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NATO AND NUCLEAR PROLIFERATION

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Preface

That we are witnessing a global transformation has become cliché. The world has changed from the bipolar power structure of the Cold War to a multipolar post–Cold War configuration. Alliance systems must also change to adjust to this new world with seemingly expanded dangers. The nuclear threat, so long held in check during the Cold War, now appears as a pressing issue at the same time NATO is undergoing a difficult period of adjustment. One troublesome task will be to adequately address the nuclear proliferation question within the dynamically evolving NATO alliance. The proliferation topic is critical to regional security and has considerable impact on military issues, particularly planning. It is of crucial importance, therefore, that those in the military concerned with these issues have an appreciation of the nuclear proliferation problem.

Our research paper will assist in illuminating this area of concern. The research was initiated at the request of the US Air Force Headquarters Staff to serve as a primer for studying the impact of nuclear proliferation on NATO. This paper will introduce you to the major facets of the proliferation issue. The goal is not to make the reader a nuclear expert but merely to provide a concise yet broad perspective on nuclear proliferation and related questions facing the alliance.

To accomplish this task, the research team conducted a literature review to enumerate current topics and provide adequate background information. The quality of this product is enhanced by the team's composition. Current NATO members are

represented by military officers from Portugal, Spain, and the United States. An officer from Slovakia represents a Partnership for Peace and potential NATO member nation. Finally, an Algerian officer represents the views of a nation on NATO's periphery. The consensus developed by this diverse group in compiling this report is an example of what we hope is possible at the international level. Perhaps the battle against nuclear proliferation is an issue around which all nations can rally and one which might prove a worthy replacement to those lost with the passing of the Cold War.

Abstract

This research project explores the topic of nuclear proliferation in the current, post–Cold War environment. The intention is to provide the military planner with a basic primer on what has been and will continue to be a highly dynamic problem. The methodology for this research is primarily a literature review to illuminate the nuclear proliferation issue. These topics are critically assessed as they relate to NATO. This process will highlight tasks which NATO should consider accomplishing to confront the challenge of nuclear proliferation.

Included in Chapter 1 is an examination of the nuclear environment—which states presently possess or are in pursuit of acquiring nuclear weapons, and what are the motives and disincentives of this pursuit. Methods of proliferation will be explored followed by an analysis of the factors which complicate decision-making on nuclear issues. Chapter 2 discusses the effectiveness of current treaties and international organizations in countering proliferation. Chapter 3 investigates current issues confronting NATO. An overview of the alliance's new proliferation policy is included in Chapter 4. The paper's fundamental theme is to provide the reader an understanding of the proliferation issue as well as an appreciation for today's opportunities to confront the problem.

Chapter 1

The Nuclear Environment

Introduction

Like it or not, "the future will be nuclear. Not only can nuclear weapons not be disinvented, but efforts to seek their elimination are bound to fail. [Our goal, then, is] to extend the 50-year-old tradition of non-use into the future."[1] This sentiment, here expressed by Ivo Daalder, is one challenge of the post–Cold War world. Recent events have brought into existence an international environment conducive to nuclear proliferation. A program to stem the tide of proliferation has never been more needed, and a thorough understanding of the proliferation issue is necessary for any such attempt. The thesis of this study is that today there is a unique opportunity to confront this problem. NATO provides a ready-made forum and infrastructure to develop and promulgate an effective non-proliferation program. This paper will investigate the topic of nuclear proliferation and provide an overview of the subject as it relates to NATO. We will begin with a look at the environment—who is in the nuclear club, who wants to be and why. We will look at how nuclear weapons spread and what factors complicate nuclear policy-making. Next, we examine the current control apparatus (the treaties and

organizations) to determine its effectiveness. Last, we focus on NATO and issues affecting its potential to deal with proliferation.

The critical nature of this problem has been recognized at the highest levels of the American government. President Clinton recognized the proliferation of weapons of mass destruction as "a major challenge to our security" and worthy of special attention in his National Security Strategy.[2] The Chairman of the Joint Chiefs of Staff has ranked proliferation as one of the top four dangers our military must address. The US's senior military officer writes that:

> Potential adversaries should recognize our capability to dominate any escalation of conflict should weapons of mass destruction be employed against us. In addition, we will maintain and strengthen our defensive capabilities against such weapons. We continue efforts to prevent the use of mass destruction weapons and make preparations to operate effectively in environments marked by . . . radioactive contamination.[3]

This level of concern is echoed in Congress. In launching the Defense Counter-proliferation Initiative in December 1993, Sen. Pete Domenici stated, "The [Department of Defense] Bottom-Up Review of October 1993 viewed the proliferation of weapons of mass destruction as the most urgent and direct threat to US security in the emerging era."[4] The issue has reached the level of partisan politics, being mentioned briefly in the "Contract with America," the agenda of the new congressional Republican leadership.[5] The republicans argue that the US should join with its NATO allies to redefine the alliance's role in the post–Cold War world with emphasis on the dangers of proliferation.

