

Soft Power meets the Bomb: The EU and Non-Proliferation

Dr. Andrew Cottey

Department of Government
University College Cork
Tel. 00-353-21-490-2087
E-mail: *a.cottey@ucc.ie*

Paper for
Political Studies Association of Ireland
Annual Conference
Department of Government
University College Cork
20th-22nd October 2006

(Draft only – comments welcomed)

Since the early 1990s the threat posed by the proliferation of weapons of mass destruction (WMD) has moved to the centre of the global security agenda. The controversy surrounding the 2003 Iraq war, which was at least putatively launched in order to prevent Iraq from developing WMD, and the ongoing debate over how to prevent Iran from developing nuclear weapons, including the possibility that the US or Israel may use force to try to achieve this goal, indicate that proliferation is likely to remain at the fore of the global security agenda. The increasing prominence of proliferation reflects two factors. First, the end of the Cold War dramatically reduced the risk of nuclear war between the United States and Russia, effectively bringing the first part of the nuclear age to an end. Second, India and Pakistan's development of nuclear weapons and Iran, Iraq and North Korea's progress towards that goal suggested that the world was on the verge of a significant widening of the nuclear club.

The prospect of a significant expansion of the nuclear weapons club, as well as of the proliferation of chemical and biological weapons and of terrorist groups obtaining WMD, called into serious question the adequacy of existing non-proliferation institutions and policies. From the 1950s through to the early 1990s, a series of multilateral arms and technology control agreements were put in place – in particular, the Nuclear Non-Proliferation Treaty (NPT), the International Atomic Energy Agency (IAEA), the Biological and Toxin Weapons Convention (BTWC) and the Chemical Weapons Convention (CWC) – to prevent the proliferation of WMD. Up to the early 1990s only six states – the United States, the Soviet Union/Russia, the United Kingdom, France, China and Israel – had developed nuclear weapons. India and Pakistan's 1998 nuclear weapons tests, Iran, Iraq and North Korea's progress towards developing nuclear weapons (despite being signatories of the NPT and subject to IAEA inspections) and the 2003 revelation of a substantial clandestine international nuclear technology network led by the father of the Pakistan nuclear bomb A.Q. Khan, however, sharply illustrated the limitations of existing non-proliferation arrangements.

These developments have generated heated debate on how best to respond to the proliferation threat. This debate has, in effect, been led by the United States. In the 1990s, the Clinton administration attempted to reinforce the existing multilateral non-proliferation frameworks, but also sought to mobilise international diplomatic and economic pressure against Iran, Iraq and North Korea, developed Cooperative Threat Reduction (CTR) programmes with Russia and the other former Soviet republics (designed to ensure effective controls over the former superpower's WMD arsenal) and launched a 'counter-proliferation initiative' to explore the role of military force in preventing and responding to proliferation (Andreani, 1999-2000). In the wake of the 9/11 terrorist attacks, the Bush administration defined proliferation alongside terrorism as one of the central security threats to the US, formally adopted (in its 2002 National Security Strategy) the pre-emptive use of military force as a means of preventing proliferation, invaded Iraq (as exhibit number one of the new doctrine of pre-emptive war), has sought to further isolate and intensify pressure against Iran and North Korea (while not ruling out the pre-emptive use of force against either), introduced a Proliferation Security Initiative (PSI) to intercept WMD technologies and materials being transferred to potential proliferators and initiated plans for the deployment of missile defences to protect the US against long-range missile attack. At the same time, the US has adopted an increasingly sceptical policy towards the more traditional multilateral arms control approach to proliferation: in 1999 the US Senate rejected the Comprehensive Test Ban Treaty (CTBT); since 2000, the Bush

administration has adopted an unsupportive approach to most arms control agreements, effectively torpedoing a verification protocol for the BTWC and bringing the 2005 NPT Review Conference to the point of collapse. In combination, these shifts constituted a revolution in US non-proliferation policy, shifting it away from the traditional approaches of arms control, export controls and diplomacy and towards political, economic and military coercion. Critics of this revolution in US non-proliferation policy argue that it overplays the threat posed by proliferation, fails to recognise the continuing value of arms control, underestimates the limitations and dangers of coercion and the use of force and risks undermining the broad legitimacy on which international non-proliferation efforts have rested to date (Andreani, 1999-2000).

European states and institutions have thus been faced with the challenge of responding not only to the problem of proliferation itself but also to a radical and controversial new US non-proliferation policy. This paper examines European responses to the WMD proliferation threat and the revolution in US non-proliferation policy. It shows that European states, while concerned by the proliferation threat, do not view it with the same sense of urgency as the US and that European governments remain strongly committed to the more traditional multilateral non-proliferation policies and wary of the more coercive approaches now advocated by the US. Nevertheless, in the wake of the 2003 Iraq war, the EU in particular has sought to develop a more proactive role in non-proliferation, adopting a formal EU Strategy Against Proliferation of Weapons of Mass Destruction at the end of 2003 and seeking, under the leadership of the Union's three largest members, Britain, France and Germany to play a central role in persuading Iran not to develop nuclear weapons. The difficulties the EU has faced in using its 'soft power' to influence Iran, and the possibility, perhaps likelihood, that Iran will go on to develop nuclear weapons, however, indicate the continuing challenges Europe is likely to face in the area of proliferation.

Assessing the Proliferation Threat: European Perspectives

European governments generally accept that WMD proliferation is a major security problem. The EU's December 2003 European Security Strategy argues that proliferation 'is potentially the greatest threat to our security' (European Union, 2003). Beyond this, however, the nature and extent of the threat is more controversial. Assessing the threat posed by WMD proliferation is problematic for a number of reasons. Threat assessments depend on intelligence information about the capabilities and intentions of other states. Intelligence can be unreliable, partial or politically biased; it can lead to the underestimation of risks (such as the failure to predict India's 1998 nuclear tests) and the exaggeration of threats (as with Baghdad's WMD potential before the 2003 Iraq war). Assessments of how far states do or do not have WMD arsenals or programmes and of their intentions should therefore always be treated with a degree of caution. Since the US has the world's most extensive intelligence capabilities and makes quite regular and detailed open assessments, most publicly available independent assessments of the proliferation threat also rely to some extent on official US sources. Assessments of the threat posed by proliferation, however, reflect not simply estimates of what weapons particular states have or may develop but also of the strategic and political consequences of such developments, as well as of the prospects of preventing particular states from developing WMD or of deterring them from using such weapons.

Bearing in mind the caveats about intelligence noted above, table 7.1 provides a summary of the state of play in terms of WMD proliferation beyond the five established nuclear weapons states (the US, Russia, China, Britain and France) as of 2006, indicating states which are believed to have nuclear, chemical and/or biological weapons or programmes to develop such weapons, as well as details of the missile systems these states are believed to possess or have underdevelopment. As can be seen, Israel, India and Pakistan have nuclear arsenals and North Korea may have developed a small number of nuclear weapons. Iran is widely believed to have a nuclear weapons programme, although estimates suggest it may be anywhere from 2-3 to 10 years from developing nuclear weapons and it is unclear how far Tehran has yet taken a definitive decision to move down this road. Israel and North Korea are believed to possess biological weapons and Iran, Syria and Egypt are believed to have biological weapons research programmes. Israel, North Korea, Iran, Syria and Egypt are believed to have chemical weapons. The aftermath of the 2003 Iraq war revealed that Baghdad's WMD arsenal had been dismantled during the 1990s or early 2000s. Libya abandoned its WMD programmes in 2003-04. Beyond this, there is a larger circle of states which are not believed to have active nuclear, chemical or biological weapons programmes but probably have the technological and industrial capacity to develop such weapons in a relatively short time frame (approximately 5-10 years) if they chose to do so. This includes in particular in the nuclear weapons field countries such as Saudi Arabia, Japan, South Korea and Taiwan, as well as Germany, Brazil, Argentina and South Africa (- the latter three having had nuclear weapons programmes in the past but which were abandoned in 1980s or 1990s).

