faced by the Alliance, in order to establish the extent of radical change taking place in the strategic environment. A major and implied challenge for Adaptation will be to help future-proof NATO, by getting ahead of change-driving megatrends. There are a range of global megatrends that will necessarily form the strategic backdrop to Adaptation that can be roughly divided into four linked change-driving factors, all of which have profound implications for the Alliance and the security and defence of NATO nations: climate change, rapidly-changing demography, resource-scarcity, and a structural shift in economic and military power from the West to the East. These changes are already leading to strategic consequences as competing groups within countries undermine state structures, and competition and consequent friction between states increases with profound shifts underway in the global balance of power and resources.

Climate change will place ever more, ever-bigger populations under ever greater stress. This stress could, in turn, help trigger systemic migrations far greater than those of the last few years on and around Europe's borders. In the future such stresses could also grow exponentially in both scale and intensity, as rising sea levels and accelerating desertification render large swathes of the globe untenable. The mass movement of people will also be abetted by advances in global communications in all its many forms, and which in large part defines globalisation.

Mass migration is changing the nature of Western societies. The development of less cohesive, but more open Western societies, constructed on a liberal belief in tolerance and multiculturalism, and leading to more diverse societies will enjoy many intrinsic strengths. However, such diversity will also pose security challenges to Western societies. There is already evidence that mass migration is slowing, if not halting, the secularisation of Western societies. The entry of groups into society of people with very different beliefs and practices does not necessarily mean a critical loss of social cohesion, as most migrants wish to be productive members of their new societies. However, it is certainly likely that another megatrend – a resurgence in cultural friction and struggle – could well be reinforced, thus creating a basis for further radicalisation of groups of people within the West, thus aiding recruiting by extremist groups, such as Al Qaeda and Islamic State.

More open societies are also likely to be far more vulnerable to penetration and manipulation by adversarial states and non-state actors. Russia's use of hybrid warfare, and its exploitation of disinformation and concerted influence operations, might well be the harbinger of efforts by ostensibly weaker states, and highly-coherent non-state actors and criminal networks, to keep intrinsically stronger states politically (and perhaps permanently) off-balance.

Globalisation and urbanisation are two linked megatrends. States will likely become more advanced, but also more vulnerable. The growth of mega-cities (cities with ten million or more inhabitants) suggests the emergence of competing poles of power within state. These poles will render effective governance more complex, not least because of the reaction of nativist populations to the diversity implicit in the growth of such cities. Urbanisation and rapid changes in technology also tend to go hand-in-hand, due to the concentration of large numbers of skilled people.

Urbanisation may well promote a concentration of talent, but it is also likely to exacerbate the perception of inequality, as wealthy-educated people live cheek by jowl with poor, relatively uneducated and diverse populations. Such friction will, at the very least, tend to polarise politics and further fuel frictions and tensions within fast-change, high-tension societies and communities. The rising mega-slums that will accompany the growth of mega-cities could well create dense urban 'no-go' areas for law enforcement and may be implicitly governed by non-state entities, in direct competition with the writ of central government. There are a growing number of megacities in the world where central, provincial, and municipal governments are sorely pressed to extend control over the mega-slums. Implications for the Alliance? While there are no megacities as yet in Europe, NATO may well have to project stability into a distant megacity. As migrant populations grow, their concentrations in key European cities may, in time, develop the same no-go area characteristics of mega-slums already in existence.

For the Alliance such change, and the need to future-proof NATO through Adaptation (which is likely to take place across no more than two standard defence planning cycles) will have profound implications. Such change suggests new balances and relationships will need to be forged between police, armed forces and intelligence as a state is unlikely to be able to project power unless it can protect and control a fractious and complex home base. Moreover, technology could well create an inverse and perverse relationship between the size of any adversary group and its ability to cause mass disruption and destruction. New relationships will also be needed between law enforcement and criminal and military intelligence, as such distinctions fast become obsolete.

What if war broke out in a mega-city? How would such a war be fought? What kind of armed/police forces would be needed to both defend a state from without, and stabilise a state from within? These are the type of uncomfortable megatrend challenges an institution such as NATO must consider if Adaptation is to be seen as a serious effort to future proof the Alliance. After all, the Alliance is the last

resort for security and defence to which its members will turn, not just during faraway crises, but during acute crises when an Ally might be facing defeat at home at the hands of a skilled enemy (or enemies) employing a range of attacks across the contemporary and future conflict spectrum, including cyber-disruption and the destruction of critical national infrastructure.

Military Megatrends

There is a real shift underway in the balance of world and NATO-regional military power that could well gather pace if Adaptation does not forestall what for the Alliance would be a profoundly unwelcome trend. The hard facts behind NATO's relative power are reflected in these adverse military megatrends with which Adaptation and the Alliance must contend. The relationships and ratios between the relative economic weight of the liberal-democracies and the illiberal powers is shifting away from the former. This negative shift is being reinforced by an aversion of the democracies to commit expenditures to defence, particularly since the banking and sovereign debt crises of 2008 and 2010. This shift in expenditure is likely to continue and could lead to a profound shift in the world balance of military power if the Alliance collectively fails to act. However, it is not too late. In absolute terms the Western democracies together remain uniquely militarily strong. It is an assumption that is further strengthened if the liberal West is defined to include all major democracies the world over.

However, the adverse trends faced by the West are clear. According to the International Monetary Fund, in 2015, the top five global economies were the United States with a gross domestic product of \$17.9 trillion, followed by China (\$10.9tr), Japan (\$4.1tr), Germany (\$3.3tr), and the UK (\$2.8tr). By way of contrast, the Russian economy was worth some \$1.3tr in 2015.³ Contrast economic weight with that of military investment and the picture becomes somewhat more complicated. According to the International Institute for Strategic Studies (IISS) in 2015 the top five global military spenders were as follows; the US at \$597 billion (bn), China \$146bn, Saudi Arabia \$82bn, UK \$56bn, and beyond the top five: Russia \$52bn, France \$47bn, and Germany \$37bn.⁴

NATO European powers have for the last eight years or so seen defence as an expense to cut within the national exchequer, as they pursued hard austerity policies which have accentuated, and to some degree exacerbated, relative Western military decline. Whereas, other powers, most notably China and Russia, have embarked on military expansions. In Russia's case, this greater expenditure places Russian society and the Russian economy under significant strain but affords Moscow a powerful military force.