The proliferation issue is also important to NATO. It is closely linked to a basic reason for NATO's existence. The following excerpt from the NATO handbook explains:

> NATO's essential purpose is to safeguard the freedom and security of all its members by political and military means in accordance with the principles of the United Nations Charter. To achieve its essential purpose, the Alliance performs the following fundamental security tasks. It provides an indispensable foundation for a stable security environment in Europe based on the growth of democratic institutions and commitment to the peaceful resolution of disputes. It seeks to create an environment in which no country would be able to intimidate or coerce any European nation or to impose hegemony through the threat or use of force.[6]

The NATO nuclear proliferation policy framework issued at the ministerial meeting in June 1994 reiterates the significance of this issue.[7] The ministers stated that proliferation constitutes a threat to peace and security and directed NATO to develop a policy framework to reduce the threat and protect against it. Further, the ministers recognized the potential proliferation threat posed on the continent following the breakup of the Soviet Union and the threat from non-state actors, such as terrorists. They expressed concern over the states on the alliance's periphery which seek to obtain weapons of mass destruction and the systems to deliver them. They also noted the difficulty in stemming equipment transfers because of ever-increasing trade and dual-use commodities. In addition, the development of indigenous nuclear weapons-related technology has made proliferation more difficult to control. We shall look at these issues in more detail later.

The immediate effect of this meeting was for NATO to form two committees to carry out alliance efforts against proliferation.[8] The Senior Politico-Military Group on Proliferation (SGP), chaired by the NATO Assistant Secretary General for Political Affairs, focuses on the political and preventative aspects of NATO's approach to dealing with proliferation. The Senior Defense Group on Proliferation (SDP) is co-chaired by a European and North American nation, currently the UK and the US. This group

considers how NATO's defense posture can support non-proliferation efforts and provide protection should those efforts fail. The work of these two groups is brought together and reported to the North Atlantic Council by the Joint Committee on Proliferation, chaired by the Deputy Secretary General. The SGP has considered the political, security, economic and other factors that may cause states to acquire nuclear weapons. The SGP is now considering instruments available to NATO and its member states to discourage proliferation by affecting a would be proliferator's motives. These motives are addressed later in this paper. The SDP has begun a phased program to address the military capabilities required by NATO. They have examined the proliferation risks and are now investigating implications for NATO's defense posture. This process should produce a description of the capabilities required to respond to proliferation risks.

One particularly alarming aspect of the proliferation issue highlighted by the NATO ministers involves the possibility of terrorists obtaining a nuclear device. It seems implausible that terrorists could build a bomb on their own—much less deliver it. However, a terrorist group with state sponsorship could conceivably pose a threat. One group of experts feels that, "Criminal diversion of fissile material might well be the single most worrying proliferation problem. A rogue state could, upon acquisition of a few kilograms of plutonium or highly enriched uranium, develop a nuclear bomb within a few years."[9] A more alarming picture of the future is drawn by futurist Dr. Alvin Toffler who relates the ideas of the RAND Corporation's Carl Builder.

> The main nuclear problems of the future . . . will arise not from nation-states at all, but from those we called 'global gladiators'. . . . These are terror organizations, religious movements, corporations, and other nonnational forces—many of whom . . . could gain access to nuclear weaponry. In short, private armies, mercenaries, and First Wave

warlordism are all making a comeback. The idea of nuclear weapons under the control of these local genaralissimos should send a shudder down our collective spine.[10]

What defense does a state have against a nonnational group armed with a nuclear weapon? Very little, and the potential for nuclear blackmail in such a situation is great.

Table 1. Post Cold War Proliferation Environment

GOOD NEWS	BAD NEWS
Improved prospects for US-FSU cooperation and enhanced UN role to resolve regional conflicts	Weakening of Cold War security relations increases proliferation motives, exacerbates regional conflicts
Superpowers devote more attention and resources to Third World proliferation threat	Domestic preoccupation and reduced interest in Third World produces US-FSU disengagement and complacency about proliferation
Reduced superpower tendency to tolerate nuclear programs of regional allies and clients	Reduced superpower leverage over former Cold War allies and clients
US-FSU arms control eases regime double standard; demise of warfighting strategies sends signal of disutility of nuclear weapons	US-FSU arms cuts lower threshold for entry into nuclear club, encourage proliferation
United Europe takes more active non-proliferation role; French and British nuclear forces are merged into a "Euro-deterrent"	Postbipolar Europe fragments, proliferates
Improved cooperation in export controls	Export controls decline because of relaxed East-West technology transfer restrictions, vulnerability of new Third World suppliers to oil and financial leverage, disintegration of Soviet Union

Perhaps we can take heart from one expert's prediction that nuclear weapons will someday be obsolete and our progeny will consider our non-proliferation attempts to have been as naive and ineffective as earlier attempts to ban gunpowder.[11] However, for the present, such attempts seem necessary.