Table 7.1. WMD Proliferation: The State of Play (as of 2006)

State	Nuclear Threats	Biological Threats	Chemical Threats	Missiles (Current)	Missiles (Development)
North Korea	W?	W	W	MR (<2500)	LR (>5500)
Israel	W	W	W	MR (<1800)	--
India	W	--	D	MR (<2000)	LR (12000)
Pakistan	W	--	--	MR (<2500)	IR (3000)
Iran	R	R	W	MR	IR
Syria	--	R	W	SR	--
Egypt	--	R	W	SR	--
Libya	--	--	D	SR	--

Notes:

- Weapons: W = known or suspected weapons or weaponizable agents; R = known or suspected research program; D = declared chemical weapons or weapons program scheduled for destruction in accordance with the terms of the Chemical Weapons Convention.
- Missiles: SR = short-range (<1000km); MR= medium-range (1000-3000km); IR = intermediate-range missiles (3000-5500km); LR = long-range missiles (>5500km).

Sources: Cirincione, J., Wolfsthal, Jon B. and Rajkumar, M. (2002), *Deadly Arsenals: Tracking Weapons of Mass Destruction*, (Washington, DC: Carnegie Endowment for International Peace); Cirincione, J., Wolfsthal, Jon B. and Rajkumar, M. (2005), *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*, (Washington, DC: Carnegie Endowment for International Peace); International Institute for Strategic Studies (2005), *The Military Balance 2005/2006*, (London: Routledge for The International Institute for Strategic Studies); United States Department of Defense (2001),

Proliferation: Threat and Response, <http://www.defenselink.mil/pubs/ptr20010110.pdf>; and Swaine, Micheal D. and Runyon, Lauren H. (2002), 'Ballistic Missiles and Missile Defense in Asia', *NBR Analysis* 13, 3, (Seattle, WA: National Bureau of Asian Research), <http://www.carnegieendowment.org/files/swainenbr.pdf>.

From a broad European perspective, the current proliferation landscape poses a number of threats (Krause, 1996; Muller, 2003):

- Direct attack: In the worst case, European states might be the subject of WMD attack by states outside Europe. In the short-to-medium term the only states that might develop WMD and missiles capable of attacking much of Europe are in the Middle East, in particular Iran. Even if Iran and/or other Middle Eastern states develop WMD and missiles capable of reaching much of Europe, the nuclear arsenals of the US, the UK and France would probably provide a significant degree of deterrence against such attack or blackmail, as would the likelihood of severe political, economic and perhaps military repercussions were a country to use WMD against Europe. Nevertheless, a radical regime – for example, if an Islamic revolution brought to power al Qaeda style forces in Saudi Arabia – might be willing to threaten or even use nuclear weapons against European states in a bid to persuade them to withdraw military forces from the Middle East or cease support for Israel. While a direct WMD attack on Europe (or the threat of such an attack) is probably unlikely in the short-to-medium and perhaps also in the longer term, if proliferation widens in the Middle East such a scenario cannot be entirely ruled out.
- Threats to European armed forces on 'out-of-area' missions: In a second set of scenarios, European armed forces deployed outside Europe might be the subject of WMD attacks by either states or terrorists or threatened with such attack in order to deter military action. Indeed, after the 1990-91 Gulf war many observers concluded that the lesson was 'don't take on the US unless you have nuclear weapons', a lesson re-inforced by the 2003 Iraq war and which probably lies behind North Korea and Iran's pursuit of nuclear weapons. The use of terrorist tactics against US and European armed forces in Afghanistan and Iraq also suggests that if terrorists obtained WMD they might be quite likely to use them against Western military forces in order to raise the costs of continued military operations in the region and force a Western withdrawal. The development of nuclear weapons by Iran and/or North Korea would thus have a potentially very significant impact in terms of deterring US/Western military action against these countries. Indeed, many analysts suggest that North Korea's ability to threaten massive conventional retaliation against South Korea and US forces based there (as well as the possibility that Pyongyang already possesses a small number of nuclear weapons) precludes US military action against that country. The use or threatened use of WMD against Europe forces deployed outside Europe is probably one of the more likely threats if further proliferation occurs.
- Chemical and biological weapons: Although the term weapons of mass destruction is now widely used there are significant differences between nuclear, chemical and biological weapons and these have important implications for the threats they pose. The destructive power of nuclear weapons gives them unparalleled capacity to destroy large population centres or concentrations of military forces and to kill many thousands (or even millions) of people, making them by far the most serious proliferation concern. Chemical and biological weapons, in contrast, depend on dispersing a deadly chemical or biological agent over a significant area, which is not easily achieved. Historically, chemical and

biological weapons have been used primarily as battlefield weapons, targeted against local concentrations of military forces and killing hundreds or low thousands of soldiers (but not significantly larger numbers). While the possibility that a state or terrorist group could succeed in dispersing a deadly agent across a large city is a serious concern, most analysts suggest that chemical or biological weapons are more likely to be used for limited battlefield purposes or smaller-scale terrorist attacks.

- Eroding the WMD taboo: Since the US use of nuclear weapons against Japan in 1945, a powerful taboo against the use of WMD and especially nuclear weapons has emerged. If a significantly wider group of states develop WMD, the risk that one or more state will eventually use these weapons inevitably increases, especially in a crisis. The consequences of the first use of nuclear weapons since 1945 in particular would be difficult to predict, but aside from the immediate military and political consequences for the countries concerned might also include major negative repercussions for the world economy (for example, by triggering a financial collapse or serious global recession). The ‘successful’ use of WMD by one or more state – in the sense of allowing that state to achieve a particular strategic objective or end a conflict on significantly better terms than might otherwise have been the case – would provide a significant incentive for other states to acquire WMD and consider their use. Such a lowering of the WMD threshold might create a significantly more dangerous international security environment in general and increase the risk of European states becoming the subject of WMD attack at some point in the future. Even if European states were not directly involved, the breaking of the WMD taboo, and especially of the international norm against the use of nuclear weapons, would thus have very serious negative implications for Europe.
- WMD terrorism: The 9/11 terrorist attacks and subsequent revelations of apparent al Qaeda plans to develop WMD and contacts between al Qaeda and personnel from the Pakistani nuclear weapons programme have pushed concerns about possible WMD terrorism to the fore. Al Qaeda’s apparently unrestrained attitude to the use of violence has re-inforced the view that were Islamic terrorists to obtain WMD they would be likely to use them. The terrorist bombings in Madrid and London in 2004 and 2005 suggest that Europe might be a likely target. The likelihood and extent of the threat posed by WMD terrorism is a matter of some debate. Some, especially in the US, argue that WMD terrorism, in particular nuclear or biological terrorism is a very real possibility, would give terrorists the potential to kill or threaten to kill millions of people and is therefore amongst the most serious threats to the US and other states. Senator Richard Lugar, Chairman of the US Senate Foreign Relations Committee, for example, has argued that ‘for the foreseeable future, the United States and other nations will face an existential threat from the intersection of terrorism and weapons of mass destruction’ (Lugar, 2005: 3). Others argue that there are very serious technical obstacles to true mass casualty terrorism, that it is far from clear that terrorists would engage in such activity even if they had the capacity to do so and the threat of nuclear and biological terrorism has therefore been exaggerated (Frost, 2005 and Ruppe, 2005). Obstacles to the procurement/development of nuclear weapons by terrorists include the likely unwillingness of states to transfer or sell a complete nuclear weapon to a terrorist group, the difficulty of obtaining sufficient fissile material for a nuclear weapon and the technical problems of assembling even a crude nuclear weapon. While terrorist groups are probably more likely to be able to

obtain chemical or biological materials, there are major obstacles to successfully dispersing these over a large area such as a major city. The most likely type of WMD terrorism may therefore be small-scale chemical or biological attacks such as the 1995 Aum Shinrikyo nerve gas attack on the Tokyo underground and the distribution of anthrax spores in the US after 9/11. Nevertheless, the possibility that a terrorist group might be acquire a nuclear weapon or more extensively usable biological weapons is real but difficult to estimate the likelihood of.