Equally, there are clear limits to Russia's ambitions that the Alliance needs to grasp. Although President Putin shows no sign of abandoning his expansionist foreign and security policy that since 2008 has seen the invasion of Georgia, the illegal 2014 seizure of Crimea and much of Eastern Ukraine, and Russia's incursion into the Syria, there have also been significant cuts to planned public investment, including some cuts in defence investment. The relative figures on defence investments programmes are telling with the US investing some \$700bn on new equipment, Russia some \$300bn, and the UK some \$250bn.⁵ Still the World Bank suggests that Russia spent 4.9% of its GDP on defence in 2015 and Russia's commitment of dwindling economic resources to its armed forces remains high when compared with the US, which in 2015 spent 3.3% of its GDP on defence, France at 2.1%, the UK 1.9%, and Germany 1.2%.⁶

There are three caveats to this analysis. The figures for defence expenditure are themselves contested, and the relative 'bang for the buck' ratios generated by European military investment, compared with China and Russia, would appear to be unfavourable. In other words, the West, NATO Europe in particular, gets far less bang for each euro, krone or pound invested.⁷

The tendency of Europeans to favour the appearance, rather than the substance, of defence investment is endemic in some areas of the Alliance. Part of the challenge is to agree on a basis for

3 World Economic Outlook Database, International Monetary Fund, April 2016.

4 IISS "The Military Balance 2015" (London: Routledge)

5 See Julian Lindley-French (November 2015) "Shifting the Goalposts: Defence Expenditure and the 2% Pledge". Written evidence to the House of Commons Defence Committee, at www.parliament.uk

6 See www.data.worldbank.org/indicator/MS.MIL.XPND.GP.ZS.

7 See above

a sound comparison of defence investment. *Statista* confirms IISS estimates of US defence spending in 2015.⁸ However, both *Statista* and SIPRI suggest China spent at least \$215bn on ‘defence’, i.e. its armed forces, whilst Russia spent \$66.4bn. Interestingly, *Statista* also shows UK defence spending falling from £38.6bn in 2008/9 to £35.1bn in 2015/6, a real-terms decline of some 9% over that period. Although the UK is committed to a substantial defence investment programme over the 2015-2024 period, because of ‘adjustments’ made to defence accounting, actual investments of any substantive amount in the future force will not begin until 2018/9 and will not be enough to match ends and ways with means.

Furthermore, the impact of austerity politics on European defence continues to be reflected broadly across Europe. According to SIPRI whilst military expenditure rose sharply in 2015 across much of Central and Eastern Europe, albeit from a very low baseline, Western Europe saw defence spending fall 0.4% in 2015 to \$253bn. Between 2006 and 2015 defence expenditure in the region fell by 8.5%, even though most Western European states were engaged in a major campaign in Afghanistan during much of that period. According to SIPRI between 2006 and 2015 US defence expenditure declined by 3.9%, whilst China’s and Russia’s grew by 132% and 91% respectively, whilst India increased its defence budget by 43%. In Europe, the British defence budget declined by 7.2%, the French defence budget by 5.9%, whilst the Italian defence budget contracted by a whopping 30%. Only Germany increased its defence budget by 2.8% over that period.

Perhaps the most informative data concerns the percentage share of world defence expenditure which reinforces the shift in relative power taking place between the world’s only global power, the United States and regional-peer competitors with profound implications for the Alliance. In 2015 the US still represented 36% of world defence expenditure, whilst Russia represented 4%, the UK 3.3%, France 3%, and Italy, for example, 1.4%. However, China now represents some 13% of world defence expenditure. Between 1989 and 2015 the Chinese defence budget grew by more than 10% year-on-year. However, in February 2017 CNN reported that, “China...announced a 7% rise in annual military spending, the smallest increase in seven years”. The report went on state that Chinese defence spending in 2016 saw a 7.6% rise in defence spending with the defence budget rising to \$146bn or 1.3% GDP.⁹ The problem with these figures is that many western analysts believe them to be a gross under-estimate of the figure Beijing really spends on defence.

The arms race underway in Asia-Pacific also has major implications for US grand and military strategy. According to SIPRI military spending in Asia and Oceania (Australasia and surrounding region) grew by 64% between 2006 and 2015. A significant part of this increase was made by China, and a North Korea that is almost certainly in the process of becoming a nuclear-power armed with intercontinental missile reach. US allies such as Japan and South Korea also increased their defence budgets markedly, as did Taiwan, Indonesia and the Philippines.

The situation in the Middle East is harder to gauge because data is difficult to gather. However, the quadruple threats of global Salafi Jihadist terrorist networks, regional-strategic competition and conflict, civil wars in fragile and failing states, as well as mass, forced, irregular migration pose as much a strategic level threat to the Alliance as Russian expansionism or intimidation. What data is available suggests an arms race of sorts is underway in the Middle East. Defence expenditures across the region increased by 4.1% in 2015 alone. Iraq saw the biggest increase in defence expenditure with a 35% hike between 2014 and 2015, with a 536% increase since 2006, albeit driven by very particular circumstances. Saudi Arabia spent an estimated \$87.2bn in 2015, double the amount Riyadh spent on defence in 2006 and reflective of the regional cold war the Saudis are engaged in with Iran. The Saudis also spent \$5.3bn from the national contingency reserves on operations in Yemen in 2015. In 2015 Tehran spent \$10.1bn on defence. Interestingly, Saudi Arabia’s main regional-strategic competitor actually reduced its defence expenditure by 30% over the 2006 and 2015 period. There was a precipitous fall in defence expenditure following the imposition of EU sanctions in January 2012. However, with the lifting of sanctions on the export of oil and gas it is believed Iran will increase its defence expenditure in the coming years.

8 Unless otherwise stated all the data has either been sourced via Statista <https://www.statista.com> or SIPRI www.books.sipri.org/files/FS/SIPRIFS1604.pdf (April 2016).

9 Jiang, Steven and Hunt, Katie, “China announces smallest military defence increase in seven years”. <http://edition.cnn.com/2017/03/04/asia/china-npc-military-budget/index.html> (4 March, 2017)

The message for NATO? For Adaptation to succeed it must be firmly embedded in a proper understanding and appreciation of global change. Given that the United States is the only superpower, any change in the balance of global military power that adversely impacts on Washington will also impact upon NATO Adaptation. Whilst the intent of the Trump administration to increase US defence spending by 3% is to be welcomed, without the material support of the Allies Adaptation could fall well short of expectations and critically undermine the sharing of risks and burdens.

NATO Today

Where is NATO today in its efforts to meet the Adaptation challenge of the new strategic environment? 2017 is seen by the Alliance as the year of implementing Warsaw Summit decisions across the conflict spectrum and around the 360-degree threat and risk horizon as NATO adapts to the ever-changing character of conflict. The challenge of Warsaw is to better link political and military requirements with resources to drive Alliance prioritisation. This section sets forth NATO's current situation and presages the later main report by offering some initial prognostications.

Level of Ambition: NATO remains committed to being able to conduct two major joint operations and two smaller joint operations or one very large joint operation (*MJO-Plus*). However, NATO command and control structures are not as yet able to meet such a demanding level of ambition. The NATO Command and Force Structure is thus being adapted via a range of short-term structural changes to both its personnel levels and its capabilities. By February 2018, the aim is that the Command Structure will be ready to plan for the deployment of heavier, reinforced, and/or follow-on forces organised in warfighting formations, and hold such forces at a high state of readiness for longer periods. However, the realisation of such a force will take several years, as will the capacity to properly undertake Major Joint Operations (MJO).