Nuclear States

The first step is to set the stage by outlining today's nuclear club. This study will borrow the ordering system for nuclear states used by the Institute for National Strategic Studies in their *Strategic Assessment 1995*.[12] The authors use the following six categories to organize the nuclear club. These groupings are listed, more or less, in order of how advanced their nuclear weapons programs are:

- *Declared Nuclear Weapons States.* There are five: China, France, Russia, the UK and the US.
- *States with Undeclared Nuclear Capabilities.* These states are judged to possess either completed nuclear weapons or the ability to assemble them in short order. The three states in this category are Israel in the former case with India and Pakistan in the latter.
- *Instant Proliferators.* The three states in this class sprang from the dissolution of the USSR. They are Belarus, Kazahkstan and the Ukraine. There was no conscious effort on their part to proliferate and all have since declared their intent to eliminate their nuclear weapons. They have also ratified the Nuclear Non-proliferation Treaty (NPT).
- *States with Established Nuclear Weapons Programs.* Iraq and North Korea are in this group. Both are capable of producing weapons-grade fissile material but little is known of the stage of development or ultimate goals of either program. Iraq's nuclear capability was severely damaged during the Gulf War, but the extent of their progress was a shock to the world.
- *States with Basic Expertise and Infrastructure.* Examples of some of the several states in this division are Taiwan, South Korea, Algeria, Iran and Syria. The first two have explored the nuclear weapons option and withdrawn. The other three continue to acquire the necessary infrastructure and expertise to advance from peaceful nuclear uses to a weapons program. Of course, any of these states could rapidly restart a weapons program should they perceive the need.
- *States with the Necessary Expertise and Infrastructure.* Members of this class already possess the scientific and industrial development needed to field a nuclear weapon. Some examples are Germany, Japan and Sweden.

Of special note are three states which formerly presented significant proliferation risks. South Africa had actually built a handful of nuclear weapons and remained outside the NPT regime. They have since joined the NPT and dismantled their nuclear devices and entire weapons program. Argentina and Brazil have also abandoned their nuclear

weapons programs after resolving their security concerns. These positive developments notwithstanding, there remains cause for concern for nuclear proliferation. To effectively plan within the NATO alliance, one must be equipped with an appreciation of this danger.

Motivations

To determine how to stop the proliferation of nuclear weapons and materials, one must understand the motivations for their acquisition. Among state actors these reasons are broad and varied. One way to organize these incentives is Frederick Strain's hierarchy of nuclear motivations which outlines the most common reasons nations pursue nuclear weapons.[13] Strain's construct proceeds from basic interests at the lower levels to grander aspirations at the peak. (See Figure 1)

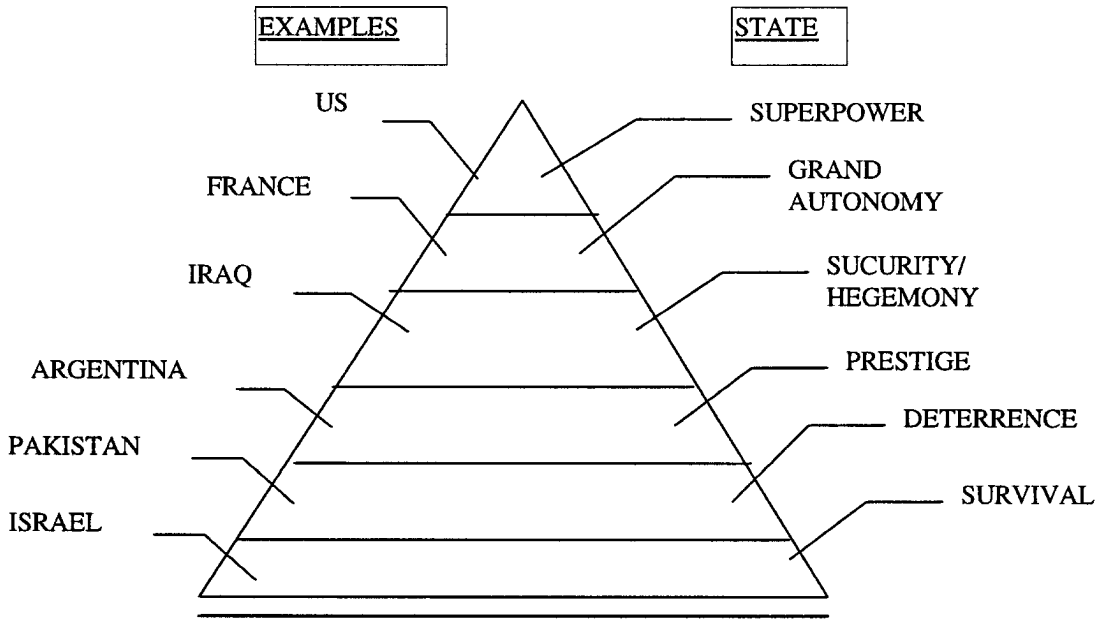

Figure 1. Strain's Hierarchy

A state's motives determine where it exists in Strain's hierarchy. In the survival state, a nation seeks to defend itself. Nuclear weapons provide a relatively inexpensive means to overcome even overwhelming enemy military superiority. The deterrent value