While assessments of the threat posed by proliferation depend on technical assessments of whether states or terrorists groups possess or may develop WMD and how they might use these, threat assessments – and views of the appropriate policy responses – are also deeply political, depending on analysis of the political likelihood of states or terrorist groups developing WMD, the political and strategic consequences of proliferation and the feasibility, costs and risks of different policy responses. As the world's only superpower, deeply engaged in all regions of the world and especially the regions of most immediate proliferation concern - the Middle East and North-East Asia – the US is the most likely target of WMD attack and would have its policy options most constrained by the further proliferation of WMD. As President George W. Bush put it in the preface to his administration's 2002 National Security Strategy document, 'The gravest danger facing our Nation lies at the crossroads of radicalism and technology. Our enemies have openly declared that they are seeking weapons of mass destruction... The United States will not allow these efforts to succeed' (The Whitehouse, 2002). In contrast, despite the fact that Europe is closer to the Middle East and thus more exposed to direct WMD attack from that region, Europeans do not in general view the proliferation threat to be as immediate or dramatic as the US does. Leading German non-proliferation Harald Muller, for example, argues that while proliferation is a 'distinct danger' that is 'increasing incrementally', it 'does not yet pose an immediate threat to the European Union' (Muller, 2003: 97). Similarly, Schmitt, noting that the number of states actively pursuing WMD is limited (essentially to Iran and North Korea in the case of nuclear weapons), concludes that there are 'good reasons to believe that the threat of WMD proliferation is manageable' (Schmitt, 2003: 90). Andreani concludes that there is 'considerable asymmetry in the way the issue is characterised on both sides of the Atlantic', reflecting the fact the 'Europe is geographically more exposed than the US, but strategically considerably less so' (Andreani, 1999-2000: 56-7). The debate surrounding how to respond to Iran's apparent efforts to develop nuclear weapons highlights the differences between European and American threat perceptions. For many in the US, the prospect of Iran developing nuclear weapons is a threat serious enough to warrant the use force to prevent such a prospect, even if such a policy involves very considerable risks and costs (Allison, 2006). In contrast, much of European opinion does not view a nuclear-armed Iran as a fundamental threat to Europe and argues that the costs of the use of force against Iran – including various potential forms of Iranian retaliation, a likely upsurge in terrorism and a further strengthening of anti-Western sentiment in Iran and the Middle East - outweigh the risks of Iran developing nuclear weapons (Grgic, 2004 and Woollacott, 2005).

From a European perspective, in the short-to-medium term the proliferation threat may be more limited than the sometimes lurid public debate suggests, essentially to the possibility of Iran and North Korea developing nuclear weapons and the risk of small-scale chemical or biological weapons attacks by terrorists. This assessment, however, needs to be complemented by two major caveats. First, although

the likelihood of true mass casualty terrorism – involving nuclear or possibility biological weapons – is difficult to assess, the possibility of such attacks should not be excluded and is a threat of a fundamentally different magnitude to that of more limited, small-scale WMD terrorism. Second, while Iranian and/or North Korean development of nuclear weapons may in itself pose only a limited threat, if it triggers further proliferation in the Middle East and Asia, a more general breakdown of the non-proliferation regime and, in the worst case, the use of nuclear weapons by one or more states it will pose a major long term threat to European and global security.

Arms Control

Multilateral arms control has been at the heart of the traditional approach to non-proliferation developed since the Second World War. In general this has involved two types of arms control regimes: universal prohibition regimes banning the possession of entire classes of weapons (the NPT, the BTWC and the CWC) and multilateral export/technology control regimes under which suppliers of the relative weapons systems and technologies agree common rules constraining the supply of weapons and technologies to other states (the Nuclear Suppliers Group (NSG), the Zangger Committee (which like the NSG seeks to control the export of nuclear materials and technologies) and the Missile Technology Control Regime (MTCR). In general, European states have been strong supporters of these regimes. The EU's December 2003 Strategy Against Proliferation of Weapons of Mass Destruction affirms the 'conviction that a multilateralist approach to security, including disarmament and non-proliferation, provides the best way to maintain international order and hence our commitment to uphold, implement and strengthen the multilateral disarmament and non-proliferation treaties and agreements' (European Union, 2003b). As table 7.2 indicates, most European states are members of all of the main multilateral non-proliferation agreements (- the only real exceptions being some of the supplier regimes which some states are not members of because they are not potential suppliers of the technologies concerned). France and Spain were not signatories of the NPT, criticising the discriminatory basis of the treaty, but Spain joined in 1987 and France in 1992.

Table 7.2. European States Membership of Multilateral Arms Control and Non-Proliferation Agreements

	NPT	BWC	CWC	CTBT	NSG	ZC	MTCR
North America							
Canada	X	X	X	X	X	X	X
United States	X	X	X	X	X	X	X
Western Europe – 'Old' European Union and/or NATO Members							
Austria	X	X	X	X	X	X	X
Belgium	X	X	X	X	X	X	X
Denmark	X	X	X	X	X	X	X
Finland	X	X	X	X	X	X	X
France	X	X	X	X	X	X	X
Germany	X	X	X	X	X	X	X
Greece	X	X	X	X	X	X	X
Iceland	X	X	X	X	---	---	X
Ireland	X	X	X	X	X	X	X

Italy	X	X	X	X	X	X	X
Lichtenstein	X	X	X	X	---	---	---
Luxembourg	X	X	X	X	X	X	X
Malta	X	X	X	X	X	---	---
Netherlands	X	X	X	X	X	X	X
Norway	X	X	X	X	X	X	X
Portugal	X	X	X	X	X	X	X
Spain	X	X	X	X	X	X	X
Sweden	X	X	X	X	X	X	X
Switzerland	X	X	X	X	X	X	X
Turkey	X	X	X	X	---	---	X
Central/Eastern Europe –‘New’ European Union and/or NATO Members							
Bulgaria	X	X	X	X	X	X	X
Czech Republic	X	X	X	X	X	X	X
Estonia	X	X	X	X	---	---	X
Hungary	X	X	X	X	X	X	X
Latvia	X	X	X	X	X	---	---
Lithuania	X	X	X	X	X	---	---
Poland	X	X	X	X	X	X	X
Romania	X	X	X	X	X	X	---
Slovakia	X	X	X	X	X	X	---
Slovenia	X	X	X	X	X	X	---
The Balkans							
Albania	X	X	X	X	---	X	---
Bosnia & Herzegovina	X	X	X	X	---	---	---
Croatia	X	X	X	X	X	---	---
Macedonia	X	X	X	X	---	---	---
Commonwealth of Independent States							
Armenia	X	X	X	X	---	---	---
Azerbaijan	X	X	X	X	---	---	---
Belarus	X	X	X	X	X	---	---
Georgia	X	X	X	X	---	---	---
Kazakhstan	X	---	X	X	X	---	---
Kyrgyzstan	X	---	X	X	---	---	---
Moldova	X	---	---	X	---	---	---
Russia	X	X	X	X	X	X	X
Tajikistan	X	X	---	X	---	---	---
Ukraine	X	X	X	X	X	X	---
Uzbekistan	X	X	X	X	---	---	---

Notes:

- Treaties/regimes: BWC = Biological Weapons Convention; CWC = Chemical Weapons Convention; CTBT= Comprehensive Test Ban Treaty; NPT = Non-Proliferation Treaty; NSG = Nuclear Suppliers Group; ZC = Zangger Committee; MTCR = Missile Technology Control Regime.
- Status: X= ratified; X = signed, not ratified; --- = not party to agreement.

Sources: Multilateral Arms Regulation and Disarmament Agreements, UN Disarmament website, <http://disarmament.un.org/TreatyStatus.nsf>; Nuclear Suppliers Group website, <http://www.nuclearsuppliersgroup.org/>; Missile Technology Control Regime website, <http://www.mtcr.info/>; and Zangger Committee website, <http://www.zanggercommittee.org/>.

Since the early 1990s European states have supported and to varying degrees led international efforts to strengthen these various multilateral arms control and non-proliferation agreements. The NPT, which having entered into force in 1970 reached the point of a twenty-five year special review conference in 1995, was indefinitely extended at that conference. At the 2000 NPT review conference – the NPT is also subject to regular five-yearly review conferences – signatories endorsed a thirteen point programme for nuclear arms control and disarmament. During the 1990s the IAEA established a strengthened system of ‘safeguards’ for monitoring states’ nuclear facilities and activities. The CWC was signed in 1993 and entered into force in 1997. The CTBT was signed in 1996, but has not yet entered into force (as not all relevant states have ratified the treaty). European states have also supported negotiations to agree a Fissile-Material Cut-off Treaty (FMCT, which would ban the further production of the fissile material required for nuclear weapons) and a verification protocol for the BTWC, but both sets of negotiations have been stalled since the late 1990s. The negotiations for these various agreements has been one of the main areas in which the EU has, beginning in the 1980s but especially since the 1990s, sought to develop common policies and assert collective influence, although such efforts have been constrained by both divisions amongst its members and the wider difficulties of reaching agreement on some of these issues.