Defence investment: In his 2016 Annual Report Secretary-General Jens Stoltenberg reinforced the defence investment challenge: "We still do not have fair burden sharing within our alliance...Only five allies met the 2 per cent guidelines in 2016. We must redouble our efforts to speed national efforts to keep our pledge".¹⁰ The Annual Report also stated that US defence spending now represents 68.2% of NATO defence spending, even though US GDP only represents some 45.9% of the NATO 'economy'. Establishing a proper and legitimate benchmark for burden-sharing would not be a simple matter of establishing a ratio of 50:50 between US and NATO European forces. The US is a global power, indeed the world's only global power, whilst its European Allies are distinctly regional actors. Therefore, to re-establish equitable burden-sharing, which the US Administration regards as critical, the ratio would probably need to be nearer 60:40 in favour the US, albeit reinforced by a clear European effort to improve the scope and the capability of its expeditionary forces.

NATO Budget 2016: The military budget of the Alliance in 2016 was divided thus; Allied Command Operations received 76% of the budget, Allied Command Transformation 22%, whilst the rest (SHAPE, International Military Staff, North Atlantic Council, and Office of the Chief of Security) were responsible for 7%.¹¹ It must be assumed that much of the funding for Adaptation would come via the NCSEP (NATO Command Structure Entities and Programmes). In 2016 NCSEP funding was structured thus: NCS Structure and Manpower 40%, NCCB Enterprise 22%, air defence systems 17%, transformation 8%, deployable forces 5%, training and education 5%, outreach 1%.

Institutional Adaptation: Alliance prioritisation is closely linked to efforts to establish a new strategic planning framework to help better co-ordinate the work of all the assistant secretaries-general and thus focus staff and resources on priorities. This framework will be supported and underpinned by a shared 'rolling picture' to promote effective co-ordination. Agency reform continues with much effort committed to the further streamlining of the NATO Command Structure and Headquarters, with a new system of annual reporting established to provide effective oversight of progress. Much of the above suggests a NATO-focused common effort, although the common funding available to the Alliance is only \$2bn per annum. More common funding is seen as an essential force multiplier for the Alliance.

¹⁰ See "France and Spain fail to hit defence spending", The Times, 14 March, 2017.

¹¹ Source: International Military Staff (Unclassified). (March 2017)

Agile decision-making: NATO efforts to promote more agile decision-making include enhancing data-fusion between NATO HQ and SHAPE to better enable the Alliance to decide and act quickly, supported by a rolling information assessment and a more granular intelligence picture. This update, it is hoped, will also assist leaders to better distinguish between a so-called cyber nuisance attack, and an all-out hybrid attack that could presage war. The Alliance has also further strengthened its capacity for agile decision-making through the creation of a new Assistant Secretary-General for Intelligence at the end of 2016 to better co-ordinate national intelligence efforts.

Military Adaptation: A major challenge for NATO at present concerns the standing up and deploying of so-called follow-on forces beyond the Very High-Readiness Joint Task Force (VJTF) and the enhanced NATO Response Force (eNRF), the time it would take, and indeed the forces that would be available from the rest of the NATO Force Structure (as well as available reserves) in the event of an emergency. There is still significant work to be done. Current estimates suggest that to mobilise all NATO forces would take between three to six months. Military adaptation is focussed on enhanced readiness, training and the development of critical capabilities. NATO forces still face critical shortfalls in areas such as precision-guided munitions (PGMs), strategic air-lift and joint intelligence, surveillance and reconnaissance (JISR). More needs to be done to realise NATO Integrated Air Command and Control and to strengthen ballistic missile defence (BMD), and to move towards replacement of the ageing NATO AWACS (airborne warning and control) fleet. Further development is also needed on NATO ground surveillance, beyond the five Global Hawk drones.

Smart Defence: Efforts to ease shortfalls are focused on the Smart Defence and Connected Forces Initiatives launched by former NATO Secretary-General Anders Fogh Rasmussen. Eleven Smart Defence projects have been completed. Such projects are closely-linked to defence planning priorities and include multinational projects, such as the development of the Special Operations Component Command, and project groups focused on developing JISR (which reached initial operating capability in 2016), as well as the planned AWACs replacement scheduled for 2035.

Logistics: NATO seeks to establish more robust military and civilian logistics capabilities that would be available to the Alliance in peacetime, crisis and in conflict. The focus is on upgrading the necessary infrastructures, pre-positioning of forces, food and fuel supplies, and guaranteeing and securing them, as well as ensuring runways, railways and roads meet with military requirements in a crisis. The logistics challenge faced by the Alliance is daunting. The 2016 deployment of a single US Armored Brigade Combat Team proved logistically challenging for the Alliance. By way of comparison, during the Cold War the plan was to deploy ten US and Canadian divisions to Europe over ten days.

NATO-EU: Much of the effort in reinforcing the NATO-EU strategic partnership is focussed on NATO's South. Efforts include enhanced defence co-operation, and the reinforcing of both EU FRONTEX, and the EU's anti-human trafficking mission EU SOPHIA. President Trump, is also demanding that the Alliance becomes more heavily engaged on counter-terrorism missions. However, NATO's specific counter-terrorism mission remains unclear, as the military campaign against ISIS is currently being run as a US-led coalition, rather than as a NATO operation (although many Allies participate). NATO's main role is preventive; building the defence capacity of Middle Eastern partners such as Iraq, Jordan, and possibly Libya. Much of the vital de-radicalisation effort is likely to remain the preserve of the nations and/or the EU.

Cyber Defence Pledge: Warsaw, "Cyber-attacks present a clear challenge to the security of the Alliance and could be as harmful to modern societies as a conventional attack. We agreed in Wales that cyber defence is part of NATO's core task of collective defence. Now, in Warsaw, we reaffirm NATO's defensive mandate, and recognise cyberspace as a domain of operations in which NATO must defend itself as effectively as it does in the air, on land, and at sea". The Cyber Defence Pledge is designed to assist the nations to strengthen the resiliency of critical networks and infrastructures.

NATO's East: Warsaw is clear: "We have decided to establish an Enhanced Forward Presence in Estonia, Latvia, Lithuania, and Poland to unambiguously demonstrate as part of our overall posture, Allies' solidarity, determination, and ability to act by triggering an immediate Allied response to any aggression". The Enhanced Forward Presence (EFP) of the Alliance on NATO's Eastern flank has

been reinforced by Operation Atlantic Resolve and the return of US armour to Europe. NATO is also furnishing a so-called tailored Forward Presence in the south east of the Alliance, together with a Standing Naval presence. The next phase is to pre-position forces in key parts of Europe, and not just US forces. Germany, the Netherlands, and Poland have already been designated as sites for pre-positioned forces and resources, and a debate is now underway about whether to pre-position more forces further to the east of the Alliance.

In June 2017 battalions from the US, UK, Canada and Germany will forward deploy to Poland and the Baltic States, supported thereafter by fourteen other nations. In January, a force generation conference took place at the NATO regional headquarters in Szczecin to stand up NATO Force Integration Units (NFIU), and ‘graduated response planning’ is underway so that the Alliance can respond quickly to any emerging threat. It is likely that the Trump administration will maintain and confirm the \$3.4bn European Reassurance Initiative (ERI) or European Deterrence Initiative (EDI) as it has been renamed, which in part helps to fund much of the current effort. There is also significant effort underway to ensure NATO forces can degrade the Russian A2/AD (anti-access, area denial) ‘bubble’ in the event of hostilities, and a wider debate is underway about the threat posed by Russia’s Kaliningrad enclave, and the increasingly militarised Crimean Peninsula.