of nuclear weapons is important to a state with a history of being dominated or bullied by its neighbors; such nations seek balance. Large numbers of weapons are not required. France is an example of deterrence based on an inferior force. States may perceive nuclear weapons acquisition as a path to prestige placing them at the height of power and military might. Nuclear weapons provide security in areas of regional instability and grant the capacity to become regional hegemon. They also allow a state to independently pursue its global interests. Finally, when combined with the other instruments of national power, nuclear weapons confer superpower status giving a state the most latitude in its international dealings.

Two other motives for nuclear weapons acquisition are technological momentum and domestic factors. Gary Gardner describes the UK and France as having been pushed into the nuclear club by technology.[14] The technological momentum created during the development of the nuclear energy program led inexorably to the development of nuclear weapons. Domestic factors were a major impetus in the French nuclear weapons program. The French have historically prided themselves on self-reliance and independence in international affairs. The existence of their *force de frappe* contributes to an autonomous national security. A basic reason for French nuclear weapons development was to enable France to distance itself from the US-dominated NATO.

Nuclear weapons also provide significant political leverage. Kathleen Bailey provides a good example: "The ex-Soviet republics appear to be using control of nuclear weapons as 'bargaining chips' in defining their status within the Commonwealth of Independent States and in attempting to extract economic concessions from the West."[15] Another reason underlying the ex-Soviet republics' reluctance to give up their nuclear

weapons is fear of Russia. For the Ukraine in particular this dilemma is acute. Although the country has declared its intent to denuclearize, domestic factors may interfere with this effort. Andrei Shoumikhin describes a Ukrainian president facing charges of being 'soft' on matters of national security by agreeing to dispose of ex-Soviet nuclear weapons.[16]

Of course, ex-Soviet republics aren't the only states who employ nuclear weapons, or the possibility of their existence, as a bargaining chip. Jozef Goldblat uses Pakistan as an example. "By implying that the momentum towards a nuclear explosive capability could be slowed down if its security and economic needs were satisfied, Pakistan has reinforced its leverage *vis-à-vis* the USA and succeeded in obtaining considerable military and economic aid."[17] Mr. Goldblat also describes the advantages of nuclear ambiguity. By leaving doubt in the international mind, some states avoid the expense of acquiring a deliverable weapon and the opprobrium associated with the possession of nuclear weapons while enjoying all the benefits thereof.

One last motive that many have termed the "Desert Storm legacy" is of interest. The outcome of the confrontation between one of the world's largest, most modern military machines and the US-led coalition taught the world an important lesson. A state desirous of confronting the US had better have nuclear weapons. As Matthias Dembinski puts it, "Acquiring nuclear weapons is an affordable alternative to the hopeless attempt to match United States' or even Israel's conventional capabilities."[18] One should expect any future aggressor to take this lesson to heart.

Although non-state actors share many of these same motives, there is another which is particularly important for them. Richard Paulsen writes, "Traditionally, possession of

nuclear weapons has equated to having a strong voice in world affairs."[19] What better vehicle than a nuclear weapon for a terrorist or national separatist group to use to gain the ear of the world? This group would not even have to obtain or produce an explodable bomb. The danger of widespread radioactive contamination would likely be sufficient to compel any state to accede to the group's demands. Thus, the risk of nuclear blackmail from such a group is real.

Disincentives

Understanding a state's motives is only half of the battle. The planner must also comprehend the disincentives to the acquisition of nuclear weapons. As with motives, these too are many and diverse. Disincentives include, among others, security assurances, international disapproval and sanctions, regional security arrangements and physical destruction. The following paragraphs will investigate these in more detail.

Perhaps the most effective disincentive to proliferation involves security assurances. Throughout the cold war the nuclear protection provided by the US and the USSR helped stem proliferation among states so protected. With the dissolution of the USSR, this historic restraint has been removed. The concern, then, is for a future with a greater danger of proliferation unless a similarly effective system is constructed. With the passing of the bipolar world, many have recommended a multilateral approach. Robert Blackwill suggests that, "Multilateral guarantees or sanctions may be more effective than unilateral actions. For example, a security guarantee extended by NATO or by the United Nations could carry considerable weight."[20] We shall return to this suggestion later in the study.