European states and institutions, however, face significant obstacles in advancing the multilateral arms control approach to proliferation. The verification mechanisms associated with these arms control regimes are imperfect (as illustrated by Iran, Iraq, Libya and North Korea’s progress towards developing nuclear weapons in the 1980s and 1990s despite being signatories of the NPT and subject to IAEA inspections) and strengthening these verification mechanisms have proven difficult. The NPT, BTWC and CWC contain no sanctions or enforcement measures for dealing with states which may violate their commitments not to develop nuclear, biological or chemical weapons under these treaties; and the NPT permits states to withdraw from the treaty (which North Korea did in 2003 and Iran may do in future) and then lawfully develop nuclear weapons (from an international legal perspective). The network of international technology and materials control regimes contains significant holes in terms of the range of technologies and materials covered and the states which are not members or do not fully enforce its provisions: China has in the past helped Pakistan and North Korea to develop nuclear weapons or missiles; Russia has supplied Iran with civilian nuclear technology; and North Korea and Pakistan have been involved in helping other states to develop nuclear weapons and/or missiles. Even more fundamentally, there is an undeniable double-standard at the heart of the existing non-proliferation regime: while the NPT commits the majority of the world’s states not to develop nuclear weapons, it formally recognises the status of the five established nuclear weapon states; although the NPT commits the nuclear weapons to ‘to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament’, relatively little progress has been made in this direction since the NPT entered into force in 1970. This double-standard has led India, Pakistan and Israel to reject the NPT, made many states reluctant to agree tough action against states which attempt to develop nuclear weapons such as Iran, Iraq and North Korea and more generally undermined efforts to establish a truly universal non-proliferation regime. Since Britain, France and Russia are three of the five established nuclear weapons states, this double-standard has a significant European dimension: although Britain, France

and Russia have reduced their nuclear arsenals since the 1990s, none appears likely to abandon their status as a nuclear weapon state. Britain and France's status as nuclear weapon states also significantly constrains the EU's approach to non-proliferation: while the majority of EU members would support substantial further measures towards nuclear disarmament, Britain and France have been wary of such steps and the EU's position within the NPT negotiations has often been a lowest common denominator dictated by Britain and France. European efforts to support multilateral arms control have also been undermined by the increasing opposition of the US to such approaches: while European states, and especially the EU, have supported the CTBT, a verification protocol for the BTWC and the thirteen point arms control and disarmament programme agreed at the 2000 NPT Review Conference, US opposition has stymied progress in all these areas.

Camille Grand argues that, with the US increasingly antipathetic to arms control, China committed to modernising its nuclear arsenal and Russia determined to maintain the vestiges of its nuclear superpower status, other 'countries, including the Europeans in the first instance, are becoming the main and practically sole defenders of the logic of non-proliferation' and that the EU should play a central role in promoting a multilateral, arms control based approach to proliferation (Grand, 2000: 3-5). While the EU has taken significant steps in this direction since the early 1990s, the inherent problems of arms control, Britain and France's status as nuclear weapon state and US opposition are likely to impose significant constraints on the EU's ability to assert leadership in this area.

'Loose Nukes' and Cooperative Threat Reduction

The break-up of the Soviet Union at the end of 1991 pushed a new issue to the fore of the nuclear agenda: the disintegration of a nuclear-armed superpower and the possible loss of control over its WMD arsenal. The Soviet Union was estimated to have over 27,000 nuclear warheads, as well as extensive chemical and biological weapons programmes and the defence-industrial-scientific infrastructure necessary to support its superpower WMD arsenal (Miller, 1992). In the worst case, the Soviet successor states might lose control over nuclear, biological or chemical weapons, materials, technologies or expertise and these might become available to other states or terrorist groups – generating fears of so-called 'loose nukes'. In response to this danger, the US launched the Cooperative Threat Reduction (CTR) programme (- also known as the Nunn-Lugar programme, after Senators Sam Nunn and Richard Lugar its original architects), a major effort to help Russia and the other former Soviet republics reduce and secure control of the ex-superpower's WMD arsenal. US CTR activity has had a number of foci: assisting Russia in reducing its nuclear arsenal; support for Ukraine, Kazakhstan and Belarus in dismantling or withdrawing to Russia the nuclear warheads and delivery systems they inherited from the Soviet Union (Kazakhstan became a non-nuclear weapon state in 1995, Ukraine and Belarus in 1996); enhancing controls over and security of nuclear weapons and fissile material in Russia; destroying or dismantling chemical and biological weapons and associated production facilities; and helping to retrain and provide alternative employment for WMD scientists. Between 1992 and 2002, the US spent nearly \$5billion on CTR activities with Russia and the other former Soviet states; in the 2000s it is spending approximately \$1billion annually on CTR (Whitehouse, 2002). As of April 2006, US CTR support had contributed to the de-activation of 6,828 nuclear warheads, the destruction of 612 intercontinental ballistic missiles (ICBMs), the elimination of 485

ICBM silos, the destruction of 55 mobile ICBM launchers, the elimination of 155 bombers, the destruction of 885 nuclear air-to-surface missiles (ASMs), the elimination of 436 submarine launched ballistic missile (SLBM) launchers, the elimination of 577 SLBMs, the destruction of 29 ballistic missile submarines (SSBNs or ship submarine ballistic missile nuclear) and the sealing of 194 nuclear test tunnels/holes (Defense Threat Reduction Agency, 2006).

Despite Europe's closer proximity to the former Soviet Union and thus in some ways greater vulnerability to the consequences of WMD diffusion, the US took the leading role in developing CTR with Russia and the other former Soviet republics during the 1990s. Although various Western European states contributed to specific projects (Norway, for example, had a particular interest in managing the dismantlement of nuclear submarines based in Russia's far north), the overwhelming majority of CTR-type assistance was provided by the US. Compared to the \$5 billion spent by the US between 1992 and 2002, the EU – that is, EU member states plus the European Commission and EU funded programmes – spent an estimated €369 million (less than one tenth of what the US spent) (Anthony, 2004: 8). By the turn of the century, however, there was a growing recognition that the task of securing control over the former Soviet WMD arsenal was far from complete and that other states should contribute much more significantly to addressing this challenge. Russia still has thousands of nuclear warheads, 1000 metric tons of weapons-grade highly enriched uranium, 125-200 metric tons of plutonium, 40,000 metric tons of chemical weapons agents, an unknown quantity of biological weapons agents and perhaps three quarters of a million people still living in ten formerly closed 'nuclear cities' (Blom, 2001: 7-8). At the same time, the 9/11 terrorist attacks intensified concerns about the danger of WMD or related materials falling into the hands of terrorists. Against this background, in 2002 the G8 - the Group of Seven industrialised democracies (Britain, Canada, France, Germany, Italy, Japan and the US), plus Russia - established a Global Partnership Against the Spread of Weapons and Materials of Mass Destruction to 'prevent terrorists, or those who harbour them, from acquiring or developing nuclear, chemical, radiological and biological weapons; missiles; and related materials, equipment and technology' (G8, 2002). In what was dubbed the '10 plus 10 over 10 initiative', the G8 states committed to provide \$20 billion (\$10 billion from the US and \$10 billion from the other G8 states) over the next 10 years to support projects under the new Global Partnership. In addition to the European members of the G8, other European states have also made commitments to contribute to the G8 Global Partnership – table 7.3 indicates the commitments made and funds expended by the US and European states. The G8 Global Partnership involves a major expansion of European involvement in and concomitant funding of CTR-type activities with Russia and the other former Soviet republics. Ian Anthony estimates that fulfilling their G8 pledges for the period 2002-12 will require EU members to increase their funding of CTR-type activities sevenfold compared with the previous decade (Anthony, 2004: 7). As table 7.3 indicates, European states and the European Commission have expended significant funds within the context of the Global Partnership since 2002, but meeting their commitments will require further increases in expenditure.