Ukraine and Russia: Warsaw states unequivocally that: “An independent, sovereign, and stable Ukraine, firmly committed to democracy and the rule of law, is key to Euro-Atlantic Security”. And that, “Despite its declared commitment to the Minsk Agreements, Russia continues its deliberate destabilisation of eastern Ukraine, in violation of international law”. NATO fully recognises that ‘business as usual’ with Russia is extremely difficult given the ongoing war in eastern Ukraine, Moscow’s illegal annexation of Crimea, and Russia’s interference in the democratic processes of Europe. However, there is also a genuine Alliance-wide desire to re-establish a level of dialogue between NATO and Moscow with the framework of the 1995 Vienna Document that could in time lead to more trusting relationships.

The NATO-Russia Council (NRC) will continue to meet, with efforts underway to reinforce risk-reduction mechanisms to prevent misunderstandings that could lead to air and sea disasters. At present the talks are focused on practical matters, such as de-confliction of forces, re-establishing Russia’s snap military exercises within a trusted notification framework, and promoting air safety in the Baltic Sea. Even though some modest progress on these issues was made at a meeting of the NATO-Russia Council on 30 March, 2017 the challenges should not be under-estimated.

NATO’s South: NATO’s Framework for the South has led to the establishment of a regional hub for the south at Joint Force Command, Naples. JFC Naples is engaged on a series of exercises all of which are designed to ensure the intelligence picture is sufficiently nuanced so that resorting to the use of armed force takes place as late as possible in the conflict cycle. These exercises aim to match the adversary at every level of escalation, be it a state or a major terrorist/criminal entity such as AQ or ISIS. Particular emphasis is placed on economy of force in what is today called *Phase Zero* of a conflict, as well as the use of non-military instruments in support of civil authorities, such as the rescuing and transfer of refugees and irregular migrants in the Mediterranean.

Projecting Stability: NATO continues to support a large military-led training mission in Afghanistan, as well as afford AWACS support to the coalition fighting ISIS. NATO is also supporting Georgian and Moldovan forces with training to the east of the Alliance, and the forces of Iraq, Jordan and Tunisia to the south. It is also working on a defence institution-building programme with Libya.

Resilience: NATO will be unable to project power and influence if it is unable to play a full role in the protection of Alliance citizens. In 2016 NATO set benchmarks that each nation should meet to promote resilience. NATO is also engaged in an effort to understand where and how it can best contribute to the continuity of governance, emergency preparedness, infrastructure protection, and the effective management of refugees. The Alliance is also considering how best to bolster the internal security of NATO nations to better enable them to deal with threats posed by terrorists and transnational organised criminal networks. All crises generate human misery and refugee flows, and NATO is also looking at how its planning power could be used to assist nations to better manage and process such flows.

NATO's North: Moscow believes that in the near future the so-called Northeast Passage will become navigable, and there are potentially more hydro-carbons under contested waters in the Arctic than known Saudi oil and gas reserves. Whilst there is a Demarcation Agreement between Norway and Russia that is meant to help avoid conflict Russia has markedly increased its forces in the Arctic region over recent years. Norway's North Cape is also vital for the egress and ingress of the powerful Russian Northern Fleet (*Red Banner Northern Fleet*) based in and around the Kola Peninsula. Russia's new and expanding nuclear hunter-killer or attack submarines are based in the region for easy access to the Atlantic for routine patrols, or to put quickly to sea to interdict North American reinforcement of NATO in the event of war. The bulk of Russia's strategic nuclear ballistic missile submarine forces are also stationed in the High North to enable access the so-called 'bastions' or havens in the Barents Sea from which Russian ballistic missile submarines could launch in relative safety.

Conventional and nuclear deterrent postures: NATO is also considering how best to maintain the credibility of both the Alliance's conventional and nuclear deterrents, as well as the development of a more cohesive and credible deterrent relationship between them. The current debate within the Alliance primarily concerns force posture and whether there is any need to change it. There are specific doubts in some quarters about the ability of NATO's dual-capable aircraft (DCA) to perform their sub-strategic nuclear role, and whether they would be capable of penetrating Russia's air defences, or can be held at a sufficiently high state of readiness for such a role. Given that NATO's sub-strategic nuclear arsenal sees ageing aircraft pitted against missile-delivered systems the capacity of Alliance forces to deliver payloads against a sophisticated air defence is now a serious concern. Efforts are also being made to strengthen NATO's nuclear messaging as part of its deterrence posture, as well as enhanced exercising to underpin such strategic communications, all of which were discussed at an important February 2017 NATO Nuclear Consultation Meeting.

NATO's Strategic Environment: Analysis

The Core

Moscow in certain respects wants to turn the clock back by re-establishing the unquestioned control and power of the state. To some extent, such 'reaction' is also implicit in Brexit, which if handled without due care and attention could lead to a break-down of political and strategic relations in Europe with profound implications for the political cohesion of the Alliance. There are similar, what some have termed 'nativist' reactions across Europe, evident most recently in the French presidential elections, prior to the election of Emmanuel Macron. However, reaction is not confined to Europe. The election of President Donald J. Trump in the US, and his 'America First' pledge, also suggest a desire to return to an age when the ideas of 'nation' and 'state' were unquestionably the source of both power and legitimacy of action. One paradox is that, while there is a demand to return to a time when the nation-state was dominant, when *Realpolitik* and the national interest were the drivers of policy and the use of force, in the 'West' today there are large parts of society which harbour profound doubts about and over the place, use, and utility of force in pursuit of peace and stability. The West suffers from a potentially critical weakness; the 'End of History' syndrome. Having preserved peace with the ending of the Cold War many in the West came to believe that they no longer had to compete because the world was no longer comprised of predators and prey. Sadly, the world still contains predators.

There are several factors which may explain this paradox. The changing nature of Western societies with significant numbers of people with multiple loyalties means the state can no longer assume consensus over what constitutes the 'national interest'. Continuing economic insecurity, leading to an extended period of austerity in Europe, is also creating new seams within societies (and between the Allies) that adversaries and enemies seek to exploit, not least through the use of hybrid warfare, radicalisation campaigns, and 'fake news' strategies to destabilise and divide through applied strategic disinformation communications.

The East

Russia today under President Putin is an aggressive, revisionist power built upon a fragile political and economic base with 'over-mighty' security and defence institutions surrounded by weak post-Soviet successor states. Moscow seeks to re-establish a sphere of influence along its extended border, with a particular focus on the High North, Eastern and South-Eastern Europe. Even though Russia is dependent on Europe to purchase the bulk of its energy products and shares a similar level of threat from Salafi Islamist-inspired terrorism, it identifies NATO as its primary threat. Moscow is seeking to establish a *de facto* 'security buffer' between its western border and NATO.

The threat posed by Russia comes in both direct and indirect forms. Many in the Alliance believe NATO is well-placed to deter Russia's conventional threat because of 'muscle memory' of the Cold War. However, the use by Moscow of an implied threat to use nuclear weapons early in a conflict to offset what Russia implies is NATO conventional superiority might also suggest that the formal nuclear balance that petrified the Cold War into a form of stability might also be a thing of the past.