The future of security assurances may well revolve around regional arrangements. This notion has a successful track record as well. NATO-guaranteed security (backed by US nuclear weapons) has helped keep proliferation limited in the European region. The same may be said for the region of the former Warsaw Treaty Organization. This leads many experts to conclude that efforts to stem proliferation must be part of a comprehensive program involving regional security assurances. According to Jack Mendelsohn, "Easing regional concerns is the key to taking the pressure off the 'demand' side of proliferation. In fact, supplier restraint should only be a tool to buy time for regional efforts to work."[21] Paul Gebhard agrees that US policy must address proliferation through a new approach. It must attend to regional security strategies and the ability to protect its interests rather than define the term narrowly as a question of responding to the acquisition of weapons or technologies.[22] This notion takes on importance when one considers the limited degree of success enjoyed by previous efforts to limit proliferation. This failure of the non-proliferation regime will be examined in greater detail later. Concerning the present topic of disincentives, it will suffice to say that supply-side efforts have not been very successful. In her study of supply-side efforts to control proliferation Kathleen Bailey concludes, "More resources should be spent on demand-side policies such as arms control and security enhancement."[23]

In addition to security assurances, Gary Gardner lists the following disincentives to nuclear proliferation: nuclear insecurity, international disapproval and fear of sanctions.[24] A nation with nuclear weapons inspires fear in its neighbors. This fear causes states to react, thus creating a paradox. The state which acquires nuclear weapons expects enhanced security, but its neighbors' reactions may in fact increase its insecurity. Take,

for example, the case of Iraq. Even though Iraq had signed the NPT, Israel distrusted Iraqi intentions. Thus, Israel struck the Iraqi nuclear reactor at Osirak in 1981 to curtail any possible Iraqi nuclear weapon ambitions. There is also increasing international disapproval of nuclear weapons acquisition. The impact of this disapproval was illustrated recently when N. Korea threatened to withdraw from the NPT. The world community quickly moved to impose sanctions to force N. Korea to change its course.

The foregoing discussion has acquainted the reader with many of the issues dealing with the motivations and disincentives to acquiring nuclear weapons. Thus armed, the planner can employ the appropriate disincentive to the given motive. Another way to stem nuclear proliferation is to stop it before the state or non-state group obtains the device. For this the planner must have a working knowledge of how these weapons spread.

How Nuclear Weapons Spread

In this section we look beyond the why of nuclear proliferation to focus on the how. There are, obviously, two ways to obtain a nuclear weapon. One may steal or purchase an assembled device or build one from its components. First, we shall investigate the situation with regards to the components of nuclear weapons. One aspect of which is the overlap between the technologies involved in nuclear energy and nuclear weapons production. Another is what is called the fissile material economy—the process of acquiring the explosive material for nuclear weapons. Of course, it takes knowledge and expertise to produce a nuclear weapon, and this is another area to research. Second, we

shall look at the status of the physical security of weapons and materials in the current area of most concern, the FSU.

Perhaps the best place to begin is with the nuclear weapon itself. What are the components of a nuclear weapon? According to Frank Barnaby, the major components of a nuclear weapon are very high quality conventional high explosives, detonators, electronic circuits to fire the detonators, a tamper and reflector, a core of fissile material (usually highly enriched uranium or plutonium) and a neutron source.[25] The purpose here is not to demonstrate how to construct a weapon. However, it should be apparent that all these components, with the exception of the fissile material, are commonly found in modern, industrialized societies. It is, therefore, the fissile material which is normally the focus of non-proliferation efforts.

How does one obtain this fissile material? One source is the nuclear energy industry. As Peter Clausen notes,

> There is an inherent overlap between the technologies and materials used to produce nuclear weapons and those used in peaceful nuclear research and electric-power programs. About 250 kilograms (550 lb.) of plutonium are produced each year by a typical nuclear power reactor. . . . A single nuclear weapon requires about 5–10 kilograms (11–22 lb.) of plutonium.[26]

Plutonium isn't the only product of nuclear fission that is useful in nuclear weapons. Tom Clancy points out that nuclear reactor waste "is still pregnant with elements like neptunium which, despite their never having been used in deployed American nuclear weapons, are every bit as fissionable as the better-known trans-uranic elements."[27] The security of this reactor waste and the associated proliferation risks become an issue with the sheer volume of material produced. Barnaby estimates that by the year 2000, 1,700 tons of plutonium alone will have been produced with 100 additional tons produced each

year.[28] (Remember, it only takes 5–10 kg to make a device.) This huge volume is the result of a growing reliance on nuclear energy. As of 1992 the world got 17% of its power from nuclear reactors while the EC got a whopping 30%.[29] In addition, nuclear energy production is growing faster in the less-secure Third World than in developed countries. With the continuing depletion of fossil fuel sources, one can expect this nuclear energy dependence to increase with the attendant increase in fissile material byproducts.

It seems appropriate at this point to take a look at the nuclear fuel cycle, because this is where the fissile material is actually produced. Reactor waste is not the only place in the cycle where bomb-grade material is created. Barnaby explains the basic nuclear fuel cycle illustrating potential fissile material sources.[30] The figure below is a simplified diagram showing this process.