Table 7.3. US and European Contributions to the G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction

	Funding Pledge	Funding Commitments	Funds Expended	Main Projects (Current and Planned)	Project Recipients
--	----------------	---------------------	----------------	-------------------------------------	--------------------

United States	US \$10 billion	US \$2.82 billion (6/02 – 9/05)	US \$1.8 (6/02 – 9/04)	Biological weapons; chemical weapons destruction; destroying strategic missiles, bombers, and missile silos; export controls; HEU disposition; nuclear submarine dismantlement; nuclear warhead and materials protection, control, and accounting; plutonium disposition; scientist employment.	Russia, Ukraine, Azerbaijan, Kazakhstan, Uzbekistan, other FSU and eastern Europe
EU Commission	EU \$1 billion (6/05)	EU \$849 million (6/02 – 6/05)	EU \$281.5 million (6/02 – 6/05)	Chemical weapons destruction; export controls; nuclear safety; nuclear submarine dismantlement; nuclear warhead and materials protection, control, and accounting; plutonium disposition; scientist employment.	Russia, Ukraine, Kazakhstan, Armenia
France	EU \$750 million	EU \$172.3 million (6/05 – present)	---	Biological weapons; chemical weapons destruction; nuclear safety; nuclear submarine dismantlement; nuclear warhead and materials protection, control, and accounting; plutonium disposition.	Russia
Germany	US \$1.5 billion	EU \$197 million (6/02 – 12/04)	EU \$150.4 million (6/02 – 12/04)	Chemical weapons destruction; nuclear submarine dismantlement; nuclear warhead and materials protection, controls, and accounting.	Russia
United Kingdom	US \$750 million	GBP 159 million (6/02 – present)	GBP 52.8 million (6/02 – present)	Biological weapons; chemical weapons destruction; nuclear safety; nuclear submarine dismantlement; nuclear warhead and materials protection, controls, and accounting; plutonium disposition, scientist employment.	Russia, Ukraine, other FSU
Italy	EU \$1 billion (over 10 years)	---	---	Chemical weapons destruction; nuclear submarine dismantlement; plutonium disposition.	Russia
Netherlands	No pledge.	---	EU \$6.1 (12/02 – 12/04)	Chemical weapons destruction; nuclear safety;	Russia

				submarine dismantlement; plutonium disposition.	
Belgium	---	---	---	---	---
Czech Republic	≈ US \$225,000 (total over 3 years)	---	---	Chemical weapons destruction.	Russia (via UK)
Norway	EU \$100 million	EU \$36.5 million (6/03 – 6/05)	EU \$35 million (6/03 – 6/05)	Chemical weapons destruction; nuclear safety; nuclear submarine dismantlement; nuclear warhead and materials protection, control, and accounting; scientist employment.	Russia
Denmark	EU \$17.2 million (6/02 – 9/04)	---	EU \$0 (6/02 – 9/04)	Nuclear safety; nuclear waste management.	Russia, Ukraine, Lithuania
Poland	≈ US \$100,000 (planned \$10000 a year for 10 years)	---		Chemical weapons destruction; scientist employment.	Poland, Russia
Finland	EU \$15 million (2004-14)	EU \$8.85 million (6/02 – 6/05)	EU \$7.85 million (6/02 – 6/05)	Chemical weapons destruction; nuclear safety; nuclear submarine dismantlement; nuclear warhead and materials protection, control, and accounting.	Russia, Ukraine, other eastern Europe
Sweden	EU \$10 million and US \$20million	---	---	Biological weapons; chemical weapons destruction; export controls; nuclear safety; nuclear submarine dismantlement; nuclear warhead and materials protection, control, and accounting; nuclear waste disposal.	Russia

Sources: GPWG Annual Report 2005: Consolidated Report Data, Annex A, G8 Summit 2005 – Gleneagles, Scotland, <http://www.fco.gov.uk/Files/kfile/GPWG%20Annual%20Report%20Annex%202005%20Final%20revised%2024%20Aug%2005.pdf>; G8 Consolidated Report of Global Partnership Projects, June 2004, G8 Summit 2004 – Sea Island, Georgia, http://www.fco.gov.uk/Files/kfile/Art%2014%20g8_report.pdf; Strengthening the Global Partnership, Donor Factsheets, <http://www.sgpproject.org/Donor%20Factsheets/Index.html>

It is perhaps surprising that European states and especially the EU have not played a larger part, and indeed a leadership role, in CTR. European preferences for multilateralism, cooperative engagement and the use of ‘soft power’ would appear to be particularly well-suited to the area of CTR. The US’s leading role in CTR to date is probably a reflection of the legacy of its Cold War nuclear and arms control

relationship with the Soviet Union, as well as its more general status as the world's only superpower. The EU's 2003 Strategy Against Proliferation of Weapons of Mass Destruction commits it to 're-inforcing cooperative threat reduction programmes with other countries, targeted at support for disarmament, control and security of sensitive materials, facilities and expertise' (European Union, 2003). While the EU and its member states have significantly increased their contribution to CTR within the context of the G8 Global Partnership, there would nevertheless appear to be significant room for increased European contributions to and leadership of the CTR agenda.

One further issue is how far the CTR agenda can be extended to other countries beyond the former Soviet Union and what role Europe may play in this. This might involve supporting countries which have abandoned WMD programmes, such as Iraq and Libya, in destroying, dismantling or securing control over WMD-related materials and infrastructure. Some observers have argued that, alongside other carrots and sticks, CTR-type programmes could be an important element of any agreements under which North Korea and Iran might abandon their nuclear weapons programmes. Indeed, the EU has already been involved in one somewhat similar venture: the Korean Peninsula Energy Development Organisation (KEDO), which was established to provide North Korea with fuel oil and proliferation resistant light-water nuclear reactors in return for North Korea's commitment under a 1994 Agreed Framework with the US to abandon its nuclear weapon programme. The EU was a partner in KEDO, alongside the US, South Korea and Japan; but KEDO's activities have been in abeyance since North Korea's withdrawal from the NPT in 2003.

The G8 Global Partnership is in principle open to other states beyond the former Soviet Union, no real progress has been made in this direction. In 2004 the US announced a Global Threat Reduction Initiative (GTRI) aimed to help secure, relocate or dispose of nuclear materials globally and dilute nuclear weapon usable high enriched uranium to less dangerous low enriched uranium. Again, Europe – whether in terms of European states or the EU – has not yet played a prominent role in efforts to extend CTR beyond the former Soviet Union, but there would appear to be significant potential for European contributions in this area also.

Dealing with the Tough Cases: Diplomacy, Sanctions and the Use of Force

One of the lessons of the 1990s and the early 2000s is that, despite the existence of the global non-proliferation regime, a small number of states may be determined to develop nuclear or other weapons of mass destruction and that preventing such states from achieving this goal is extremely difficult. India and Pakistan tested nuclear weapons in 1998 and have gone to consolidate their status as nuclear weapon powers. Since the early 1990s there has been on-going debate as to how best to prevent Iraq, Iran and North Korea from developing nuclear weapons and the clearest conclusion that can be drawn from this debate is that there are no easy means of preventing determined states from developing WMD.

The debate as to how best to respond to prevent determined states from developing WMD has in significant been one of 'engagement versus coercion': to what extent is it possible to engage with states that are seeking to develop WMD and offer them positive incentives not to develop WMD? And, to what extent is coercion - diplomatic and economic pressure and sanctions, but ultimately military force – a necessary and effective means of preventing states from developing WMD? In the 1990s and early 2000s both strategies were tried, in various combinations of carrots

and sticks, with varying degrees of success and failure. In the early 1990s the US and its allies pursued a strategy of engagement towards North Korea, in the form of the 1994 US-North Korean Agreed Framework under which North Korea was to abandon its nuclear weapons ambitions in return for the supply of fuel oil and proliferation resistant light-water nuclear reactors, as well as the prospect of a broader normalisation of diplomatic and economic relations with the US. The Agreed Framework slowed North Korea's nuclear weapons programme for the rest of the 1990s, but collapsed in 2002-03 in contentious circumstances. The Bush administration argued that North Korea had secretly been continuing work on its nuclear weapons programme despite the Agreed Framework, North Korea argued that the US had not lived up to its commitments under the Agreed Framework and there was some evidence to suggest that hawks within the Bush administration, who had opposed the Agreed Framework from the start, had sought to undermine the strategy of engagement with North Korea. Whether the Agreed Framework is an illustration of the flaws and limits of engagement or its potential thus remains controversial. In a different example, an Anglo-American strategy of engagement – offering the normalisation of diplomatic and economic relations – was probably central to Libya's 2003 decision to abandon its WMD programmes (although the stick of economic pressure also played a role alongside the carrot of engagement).