Russian forces continue to threaten NATO's Eastern and South-Eastern flanks. There are some 300,000 troops stationed in Moscow's Western Military District, which abuts the Alliance. The Enhanced Forward Presence and tailored Forward Presence agreed at the Warsaw Summit are a response to this threat. President Putin continues to support secessionists in Eastern Ukraine, both directly and indirectly, making any resolution to the civil war in Ukraine unlikely for the moment. His illegal 2014 seizure of Crimea from Ukraine was a breach of international law that led to the imposition of a range of sanctions on Russia that are likely to continue. In Syria, not only does Russia's support for President Assad maintain a genocidal despot in power, President Putin has used Syria as a demonstration of Russian strategic systems and conventional firepower that has undoubtedly raised concerns amongst traditional allies in the region about the resolve and, indeed, the relative military capability of the West. Russia now bears direct responsibility for the continuing humanitarian catastrophe in Syria by backing Assad, and allying with Iran, Lebanese Hezbollah, and other Shi'a extremist elements.

Russia has also established a new concept of 'soft power' through its clever use of indirect means to exploit the many social and political seams that now exist within Allied societies, and between Allies. Much of the effort is focused on so-called Hybrid Warfare, which the Russians call Irregular Warfare or Strategic Maskirovka. At the heart of these strategies is the use of offensive cyber warfare to threaten critical national infrastructures in Allied nations, both civil and military, as well as social media campaigns using state-backed mass media such as RT and Sputnik to sow 'fake news', which is further propagated and amplified by Russian surrogates and so-called "Trolls".

These efforts are the latter-day heirs to campaigns by the then Soviet Union to sow dissent and uncertainty in the West. Today, as then, Russia employs a sophisticated diplomatic machine to attempt to divide the West, supports dissenting groups with financial aid, particularly on the right of the political spectrum in Europe, and uses energy supplies and the threat that they might be cut off as political leverage.

The aim of the policy seems to be twofold. First, to re-establish an impression that Russia is the 'indispensable frenemy' of the United States and, by extension, convince Washington that only the US and Russia together can shape Europe, and indeed much of the world beyond. Second, that there can be no European security unless Russia enjoys a *de facto* veto over and above the heads of other Europeans.

Moscow's strategy suffers from several profound weaknesses. The Russian economy is less than half the size of the British economy. Indeed, Britain, France and Germany all enjoy markedly bigger and far more robust economies than Russia. For all its use of hybrid warfare Unlike Britain, France, and Germany, Russia has very limited innate soft power to utilise in pursuit of its policy goals – be they political, cultural or economic. Russia is also an isolated power that, whilst a member of important international institutions, such as the United Nations and the Organisation for Security and Co-operative Security (OSCE), as well as a few regimes such as the Shanghai Co-operation Organisation (SCO), sees itself as apart from the institutional international order. Russia's population also faces social and economic challenges, one of which is the growing burden of a large and growing security and military industrial complex.

Russia's foreign and security policy seems committed to over-turning much of the established European security order. It relies, doctrinally, on nuclear weapons to offset what Moscow claims to perceive as a relative weakness in Russia's conventional forces in relation to NATO. The recent deployment of an operational battalion of SSC-8 missiles is in clear breach of the 1987 Intermediate Nuclear Forces Treaty, and Russia has withdrawn from the 1991 amended Conventional Forces Europe Treaty. Its use of so-called 'snap' exercises, as well as the large-scale *Zapad* exercises, continue to intimidate its neighbours, whilst the use of military flights that repeatedly and illegally enter the airspace of NATO allies, often with aircraft that have turned off their transponders, not only threatens to trigger dangerous international incidents, but threaten the safety of civilian air travel across the Alliance airspace.

At the same time, Russia is not universally aggressive at all times, and in all sectors. For example, Russia continues to co-operate in space science and exploration, with its launch vehicles a vital component of that effort. Moreover, the Russo-German development of the *Nordstream* gas pipeline demonstrates the vital importance to the Russian economy of energy co-operation with Europe, as well as the deep ambivalence of some European countries towards sanctions on Russia. It can be argued that *Nordstream* is in fact a Russo-German political project designed to isolate Ukraine, by bypassing pipelines that traverse Ukrainian territory.

However, it would be a mistake to think that Russia is a weak state that, at some point, will collapse under the weight of its own political, economic, and military-industrial inertia. Russia has a long and ignoble tradition of poor and corrupt governance and the Russian people, for all the burdens they must bear, today enjoy better living standards than hitherto, and widely support Vladimir Putin as a result.

In conclusion Moscow controls a traditional illiberal state employing new techniques and technologies in pursuit of an age-old Russian aim of buttressing the power and authority of the state at home, and expanding its sphere of influence abroad.

The South

There has been a dramatic failure of government and governance across the Middle East and North Africa (MENA) that has profound implications for the security and defence of the Alliance, particularly the Allies in the south. This failure of governance is further complicated by regional-strategic conflicts, most notably the multifaceted 'cold war' between Iran and Saudi Arabia, and the several civil wars and frozen conflicts that have been exploited by Sunni Salafi Islamists, most notably Al Qaeda and ISIS. The stabilising of MENA will require reform over a very long period, allied to the extremely carefully combined and tailored-use of aid and development resources, as well as on occasions the clever and considered use of force. The ill-considered consequence of the use of NATO force is apparent on the Alliance's strategic doorstep. An ill-governed Libya remains an open door for irregular migration into Europe. The challenge and possible threat posed by the South to the Alliance is thus generational, and possibly existential in both scope and nature, and can thus be said to be at least as great as that posed by a revisionist Russia.

The pressures across MENA are further intensified by the demographic bulge within it, particularly the burgeoning youth population. Link this bulge, and the inability of states in the region to provide education or employment, to similar pressure in sub-Saharan Africa and the Horn of Africa, and the reasons for mass migration become apparent and will become more alarming over time. Indeed, whilst the war in Syria is seen as the *cause celebre* of recent mass migration into Europe the causes and drivers of it represent the possible beginning of a structural shift in populations, further exacerbated by violent extremism and economic factors such as climate change, most notably desertification.

States in the region could also pose a threat to the Alliance, most notably Iran. However, it is the non-state threat that is the greater danger today, especially if actors such as Al Qaeda, ISIS and their affiliates, work in harness with organised criminals and criminal networks. Such groups now control spaces beyond the reach of organized government across much of the region and threaten

to penetrate and further destabilise European society through drug and human-trafficking, as well as repatriating AQ and ISIS 'fighters' into Europe. There is also a more insidious threat to Europe and beyond that posed by states in the region that are funding mosques, madrassas (Islamic schools) and often radical clerics. Finally, there is the danger that the Shia-Sunni confessional divide, which is now well-established in Europe, could become 'weaponised'. In some places, Europe is already witnessing a struggle of conversion within the Muslim population of Shism over being Sunni.

One traditionally associates 'deterrence' with conventional and nuclear force balances. However, the ability of Salafi Islamists to radicalise members of Europe's growing Muslim populations could also act as a deterrent to the West involving itself in MENA. Unfortunately, since the so-called Arab Spring began, the West has had no option but to involve itself in MENA because critical and vital interests are at stake, but rarely to effect.