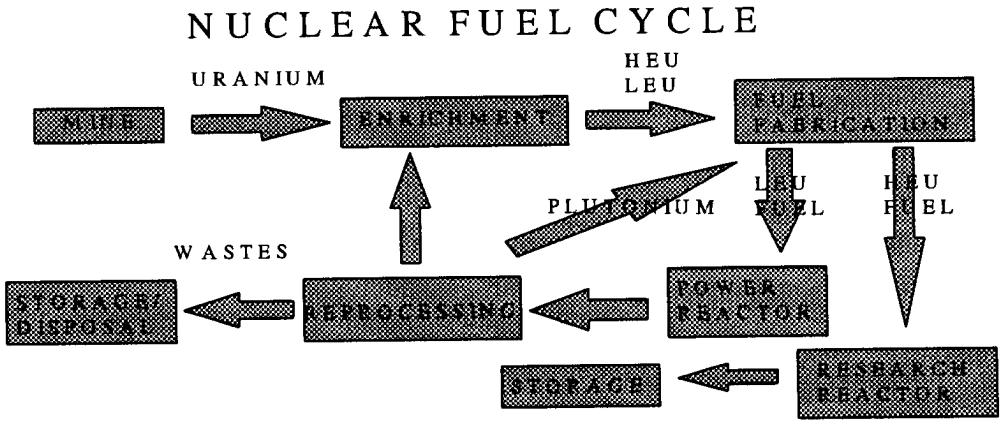

Figure 2. Nuclear Fuel Cycle

The process, in a nutshell, is as follows: uranium ore is mined, milled and converted to a uranium-oxide compound called yellow cake. This material is enriched to increase its proportion of U-235 then fashioned into the fuel rods used as elements in a nuclear reactor. The spent elements are reprocessed to extract useful material, and the waste is stored or disposed of. The following paragraphs examine the process in further detail.

Uranium occurs naturally in two isotopes—U-235 and U-238. U-235 is the more unstable isotope, hence the better for nuclear fission. Mined uranium is only about 0.7% U-235 making it useless as a fissile material. It must be enriched to increase the concentration of U-235. Most reactors use uranium enriched to 3–4% U-235. Anything under 20% U-235 is considered low enriched uranium (LEU) and not weapons grade. High enriched uranium (HEU), however, may be used as a fissile material in bombs. How much HEU is required depends on the level of enrichment—the higher the enrichment, the less mass required. Any state with an enrichment facility can, therefore, produce weapons-grade HEU.

This enriched uranium is used as fuel in various types of reactors. LEU is used in basic power production reactors. HEU is used in breeder and research reactors. A breeder reactor is one which creates more fuel than it uses. These reactors were designed at a time when there was concern whether there would be enough fissile material to power nuclear reactors in the future. Time has shown that that they are not required; the world has a huge stockpile of nuclear fuel. One must also keep in mind that nuclear reactors have uses other than energy production. Research reactors are operated in 53 countries for teaching, research and the production of radioisotopes for medicine, industry

and agriculture. Many of these countries do not yet have a nuclear energy program. One begins to see the problem in keeping track of all this material.

For this reason, most non-proliferation monitoring efforts to date have concentrated on the enrichment and reprocessing steps. The fission process produces many radio-isotopes including plutonium. Plutonium is the fissile material of choice for nuclear weapons because of its low critical mass—one needs only small amounts for big results. One concern, therefore, is the diversion of plutonium after it is extracted during reprocessing. Another concern is the backlog of spent material awaiting reprocessing. Present capacity can reprocess only 30–40% of spent fuel annually; the rest must be stored.

There is another source of fissile material to be aware of. Large amounts of HEU and plutonium are extracted during the dismantling of nuclear arsenals. Barnaby relates that, "We are...entering a period in which thousands of nuclear weapons will be dismantled because of START, new bilateral agreements, unilateral initiatives and the retirement of aged and obsolete weapons."[31] This process will involve the removal of sizable quantities of fissile material which could fall into the wrong hands. Later, we'll discuss the physical security issue.

Of course, fissile material is only one component in the bomb building process. Also critical is the knowledge and expertise required to design, machine and assemble the parts. Unfortunately, these skills and capabilities are readily available on the global market. Researcher Andrei Shoumikhin notes,

> Hundreds, if not thousands, of highly qualified specialists in various areas of military and dual-use production are being pressured by economic and psychological circumstances to lend themselves to practically any kind of

> employment offer outside the Commonwealth of Independent States. This also amounts to proliferation of sensitive know-how and technologies.[32]

In his study of the diffusion of nuclear technology, Konrad Kressley concludes that this spread is pervasive and unstoppable. He lists several factors to consider.[33] First, technology transfer is a uni-directional process; technologies do not get disinvented. Efforts to ban unacceptable technologies are doomed to failure. Second, technologies pass through stages of development. What was once rare and complicated becomes, over time, routine. Third, as noted earlier, many technologies have dual uses. Fourth, the pace of innovation and diffusion has quickened. Lastly, personal mobility plays a role. This is a real concern in light of the nuclear, scientific and engineering technical expertise available in the FSU.