The main coercive options are threefold: diplomatic pressure, economic sanctions and the use of force. Diplomatic measures (condemnations, demarches or the severing of diplomatic relations) may put political pressure on states, but are unlikely in themselves to persuade them to abandon WMD programmes. Mandatory UN Security Council authorised economic sanctions were applied against Iraq from the 1990-91 Gulf war until after the 2003 Iraq war; the US (and to varying degrees other states, including European states and the EU collectively) have instituted national economic sanctions against Iran, North Korea and other potential proliferators (such as Libya and Syria); and there has been on-going debate about whether mandatory UN Security Council authorised economic sanctions should be applied against Iran and North Korea. The experience since the early 1990s has, however, illustrated the limitations and problems of economic sanctions. Economic sanctions are usually only effective in achieving their goals in the long-term (over a period of many years or even decades, if at all), are dependent on widespread international support (which often cannot be guaranteed) and may cause significant humanitarian suffering (as in the Iraqi case). The utility of economic sanctions as a means of preventing WMD proliferation is thus open to question, while their morality may also be challenged.

The limits of diplomacy and the problems associated with economic sanctions inevitably lead to the discussion of the use of military force as an alternative means of preventing states from developing WMD. The most widely cited precedent for this is Israel's 1981 airstrike on Iraq's Osirak nuclear reactor, which succeeded in setting back Iraq's nuclear weapons programme by some years. In the 1990s, the US and Britain, operating under UN Security Council resolutions, repeatedly used airstrikes to contain Iraq and disrupt its WMD programmes. The Bush administration's 2002 National Security Strategy, however, raised the pre-emptive use of force to prevent WMD proliferation to the status of a doctrine: 'the United States can no longer solely rely on a reactive posture as we have in the past. ...the United States will, if necessary, act pre-emptively' (The Whitehouse, 2002: 15). The 2003 Iraq war provided – at least putatively - the first example of the new doctrine of pre-emptive military action to prevent WMD proliferation. Since the late 1990s, there has also been on-going discussion of whether the US (or Israel) may use military force, most

likely airstrikes, to prevent Iran from developing nuclear weapons (- as of 2006, the likelihood of such a development remains uncertain). The use of military force to prevent WMD proliferation is, of course, highly controversial. It represents a major break with the principles of state sovereignty and non-intervention. In the absence of authorisation by the UN Security Council, as in the case of the 2003 Iraq war and most likely with any US or Israeli use of force against Iran, the majority of the world's governments are inclined to view such action as illegitimate and setting a dangerous precedent for unilateral intervention. The problems the US and its allies have faced in stabilising Iraq since 2003 have also reinforced the argument that the likely negative consequences of the preemptive use of force outweigh whatever good may be achieved in terms of ending or setting back states' WMD ambitions. Nevertheless, the limitations of diplomacy and economic sanctions as means of dissuading states such as Iran and North Korea from developing nuclear weapons suggest that the preemptive use of force is likely to remain on the non-proliferation agenda, especially for the United States.

In responding to proliferation's tough cases, European states have in general preferred to use diplomacy and the incentive of engagement rather than the more coercive strategies of economic sanctions and military force. The EU's 2003 Strategy Against Proliferation of Weapons of Mass Destruction, for example, says little about the possible use of economic sanctions and nothing about the use of force (EU, 2003). After the 2003 Iraq war, Iran became a major test of the EU's ability to use its 'soft power' to prevent proliferation (Charlemagne, 2006) – see box 7.1.

Box 7.1. The EU, Iran and Nuclear Proliferation

Following the deep divisions within the EU over the 2003 Iraq war and with growing European concern about the US shift towards more coercive and unilateral approaches to non-proliferation, the EU sought to forge a united European position on Iran, take the lead in international efforts to prevent Iran from developing nuclear weapons and show that diplomacy and constructive engagement might be effective strategies for responding to the threat of proliferation. In October 2003 the Foreign Ministers of Britain, France and Germany – the EU-3 as they became called – negotiated an agreement with Iran under which Tehran agreed to halt its uranium enrichment programme – enriched uranium being the key material necessary for the development of nuclear weapons - and accept an intrusive inspection regime in return for European assistance with its civilian nuclear programme and the possibility of improved political and economic ties (including a trade and cooperation agreement with the EU). In 2004, however, the agreement with the EU began to breakdown as Iran moved to re-start its enrichment activities. In November 2004 Iran announced the suspension of its enrichment programme, while negotiations with the EU-3 continued. Negotiations between Iran and the EU-3 continued in 2005, but Iran resumed its enrichment activities. In spring 2006 negotiations between Iran and the EU-3 collapsed, Iran announced that it has produced enriched uranium and President Mahmoud Ahmadinejad declared that Iran had joined 'the nuclear club of countries'.

The failure of the EU's negotiations with Iran was a major setback for the Union's efforts to use constructive engagement to promote non-proliferation. In diplomatic and economic terms, the EU lacked sufficient carrots or sticks to induce Iran to abandon its efforts to enrich uranium. The on again/off again character of the negotiations between Iran and the EU-3 also suggested that Tehran was using the talks to buy time and avoid pressure from the International Atomic Energy Agency

and the UN Security Council. The negotiations may also have failed, however, because of the lack of US support: the US was at best lukewarm about the EU's efforts and without US support the EU could not address what may have been some of Iran's key concerns, in particular assurances regarding military action against the country and the normalisation of political and economic ties with Washington. Whether the EU's efforts really tested the circumstances under which Iran might abandon its nuclear weapons ambitions is thus open to question. The lesson of the EU's negotiations with Iran may be not so much that engagement does not work *per se*, but rather than it is unlikely to succeed in the absence of real US support.

Although European states have in general be more inclined towards the use of soft rather than hard power, it would be misleading to translate this inclination into Europe-wide opposition to the use of hard power approaches to non-proliferation. European states generally supported the economic sanctions employed against Iraq in the 1990s. While France, Germany and Russia led international opposition to the 2003 Iraq war, Britain, Spain, Italy and many other European countries supported the US (including by deploying military forces either during the war or in the post-war stabilisation operation). Many European states have supported the US Proliferation Security Initiative (PSI), a loose framework established in 2003 to support the interdiction of WMD or related materials and technologies in transit. During the drafting of the EU's 2003 European Security Strategy there was also much debate as to how far the Union would endorse the use of force, including preemptively. The final version of the strategy stated rather open-endedly that 'With the new threats, the first line of defence will often be abroad. ... We need to be able to act before countries around us deteriorate, when signs of proliferation are detected, and before humanitarian emergencies arise' – reflecting divisions within the Union over the use of force (European Union, 2003). The pattern since the early 1990s suggests that there are likely to remain significant Europe divisions – both between states and within them – over the use force as a tool of non-proliferation. Any US use of force against Iran would presumably bring these to the fore again, although given the bruising experience of the Iraq war many European leaders might be inclined to maintain a low profile and avoid the issue as far as possible.

Russia - a nuclear weapon state, a permanent member of the UN Security Council, a member of IAEA Board of Governors, a major supplier of nuclear technology and a country with political and economic ties with Iran and North Korea - is also an important player in the international diplomacy surrounding proliferation's tough cases. While Russia would prefer to avoid nuclear proliferation in the Middle East and North-East Asia, it also has other interests in these regions, in particular limiting the expansion of US influence. Since the early 1990s, while Russia has broadly supported international diplomatic efforts to dissuade Iran and North Korea from developing nuclear weapons, it has resisted US-led pressure to take a tough line against these states in the IAEA or the UN Security Council (including opposing the imposition of economic sanctions). Since the late 1980s, Russia has also been the main external supplier of nuclear technology to Iran and has a significant economic interest in maintaining this relationship. Just as Russia opposed NATO's 1999 intervention in Kosovo and the 2003 Iraq war, it would likely oppose US military action against Iran or North Korea and use its permanent seat on the Security Council to veto any resolution authorising such action. Some observers have argued that Russia also has an interest in maintaining the Iranian and North Korean nuclear situations as unresolved, low-level crises, since this maintains Russia's influence on

these issues and provides Russia with bargaining counters vis-à-vis Iran, North Korea, the US and the EU. Given these dynamics, Russia is likely to remain a significant actor in dealing with proliferation's tough cases and to constrain the ability of the US and the EU to pursue tougher line towards Iran and North Korea.