In conclusion, it must not be assumed that US and European interests are necessarily aligned across MENA. One consequence of the Obama years was that whilst the Eastern Mediterranean remains an area of vital US interest, the Central and Western Mediterranean is today less so. Whilst the latter is a vital interest to Europeans recent events have demonstrated that European simply lack the civil and military capabilities and capacities, as well as the necessary strategic guile and political will to act effectively if the US chooses not to, even if their own vital interests are at stake.

The North

Climate change and the opening of the so-called Northeast Passage, allied to the discovery of huge reserves of hydrocarbons within the Arctic Circle, could turn NATO's High North into a contested region.

The retreat of the ice cap looks likely to open a new strategic sea route across the north of the globe that would shorten the route between Asia and Europe by some three hundred nautical miles. Moscow has reinforced its forces of late to NATO's north, partly to control this vital sea-lane of communication (SLOC). Moscow also lays claim to much of the seabed in the region and the minerals and hydrocarbons that lay under it. Russia is also strengthening its *Northern Red Banner Fleet*, particularly its nuclear submarine hunter-killer or attack (SSN) and nuclear ballistic missile submarine (SSBN) forces. As indicated above, Russia regards the Barents Sea as vital to the maintenance of the so-called 'Bastions' from which Russian submarines could launch a relatively 'safe' first or second-strike nuclear attack on the West. Moscow also regards the ingress and egress of its Northern Fleet via the Norwegian Sea and through the Greenland-Iceland-UK (GIUK) gap as vital to its defence strategy.

Recent tensions in and over the island of Svalbard, which is an autonomous Norwegian archipelago, reinforce the view that Moscow again sees the Arctic region as a zone of vital interest. Even though there are various 'demarcations agreements' in place to share the sea-bed it is likely Russia will contest both space and access and once again Norway's North Cape will become an area of vital interest to both the Allies and Russia.

Emphasis at this stage must be to avoid the militarisation of the contest, and rather promote the search for a peaceful and equitable balance. Indeed, there is some evidence Moscow might be open to such a 'deal'.

The NATO-EU Strategic Partnership

The Alliance will need a range of partners, but the EU will be the indispensable partner. However, both NATO and the EU are facing centripetal forces. There is popular discontent with the 'European Project', whilst eight years of economic austerity and low growth, much of it blamed on the European sovereign debt and Eurozone crises, has weakened the trust between European people and the European elite. A weak EU also makes NATO vulnerable.

At the same time, both NATO and the EU have made significant progress towards deeper and more systematic co-operation. And, whilst the EU still retains ambitions in the defence sphere, NATO no longer regards such ambitions as a threat to the Alliance. Indeed, if the EU can assist in increasing European military capabilities and capacity the Alliance now welcomes such efforts. In time the EU Common Foreign and Security Policy (CFSP) and its subordinate Common Security and Defence Policy (CSDP) could become the European pillar of the Alliance. This is made more likely by the pending departure of Britain from the EU, London having long-regarded the creation of a European Defence Union (EDU), along the lines proposed *inter alia* by Berlin, as potentially weakening the Alliance.

However, there are also frictions that remain. For example, implicit in an EDU is the creation of a European Strategic Headquarters, which creates a dilemma for NATO. The creation of such new military infrastructure is expensive and could divert vital funds away from the NATO Defence Investment Pledge. Equally, a new EU headquarters might be the necessary political price to pay to convince certain European states and their leaders to properly invest in defence. EDU also poses an important question about future EU-NATO relations that go beyond the now obsolete Berlin-Plus arrangements. Then there is an issue of flags-to-posts. With Britain leaving the EU should the British continue to retain the post of Deputy Supreme Allied Commander (DSACEUR)? In the event of a ‘European operation’ DSACEUR would take command of such an operation because the post is ‘dual-hatted’. Could a Briton still fulfil that role? All of this suggests that further and deeper co-operation will also need to see further and deeper harmonisation of EU and NATO defence planning.

A central premise of this paper is that the projection of stability, influence and power is unlikely to take place to effect without a demonstrable ability to protect the people of Europe. Whilst NATO will remain in the lead on questions of hard power, particularly at the higher ends of the conflict spectrum, it is self-evident that the EU will have an ever-more important role to play in what might be termed European homeland security. This role will be particularly important in countering malicious non-state actors and terrorists.

Furthermore, NATO will be unable to deal with complex threats and contingencies in and of itself. The NATO-EU partnership will be particularly important in the combatting of what might be called the ‘new threats’; hybrid warfare, cyber-warfare, and malicious strategic communications. Some consideration might be given to an EU-NATO Cyber-Resilience Centre, although to realise such an initiative contentions such as those between Cyprus, Greece, and Turkey will need to be carefully and sensitively managed. The EU will also have to accept that during a major crisis NATO would have to play a pivotal role, not least as part of consequence management and military support to civil authorities in the wake of a catastrophe. The technical and industrial bases of the EU will also be indispensable, indeed critical, to NATO’s anticipation of the hyper war challenges ahead.

The Warsaw Summit states that: “We have taken steps to ensure our ability to effectively address the challenges posed by hybrid warfare, where a broad, complex, and adaptive combination of conventional and non-conventional means, and overt and covert military, paramilitary, and civilian measures are taken in a highly-integrated design by state and non-state actors to achieve their objectives”. Of the forty-two points in the NATO-EU Joint Action Plan agreed at the Warsaw Summit, some fourteen of them were devoted to combatting hybrid warfare.¹² The EU is standing up an EU Hybrid Warfare Intelligence and Analysis Centre that will work closely with the Alliance in its own efforts to improve and enhance analysis and assessment, and generate the early indicators vital to preventing and combatting such attacks.

In conclusion, NATO and the EU need each other. However, if Brexit leads to a profound political split between Britain and many of its European partners then the implications for the Adapted Alliance would be profound. This would be especially the case if the British people are asked to defend Allies they believe are trying to punish Britain for leaving the EU. The ‘softening’ of the security and defence commitment to the Alliance of Europe’s most formidable Intelligence power and leading military actor would undermine Europe’s security and defence. Equally, the NATO EU strategic partnership has never been more important to European security and defence, and there can be no question that NATO and its mission would be far better enabled by an effective EU.

¹² These figures were relayed to the Steering Committee by a senior NATO official under the Chatham House rule.

New Technologies and the Twenty-First Century Character of War

NATO faces three offset 'threats'. The first offset threat to NATO is Russia's growing reliance on nuclear weapons to offset what Moscow sees as NATO's on-paper conventional military superiority. The second offset threat is that posed by Al Qaeda and Islamic State and related groups to Allied societies, and with it the danger that terrorism will erode the protection of the home base, and thus profoundly weaken the ability of the Alliance to project security and stability beyond its borders. However, there is a third offset threat posed by America's own offset strategy. Technology drives and shapes policy and strategy often as much as it is shaped by them. There is now a very real danger now that technologically-driven US military strategy will advance so far ahead of allies that military interoperability, and in time political cohesion, will become impossible to maintain.