Aiding the proliferation of nuclear weapons is the proliferation of education, industrial capability and information. All are required to produce a bomb. For years the world has been concerned with the "brain drain" from the Third World. Now the concern is, as Clancy notes, "A high-tech cadre of thousands [that] has returned to the Third World with First World advanced degrees. South Korea is now acquiring more than 1,000 American doctorates annually."[34] Along with this expertise is the existence of modern machine tools with "computers and attendant software that bridge the gap between the level of sheer genius needed to innovate thermonuclear devices and the less demanding task of getting them built once their operation is understood from its first principles."[35] The only ingredient missing is information, and this too is available. One need not be an expert computer hacker to obtain instructions on the construct of a nuclear device. This information is available in open sources. In the words of Toffler, "The flow

of information into or out of a nation can no longer be effectively controlled by the state; information is everywhere and accessible."[36] Such an international environment makes counter-proliferation efforts extremely difficult.

Compounding matters is the situation in the FSU. The incentive to export nuclear know-how is summed up by Peter Clausen in the following:

> The economic collapse of the Soviet Union might lead Soviet nuclear scientists who were thrown out of work at home to become nuclear weapons mercenaries working abroad in clandestine weapons programs. Alternatively, enterprising Soviet nuclear scientists and bureaucrats might seek to capitalize on one of the Soviet Union's few marketable advanced technologies and try to sell nuclear weapons technologies to the highest bidders. These unprecedented possibilities invited the question of whether the post–Cold War world would on balance be more or less hospitable to US and global non-proliferation efforts.[37]

Indeed, one of the major efforts of the Cooperative Threat Reduction program is to find gainful employment for these potential nuclear mercenaries and stem a Russian "brain drain."

Of equal concern as the potential hiring out of FSU expertise is the status of the physical security of nuclear materials. Part of the security problem stems from the fact that an effective accounting and control system is not in place. In a 1994 interview conducted at the Monterey Institute for International Studies, the former head of the Kazakhstan Atomic Energy Agency and the Chairman of the Ukrainian State Committee for Nuclear and Radiation Safety confirmed this predicament.[38] These experts spoke of tons of plutonium that are unaccounted for. They could not say if it had been stolen or not, they just did not know where it was. They explained that their system of control for nuclear material was not put in place until 1984, and it does not meet the standards that currently exist elsewhere in the world. One of the interviewers related the answer he got

from a senior official from the research institute in Minsk when he asked about the amount of HEU at the facility. The official said, "I can't tell you exactly. Maybe 33 kg, maybe 35 kg, we ourselves don't know." This episode illustrates the poor control and accounting of nuclear material in the FSU. The need for improvement is echoed by Oleg Bukharin who argues that while the security of nuclear weapons in Russia is fairly high, fissile materials are at greater risk because of the economic and social crisis in Russia.[39] The inadequacy of nuclear safeguards and the large inventories of these materials make the issue more nettlesome.

An additional problem is posed by the questionable means used to secure nuclear materials. This issue was emphasized by Dr. William Potter, Director of the Center for Nonproliferation Studies at the Monterey Institute of International Studies, in his testimony before Congress on 27 June 1994.[40] The following is paraphrased from his deposition.

The most dangerous and immediate problem involving inadequate physical security concerns the large stockpile of HEU in the form of fuel for Russia's nuclear propulsion reactors. An associated physical security problem relates to the storage of spent fuel from the reactors of 113 nuclear-powered submarines that have recently been decommissioned. Interviews with knowledgeable Russian nuclear engineers, naval experts, export control officials and environmentalists, however, suggest that significant problems exist. They pertain to lax security at storage sites, confused lines of authority regarding material control at these facilities and suspect reliability on the part of those charged with responsibility for securing access to the nuclear material. Photographs of sites in the Kola Peninsula indicate huge open-air piles of fuel rods protected only by barbed wire.

Although security at military facilities probably remains much higher than at civilian nuclear sites, Ministry of Atomic Energy officials recently have stated that interim storage facilities for plutonium from dismantled weapons are "not very safe" and are not adequately guarded...the explicit acknowledgment that plutonium storage facilities are vulnerable to theft must be taken seriously, especially in light of a number of complicating factors: the enormous quantities of weapons-grade material in question, the growing disaffection of large segments of the Russian population, plummeting morale in the Russian military and the nuclear industry, the widespread disregard in Russia for law, pervasive corruption throughout the government, the increasing reach of organized crime and an economic malaise that encourages the plunder and sale of government property. The poor accounting system combined with lax physical security makes quite plausible the possibility of the theft of some of this material. In addition to the fissile material, the security of the devices themselves is questionable. Although it may be difficult to imagine someone stealing the warhead from an ex-Soviet ICBM, the intelligence community is concerned about the possibility of a smaller device disappearing. CIA Director Robert Gates is concerned that "one or another of the older, less sophisticated very small tactical devices might be stolen or slip out of control of the central authorities."[41] Now the question is this—can these nuclear thieves get the material out of the country?