Living with Proliferation?

Given India and Pakistan's consolidation of their status as nuclear weapon powers and the difficulty of preventing Iran and North Korea from developing nuclear weapons, it is likely that the world will have to live with at least a limited degree of proliferation. While some countries – such as Argentina, Brazil, South Africa and more recently Libya – have abandoned nuclear weapons programmes, no state which has crossed the threshold of developing nuclear weapons has subsequently abandoned its nuclear status, suggesting that reversals of nuclear proliferation are unlikely once a state has crossed this threshold.

As was discussed above, the immediate impact of proliferation on Europe may not be great. Nevertheless, the prospect of proliferation has already prompted thinking within Europe on two issues: what may be done to deter states from using WMD and the prospects for defending against WMD attack. If proliferation occurs or even as its prospect increases, debate on these two issues is likely to intensify.

Deterrence, of course, has been the classical rationale for the possession of nuclear weapons. For the US, Britain, France and NATO as a whole deterrence of the Soviet Union provided the rationale for nuclear weapons during the Cold War. Since the 1990s, however, there has been a gradual shift in Western thinking on nuclear weapons away from the need to deter Russia and towards the need to maintain nuclear weapons in order to deter WMD attack from elsewhere in the world. The UK's 1998 Strategic Defence Review concluded that 'while large nuclear arsenals and risks of proliferation remain, our minimum deterrent remains a necessary element of our security' (UK Ministry of Defence, 1998: para60 – emphasis added). In announcing the conclusions of a major review of French nuclear strategy in 2001, President Jacques Chirac argued that 'Deterrence must also enable us to deal with the threats to our vital interests that regional powers armed with weapons of mass destruction could pose' (quoted in Yost, 2005: 118). Deterrence of WMD attack from outside Europe has also become one of the rationales for NATO's continuing strategy of nuclear deterrence based on the US's strategic nuclear arsenal and the relatively small numbers of US nuclear weapons that remain forward-deployed in Europe (Yost, 1999: 27-33). Unless there is a return to a much more confrontational relationship with Russia, for Britain and France - as well as the US – deterrence of WMD attack from elsewhere in the world is likely to become an increasingly important, perhaps even the primary, rationale for the maintenance of nuclear weapons. The possible need to deter WMD attack from beyond Europe has also led to a number of doctrinal debates and discussions. The US, the UK and France are all restructuring their nuclear forces: this has involved reductions in the overall size of their nuclear arsenals, but also adapting them to be more suitable for deterring smaller-scale WMD attacks (for example, by reducing the numbers of warheads deployed on nuclear missiles and producing warheads with lower destructive yields) - a step that critics charge may make Western leaders more likely to actually use nuclear weapons in a crisis (Rogers, 1996). There has also been discussion of how far nuclear weapons can be used to deter biological or chemical weapons attacks and whether the use of nuclear weapons might be justified in response to such attacks. The political and moral problems of actually

using nuclear weapons has additionally led to discussion of how far conventional weapons may be used to deter WMD attack, by threatening devastating conventional – as opposed to nuclear – retaliation in the event of such attack, with the US and the UK developing various options for long-range conventional strike weapons. In the context of the on-going development of the EU's defence role, it might be thought that the prospect of WMD proliferation would have increased interest in the possibility of a 'European' deterrent based around Britain and France's nuclear weapons. However, although Britain and France have engaged in bilateral discussions on nuclear weapons, there has remained little support for the development of a 'European' nuclear deterrent. How far proliferation may create further pressures to strengthen nuclear deterrence, whether within NATO, the EU or nationally, remains to be seen.

The prospect of WMD proliferation and the United States' plans for missile defences have prompted debate on missile defence within Europe. The issue of missile defence – i.e., systems capable of intercepting long-range missiles and thereby defending countries against attack with such weapons – is not new: the United States and the Soviet Union explored such systems during the Cold War, but negotiated a bilateral agreement not to deploy them (the 1972 Anti-Ballistic Missile (ABM) Treaty). In 2002, however, US President George W. Bush announced plans for the US to develop missile defences (withdrawing from the ABM Treaty in the process), with initial deployment beginning in 2004. In this context, European governments have faced the question of how far to support and participate in US missile defences and whether to deploy missile defences of their own. During the Cold War, European governments were wary of missile defences, fearing that they might de-stabilise the US-Soviet nuclear balance or weaken the US-European link. In the context of the end of the Cold War, increasing concern over proliferation and the US's decision to deploy such defences, European governments have since the 1990s re-considered their attitudes to missile defences. European states are now involved in missile defence in a number of overlapping areas (DeSutter, 2006).

- NATO: NATO members initially agreed to explore missile defences in 1999 and decided in 2004 to proceed with the development of a Theatre Missile Defence (TMD) system designed primarily to protect troops deployed overseas against short- and medium-range ballistic missile attack (NATO, 2006). NATO's Active Layered Theatre Ballistic Missile Defence (ALTBMD) capability will involve member states providing sensors and weapon systems, with NATO collectively providing the battle management, communications, command and control (BMC3I) to integrate the components into an overall missile defence system, and has a planned initial operating capability of 2010. In 2002 NATO also initiated a 'NATO Missile Defence feasibility study to examine options for protecting Alliance territory, forces and population centres against the full range of missile threats' (NATO, 2002: para. 4(g)). The study was completed in May 2006 (NATO, 2006), but how far NATO would proceed with the development and deployment of more extensive missile defences remained to be seen. In 2001 NATO also initiated missile defence discussions with Russia, aiming to provide for possible cooperation in the conduct of TMD operations, with joint TMD Command Post Exercises undertaken in 2004 and 2005 (- the US and Russia are also discussing missile defences bilaterally).
- Participation in US Missile Defences: A number of European countries have agreed to participate or expressed an interest in participating in US missile

defences. In 2003 Britain agreed to a US request to upgrade the early warning radar based at Fylingdales, Yorkshire, for missile defence purposes. In 2004 Denmark agreed to a similar upgrading of the early warning radar based at Thule in Greenland. There is also on-going debate about the possible deployment of US ground-based interceptors in Europe, with a number of the Central and Eastern European states which joined NATO in 1999 and 2004 expressing interest in hosting such interceptors (Traynor, 2005). The closer proximity of such countries to the Middle East and Asia (compared to many Western European states) makes them a more likely location for US interceptor bases, but such proposals have also generated concern in Russia.

- National and multinational missile defence projects: A number of European states are involved other multinational missile defence projects. These include the Franco-Italian Surface Air Moyenne Portee/Terre (SAMP/T), the US-German-Italian Medium Extended Air Defence System (MEADS) and the French-Italian-British Primary Anti-Air Missile System (PAAMS). These existing projects are all relatively short-to-medium range systems capable only of defence against short-to-medium range missiles. It remains to be seen how far European states, either individually or collectively, may develop and deploy more extensive and longer-range missile defences similar to those being deployed by the US.

Critics, including many in Europe, argue that missile defences are, however, deeply problematic (Davis, 2004). Missile defence is technically extremely challenging – akin to trying to hit a speeding bullet in flight – and there are serious doubts about the effectiveness of any systems that may be deployed. Missile defences are also likely to be very (perhaps prohibitively) expensive, especially in the case of systems for the defence of territory and population centres. Critics also argue that missile defences may be de-stabilising, for example by encouraging new arms races with countries such as China or Russia or contributing to the militarization of outer space. European states therefore face major decisions about whether to move beyond the current pattern of developing limited theatre missile defences and limited involvement in US systems towards a more comprehensive Europe-wide missile defence.

Even if European states and NATO or the EU strengthen their deterrent capabilities and deploy missile defences, if WMD, and especially nuclear, proliferation proceeds, the reality of proliferation is likely to have a significant impact on European and American attitudes to the deployment of military force overseas. To date, the US and European countries (in particular Britain and France, Europe's leading military powers) have been able to deploy military forces relatively freely in other parts of the world such as the Middle East because the risk of significant direct retaliation against their territory or major attacks on concentrations of forces deployed beyond their national territory has been relatively low. The ability of other states to retaliate with nuclear weapons or use nuclear weapons against concentrations of US or European forces would radically alter this calculus. If Iran develops nuclear weapons, for example, the possibility of using military force against it will effectively be precluded. In the medium term, therefore, proliferation is likely to significantly curtail the ability of the US or European states to intervene in other parts of the world, at least against those states that develop nuclear weapons.