Russia's offset strategy is far more narrowly drawn than that of the US. Russian military strategy today emphasises the possible use of nuclear weapons ('escalate to de-escalate'), the need to gain local military superiority, and by keeping adversaries politically and socially off-balance render them unable to mount a cohesive defence, let alone a credible offence. The specific focus of Russian 'offset' efforts include the development of autonomous, robotic and remotely-controlled systems; new generation electronic warfare and expanded offensive and defensive cyber capabilities, advanced command and control systems, including the extensive use of battlefield internet, and enhanced ultra-range air defence and missile defence systems, including anti-satellite (ASAT) capabilities. The aim of the strategy is to offset advantages in Allied air power, and thus gain strategic and tactical air superiority.

Russia is rapidly developing advanced fighters designed specifically to counter the West's 5th Generation aircraft, such as *F22 Raptor* and *F35 Lightning II*. Russia is also developing a new generation of armoured vehicles that will enhance battlefield mobility and reduce the vulnerability of deployed Russian forces. Like the Americans, the Russians are developing hyper-sonic weapons, but unlike the Americans looking to develop new nuclear warheads to deploy atop its next-generation intercontinental ballistic missiles, which are in turn being future-proofed against next generation missile defence systems. Moscow is also looking to develop directed energy weapons. Finally, much of this capability will rely on artificial intelligence and deep learning, an area of advantage yet to be fully embraced by the US, much less NATO.

Al Qaeda and Islamic State also employ offset strategies. The most obvious of these strategies is their use of open borders and Western nationals to circumvent the intelligence and police forces of Western states. The success of this strategy is most apparent in the use of so-called 'lone-wolf' attacks on soft targets in the West, particularly, but not exclusively, in Europe. The scope, nature and extent of media coverage generated by such attacks means they also generate influence and impact far beyond the scale of the mayhem they actually cause, however nasty that may be. This helps further undermine trust in the credibility of elites and establishments in Alliance nations.

If Russia and other adversaries use the internet to sow disinformation, both Al Qaeda and Islamic State use the internet not only to sow disinformation, but also to radicalise and recruit activists from within Western societies. The increasing number of secure, encrypted phone applications enable these adversaries to co-ordinate and activate them through unheard of operationally secure communications. Such groups also use the resources available to them within an open society to build bombs and acquire munitions, with the internet the medium of choice to offer instruction in bomb-building. It is a threat close to home. Only a few kilometres from NATO HQ hand guns and automatic weapons were allegedly purchased on the black market close to Brussels Midi station shortly before the August 2015 attack on a *Thalys* train travelling between Brussels and Paris.¹³ This raises the additional challenge of the increasing cooperation and synergy between terror groups and highly sophisticated criminal networks with global reach. It is a reality that argues even more forcefully for a close EU/NATO security relationship.

Islamic State has already exploited the European migration crisis to insert foreign fighters into Europe, and re-insert returning Salafist jihadis into European societies. Indeed, the refusal of much of Europe's leaders to properly recognise a link between the terrorist threat and the migration crisis has helped

13 See "French train attack: Belgian station is close to notorious weapons supply line", The Telegraph, 28 August, 2015. www.telegraph.co.uk/news/worldnews/europe/france/11818920/French-train-attack-Belgian-station-is-close-to-notorious-weapons-supply-line.html

to further undermine popular trust in political elites, accounting in no small measure for the rise of populist, nativist political parties. These are the very same causes that have been supported by Russian cyber and influence campaigns which aim to undermine the cohesion of the EU, a critical objective of Russia's hybrid warfare strategy.

In November 2014 then US Secretary of Defense Chuck Hagel announced the *Third Offset Strategy* via the creation of a future US joint force that could simultaneously, and in parallel, defend the homeland, conduct a global counter-terrorism campaign, assure allies, and deter adversaries in multiple regions the world over. Maintaining an Alliance that is by and large in line with 'adapted' US military strategy, with Canadian and European armed forces sufficiently advanced to be able to operate to effect alongside their American counterparts, is a main driver of Adaptation. It will also prove a profound challenge even if paradoxically the US offset 'threat' to NATO is posed by American efforts to 'offset' the very adversaries and enemies the Alliance must defend against.

The US is looking to develop a range of capabilities and capacities the consequences of which will widen the already significant chasm between the capabilities of US forces and those of its European Allies. At the high-end of the conflict spectrum such developments include new nuclear and space-based capabilities, advanced sensors, extreme range stand-off weapons and communication systems designed for engaging in far distant contested theatres, the development of advanced missile defences, as well as offensive and defensive cyber capabilities.

The US is also looking to the future of warfare by seeking to decisively exploit new technologies. These technologies include autonomous systems, unmanned undersea vehicles, advanced sea-mines, high-speed strike weapons, advanced aeronautics, electromagnetic rail-guns, and high-energy lasers. The US *Long-Range Research and Development Planning Program* is also looking into areas such as robotics, system autonomy, miniaturisation, scaling big data, artificial intelligence and deep-learning. To that end, the Pentagon is keen to develop a more innovative relationship with US industry, to better exploit the entire national supply chain (not simply the defence supply chain) through a form of entrepreneurial security and defence procurement, locking both innovation and competition into the provision of the future force.

Meanwhile, the convergence of artificial intelligence, deep learning, natural language processing, computer vision and autonomous systems portends a profound change in the character of war, where the speed of conflict shrinks the decision-action loop to heretofore unprecedented dimensions. Dubbed "hyper war", for the enormous compression of time and effect in conflict it portends, the technological requirements to wage offensive operations or to defend in an environment of hyper war, are both dramatic and expensive. Given the investments Russia and China are making at this uber high-end of conflict, perhaps soon to be vastly enhanced with the mastery and integration of quantum computing, the reality of future war is daunting to say the least. NATO must be capable of operating simultaneously at both ends of the conflict spectrum. However, whilst NATO struggles with the challenges of hybrid warfare, it could potentially be surprised by hyper war, with little capacity either to defend against or defeat a concerted attack.

In conclusion, defence innovation is key to creating a new defence and force strategy that could maximise strengths and offset weaknesses across and throughout the conflict spectrum. Innovation is also the key to the maintenance of Allied comparative strategic advantage via enhanced intelligence, surveillance and reconnaissance, allied to technological superiority. The need is critical precisely because adversaries of all stripes are systematically studying US and Allied weaknesses, and vulnerabilities and how to exploit them. Therefore, NATO Adaptation must engage the Alliance as a whole in the innovation arms race.

Defence Investment

Europeans are far behind in considering, let alone investing in, the new technologies and science that will drive and define the character of war and conflict in the twenty-first century. Without a clear plan for spending, based upon a clearly established NATO requirements system, the additional resources

from meeting the 2 percent GDP per annum Defence Investment Pledge, together with 20 percent of that invested in new equipment, will be meaningless unless such efforts are co-ordinated across the entirety of the requirements identified. This effort, and Adaptation with it, must be based on a NATO strategy designed from the outset to deal honestly and credibly with a dangerous strategic environment. Put simply, if the Alliance is not resourced, and/or squanders accumulated resources for want of an alliance-wide spending plan, then any chance the Alliance will be properly adapted to meet the threats and challenges of the strategic environment of today and tomorrow will come to nought.