Conclusion

This paper has analysed European assessments of the threat posed by WMD proliferation and European contributions to international efforts to respond to proliferation. In the United States, proliferation is now viewed, alongside terrorism, as one of the two central security challenges of the early twenty-first century and the US has proved willing to move beyond the more traditional approach to non-proliferation based on arms control. This paper has suggested that while European governments are seriously concerned by the threat posed by WMD, they do not in general view it with the same sense of an immediate or existential threat as the US does. European governments, further, continue to view multilateral arms control as the primary vehicle for attempting to prevent proliferation and have sought, especially through the EU's common positions in the main arms control negotiations, to strengthen the international non-proliferation regime. European governments are also increasingly contributing to cooperative threat reduction in the former Soviet Union, although the US remains the leading actor in this area. In terms of proliferation's tough cases – those states which appear determined to develop nuclear weapons, in particular Iran and North Korea – the European preference has been to use diplomacy and soft power, rather than the more coercive instruments of economic sanctions and military force. The failure of the EU's efforts to persuade Iran to abandon its apparent nuclear weapons ambitions was thus a major setback to its ambitions to show that its soft power approach to proliferation could succeed (although it remains possible that Iran may yet be persuaded to halt its apparent march towards nuclear weapons). While the general European preference is for diplomacy and soft power approaches to non-proliferation, Europeans are also divided over the more contentious issues of economic sanctions and military forces as tools of non-proliferation. Any US use of force against Iran would doubtless bring these divisions to the fore once more.

While the 1990s and the first half of the 2000s have in part illustrated the limitations of arms control and soft power in preventing proliferation, they have also highlighted a deeper problem at the heart of the existing non-proliferation regime: the double-standard implicit in the efforts of the five recognised nuclear weapon states to prevent other states from developing WMD while themselves retaining exactly such weapons. So long as the five recognised nuclear weapon states – including three leading European powers, Britain, France and Russia - retain their nuclear arsenals and engage in only modest efforts to reduce those arsenals, it will remain extremely difficult to persuade other states (such as India, Pakistan, Iran or North Korea) not to develop nuclear weapons or to mobilise the sort of international pressure which might compel such states to abandon their nuclear weapons ambitions. Whether more radical progress towards nuclear disarmament is feasible or would really create the circumstances in which proliferators might abandon their nuclear weapons ambitions is a moot point, since none of the five recognised nuclear weapons powers appears inclined to seriously test this logic. In these circumstances, India and Pakistan are likely to further consolidate their status as nuclear weapon powers and Iran and North Korea may well move down this road. The larger long-term question is probably whether nuclear (and other WMD) proliferation will remain limited to these countries or a significantly wider group of states will develop such weapons, thereby further increasing the risk that they will be used or fall into the hands of terrorists. European states – and the United States – are thus likely to have to live with the reality of at least limited nuclear proliferation and, while they may enhance their own deterrent capabilities and deploy missile defences, this reality is likely to fundamentally

constrain their ability to use military force against countries such as Iran and North Korea and re-shape the strategic calculus in the Middle East and North-East Asia.

Bibliography

Allison, Graham, (2006), 'The Nightmare This Time', The Boston Globe, 12 March, http://www.boston.com/news/globe/ideas/articles/2006/03/12/the_nightmare_this_time/?page=full, [Accessed 11 May 2006].

Andreani, Gilles, (1999-2000), 'The Disarray of US Non-Proliferation Policy', Survival, 41/4, 42-61.

Anthony, Ian, (2004), The Role of the EU in International Non-Proliferation and Disarmament Assistance, GCSP Occasional Paper Series No. 44, (Geneva: Geneva Centre for Security Policy), <http://www.gcsp.ch/e/publications/Other-pubs/Occ-papers/2004/44-Anthony.pdf>

Blom, Frida, (2001) Non-proliferation and Disarmament Assistance to Russia, (Stockholm: Swedish Peace and Arbitration Society) <http://svenska-fres.se/karnvapen/Non-proliferation%20and%20disarmament%20assistance%20to%20Russia.PDF>.

Defense Threat Reduction Agency, Threat Reduction Scorecard (as of 6 April 2006), (Washington, DC: Defense Threat Reduction Agency).

DeSutter, Paula A. (2006), International Cooperation on Missile Defense Capabilities Growing, Prepared Remarks, Delivered at the National Defense University Foundation Congressional Breakfast Seminar Series, Washington DC, 4 April, (Washington, DC: US Department of State), [http://usinfo.state.gov/ GET FULL WEB ADDRESS DETAILS](http://usinfo.state.gov/GET_FULL_WEB_ADDRESS_DETAILS), [Accessed 10 April 2006].

European Union (2003a), European Security Strategy: A More Secure Europe in a Better World, <http://ue.eu.int/uedocs/cmsUpload/78367.pdf>.

European Union (2003b), European Strategy Against Proliferation of Weapons of Mass Destruction, Brussels, 12 December.

Frost, Robin M., (2005), Nuclear Terrorism After 9/11, Adelphi Paper 378, (London: Routledge for The International Institute for Strategic Studies).

G8, (2002), Statement by G8 Leaders, Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, (http://www.g8.gc.ca/kan_docs/globpart-e.asp).

Grand, Camille, (2000), The European Union and the Non-Proliferation of Nuclear Weapons, Chaillot Papers 37, (Paris: Western European Union Institute for Security Studies).

Grgic, Borut, (2004), 'There Are Worse Things Than a Nuclear Iran', International Herald Tribune, 2 December, Global Policy Forum website, <http://www.globalpolicy.org/security/sanction/iran.1202worsethings.htm> [accessed 6 December 2004].

Krause, Joachim, (1996), 'The Proliferation of Weapons of Mass Destruction: The Risks for Europe', in Boyer, Yves, et al, Europe and the Challenge of Proliferation, Chaillot Papers 24, (Paris: Western European Union Institute for Security Studies), 5-21.

Lugar, Richard G., (2005), The Lugar Survey on Proliferation Threats and Responses, (Washington, DC: US Senate), <http://lugar.senate.gov/reports/NPSurvey.pdf>.

Miller, Steven E., (1992), 'Western diplomacy and the Soviet nuclear legacy', Survival, 34/3, 3-27.

Muller, Harald, (2003), Terrorism, Proliferation: A European Threat Assessment, Chaillot Papers No. 58, (Paris: European Union Institute for Security Studies).

NATO, (2006), NATO Missile Defence Feasibility study results delivered, Press Release (2006)048, 10 May, <http://www.nato.int/docu/pr/2006/p06-048e.htm>, [Accessed 12 May 2006].

NATO, (2006), NATO, Missile Defence, updated 10 May, http://www.nato.int/issues/missile_defence/index.html, (Accessed 12 May 2006].

Persbo, Anders and Davis, Ian, (2004), *Sailing into Uncharted Waters: The Proliferation Security Initiative and the Law of the Sea*, BASIC Research Report 2004.2, (London and Washington, DC: The British American Security Information Council).

Ruppe, David, (2005), 'Biological Terrorism Dangers Overstated, Expert Says', Global Security Newswire, Nuclear Threat Initiative, <http://www.nti.org>.

Schmitt, Burkhard, (2003), 'Conclusions', in Mark Smith et al, Fighting Proliferation: European Perspectives, Chaillot Papers No. 66, (Paris: European Union Institute for Security Studies), 89-92.

Traynor, Ian, (2005), 'Warsaw Seeks Shelter of "Son of Star Wars"', The Guardian, 16 November.

Whitehouse, (2002), The President's Trip to Europe and Russia, Fact Sheet: Threat Reduction Assistance - United States Government Non-proliferation/Threat Reduction Assistance to Russia, (The Whitehouse: Office of the Press Secretary), 24 May, (<http://www.whitehouse.gov/news/releases/2002/05/20020524-16.html>).

Woollacott, Martin, (2005), 'A bigger threat than the bomb', The Guardian, 13 May.

Yost, David S., (1999), The US and Nuclear Deterrence in Europe, Adelphi Paper 326, (Oxford: Oxford University Press for The International Institute for Strategic Studies).

Yost, David S., (2005), 'France's Evolving Nuclear Strategy', Survival, 47/3, 117-46.