For many years, European defence spending, and the defence policy within which it resides, has been driven by industrial and employment policy, not defence policy. Such convolutions as 'juste retour', 'cost plus', 'workshare', and even 'Smart Defence', have helped drive cost, inefficiency and ineffectiveness into acquisition and procurement, supply chains, and the life-cycle management of defence equipment. Such practices have also helped push defence cost inflation significantly above general inflation, and reduced the scale and quality of equipment available to Alliance forces and made delivery a long and tortuous process. Using defence as a form of subsidised barrier against competitiveness and reform has also seen the maintenance of too many low-tech 'metal bashers' and undermined much-needed investment in vital 'systems integrators'.

Better and quicker decision-making on spending will be vital also to speed up chronically slow fielding times. In Europe it is hard to escape the need for root-and-branch reform of the entire European Defence and Technological Industrial Base (EDTIB). However, the US also needs to reform its procurement and acquisition practices. Whilst aspects of the F-35/JSF programme have suggested a new approach to collaboration within the Alliance, with Britain in particular a partner rather than a client from the outset of the programme, the co-operation has at best been lumpy. Within the F35 programme the US has tried to resist British access to so-called 'black box' technologies, even when British technologies have been an important element in the black box. Worse, US export control licenses often get in the way of Allied defence-industrial collaboration because they are driven as much by parochial political concerns as they are the risk that sensitive US defence technologies might fall into the wrong hands.

Furthermore, a lot of the effort for defence industrial integration in Europe will fall to the EU, even if much of the effort to establish requirements and to maintain defence industrial interoperability lies with NATO. In Europe, a far deeper level of integration is needed across the procurement cycle from concept to retirement. Indeed, without deeper integration in Europe and improved harmonisation across the Atlantic it is hard to see how all-important military interoperability will be maintained into the future.

In effect, the adapted Alliance needs an outcome-led defence investment strategy. In an ideal world, defence investments would be driven purely by the policy and strategy that emerge from a considered analysis of the strategic environment. In reality, such investments are invariably an unhappy marriage of strategy and affordability. For the Alliance, given the nature of the emerging threats, that means a conscious effort and rationalised process to identify the military instruments it will require to mount a credible deterrence and defence posture. Policy and strategy would be reinforced by a proper understanding of the full spectrum of force and resources the Alliance will need.

Indeed, by shifting to an outcomes-led strategy, which a focus on military instruments would entail, it is far more likely that the Alliance and the Allies could realise better choices and better strategy. The need is pressing. Even if the Allies realise only 50% of the increased defence spending explicit in the Defence Investment Pledge that would mean an additional \$50bn by 2024. However, experience also suggests that in the absence of reasoned and considered strategy sharp, politically-motivated increases in public spending tend simply to lead to a large waste of substantial amounts of public money, particularly in the defence sector. Hence the political penchant for input rather than outcome-led measures of performance. The NATO Defence Planning Process (NDPP) would have an important role to play in establishing the basis for rational defence choices by the Allies. However, the NDPP must be made more central to the defence planning of Allies to perform such a function.

To conclude, if the US wants allies with which it can work, and which will be vital to keeping overstretched US forces strong where they will need to be strong, then 'America Together' might be

a better mantra than 'America First', particularly when it comes to defence-industrial collaboration between the Allies and the sharing of sensitive technologies

In the past NATO and its nations have tended to enjoy the 'luxury' of being able to confront threats in isolation, or at least sequentially, firm in the belief they enjoy comparative technological advantage. Today, whilst there might be no formal alliance between illiberal states, global-reach criminal networks, and the likes of Al Qaeda and Islamic State, there are clearly links. NATO must be able to deter and defend successfully against a range of such threats across the conflict spectrum, in multiple domains, and possibly at one and the same time, and in whatever complex form they take. This is an enormous demand upon an Alliance with a decision-making model structured around consensus. A further challenge is that the need for new strategy also takes place during a time of economic duress, particularly in Europe. Oftentimes paucity has driven innovation. However, the parallel focus of many NATO members on strict austerity policies has effectively paralysed innovation across much of the defence space, particularly in Europe.

Adaptation will only work if the adapted NATO's ends, ways and means are in sync with a sustained, systematic, and holistic Allied strategy to offset attempts by China, Russia, and indeed AQ and Islamic State, to offset what they perceive to be allied (usually American strengths). Worse, there is a very real danger that efforts by adversaries and enemies to offset US strengths, will render an already far weaker and far more vulnerable Europe, critically vulnerable to attack. That, to say the least, would be a paradox.

Conclusion

This paper has sought to scope the challenges, risk, threats and opportunities faced by the Alliance, and which drive the GLOBSEC NATO Adaptation Initiative. The May meeting of NATO Heads of State and Government has implicitly endorsed the approach of the project to Adaptation with its focus on improved burden-sharing, the strengthening of the so-called 'Transatlantic Bond', and the need for an enhanced NATO's counter-terrorism strategy. The meeting also considered the many seams, gaps, and vulnerabilities faced by the Alliance today, and the need for a mind-set change on the part of all the Allies if NATO is to be adapted to meet the challenges faced by all of the Allies.

NATO remains the cornerstone alliance not only for Europe's security, but for much of the world beyond. However, NATO is but one component and to be successful in its mission the Alliance will need not only to become part of a network of stabilising institutions the world over, but far more 'comprehensive' in the way it considers its own role in contemporary and future security and defence.

In 1932 the British Imperial General Staff scrapped the so-called 'Ten Year Rule' by which London assumed it would not be involved in another major war for at least a decade. In so doing London immediately changed the basis for the defence policy it made thereafter. If today's Alliance is to meet the challenges of today's and tomorrow's security environment, which this paper describes, then the Allies must end the unstated, but nevertheless very real Ten Year Rule which continues to reside in the minds of leaders in many Allied nations, albeit a Ten Year Rule with a twist. Not only do many within the Alliance refuse to believe a major war involving themselves and their nations could happen within a decade, they are unwilling to engage in the kind of ten year plus strategy that stabilising NATO's south will require. Be it to NATO's East, South, or North; deterrence, stabilisation, engagement, and, if needs be, conflict will demand a step change in thinking and acting which can only come first from a better and common understanding of NATO's place in the world.

Something really bad really could happen. Deciding and acting in an environment of uncertainty demands an inherent willingness to accept risk, and in an alliance to share risk. If Allies are risk averse then they are, in and of themselves, self-defeating. In such an environment, the very uncertainty that drives their risk aversion will ultimately immobilise processes paralyse decision-making, a 'paralysing factor' that will ensure failure and defeat. The ultimate bellwether is of course money and the willingness or otherwise of Allies to commit to defence spending in the face of a host of competing demands, and an increasingly diverse threat environment. The paradox is that sound investment in an age of uncertainty is the very commodity that by promoting security dilutes and in time banishes uncertainty. Conversely, failure to invest accelerates and exaggerates uncertainty and thus guarantees negative strategic political consequences simply by ceding the field to others.

It is for that reason this project is committed to writing *Harmel 2.0*. For, without such ambition NATO Adaptation will fall short in a strategic environment that is at best unforgiving, and at worst catastrophic.

Some ages past forgave mediocrity. This is no such age.

THE GLOBSEC NATO ADAPTATION INITIATIVE STEERING COMMITTEE, May 2017

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