The bad news is that the export control apparatus of the FSU is in as poor a shape as the security and accounting system. Lewis Dunn writes that in Russia, "The breakdown of centralized economic planning has eliminated Moscow's means of control over nuclear

exports . . . the needed technical and regulatory expertise is weak or simply lacking."[42] The situation is even worse in the non-Russian republics. Gardner explains:

> These states have little experience in export control administration, and may not have the mechanisms needed to seal their borders from nuclear technology leakage. . . . Their capacity to enforce export control laws often remains in doubt . . . requires adequate staffing and funding, both of which may be in short supply in emerging nuclear supplier nations. Also in short supply may be the political will to follow through . . . the political leadership may face bureaucratic resistance to tighter controls, and with little perceived political benefit from insisting on greater enforcement. . . .[43]

This grim picture showcases part of the problem the international community faces today with respect to nuclear proliferation. The world will become a far more dangerous place if an effective counter is not found.

Nuclear Policy Making Difficulties

In an increasingly complex and interdependent international arena, each state faces a challenge in developing policies to deal with nuclear proliferation. Many factors complicate and often conflict with the goals of non-proliferation. This section examines some of these issues. They include improper focus, misperceptions, economic conflicts, geopolitics, allied nuclear weapons and alliance politics.

To begin with, effective policy making must have the proper focus. The Council on Foreign Relations has noted that, "The incentives, attractions, and concerns that may appear to some states to make nuclear weapons an interesting option must be understood, and the regional tensions and basic security interests addressed."[44] Bailey, too, feels "more resources should be spent on demand-side policies such as arms control and security enhancement."[45] Their proposed focus would be the motives discussed earlier which lead states to procure nuclear weapons. This and their emphasis on regional

dynamics seems the appropriate course. Matthias Dembinski, in his study of European attitudes toward proliferation, found that, "Most Europeans favor political and economic strategies to address the problems of the region, which, they believe, are responsible for the proliferation risks."[46] Experts have often criticized the current importance placed on supply-side control efforts. Bailey feels that, "The single greatest shortcoming of supply-side policies is their failure to address the motivations underlying proliferation."[47] The shortfalls of current non-proliferation endeavors will be studied later. For the future, efforts must focus on the underlying reasons why states seek nuclear weapons; acquisition of these devices must be made unattractive.

Second, misperceptions play a role. Non-proliferation policies which attempt to restrict the movement of nuclear technologies are often seen as discriminatory. The Council on Foreign Relations writes of the growing danger of polarization of the non-proliferation debate between the 'haves' and the 'have nots'.[48] Other experts speak of the notion in Third World and southern hemisphere nations that non-proliferation is often seen as an attempt at northern technology monopoly.[49] Another issue is determining what technology to control. Western controls usually focus on the leading edge equipment, but nations interested in developing nuclear weapons may turn to antiquated technology to obtain what they lack. Iraq used WW II–era technology in a device called a calutron to enrich its uranium. Gardner notes that "until Iraq's use of this technology was revealed . . . the calutron was not subject to export controls."[50] Steps must be taken to clear up these misperceptions in order to achieve unity of effort in the war on proliferation.

Third, the goals of non-proliferation sometimes conflict with those of economic development. We have already spoken of such conflict in the FSU, but every state faces the same kinds of dilemmas. According to Bailey and Rudney:

> Increasingly, complex security and defense issues are becoming intermeshed with equally intricate political and economic interests, thereby threatening to paralyze effective policy-making. . . . All Western countries endorse the principles of free trade and arms control. However, difficulties arise where the application of these two policy objectives comes into conflict. The end result—a rather loose and ineffective string of export control regimes—satisfies neither defense and military officials preoccupied with the proliferation menace nor business leaders committed to dissolving trade barriers.[51]

States in search of economic advancement need many of the technologies involved in the nuclear industry, and states possessing these technologies enjoy the profits their sales bring. This issue is especially troublesome, since much of this equipment has dual uses. In deciding whether to allow a sale, a government official must balance the risk of non-peaceful use against the potential profit. This is a difficult task.

A fourth area of conflict is sometimes found between the goals of non-proliferation and those of a state's foreign policy. Peter Clausen's study focuses on these conflicts, and he finds three recurring patterns marking the history of US choices and actions on nuclear proliferation.[52] There has been a conflict between the US reliance on nuclear weapons to deter the Soviet Union and the attempt to deny these weapons to other countries. Second, there has been a tension between limiting the burden of US overseas commitments and addressing the security needs of would-be nuclear powers. Third, there has been a reluctance to exert strong US pressure against the nuclear programs of close allies and client states. Two cases in point are Israel and Pakistan. The US is not inclined to press the nuclear issue at the expense of its regional foreign policy interests. These

trends are illustrative of the potential for conflict between foreign policy and non-proliferation. It is important to note that when a choice must be made, a state will normally let the goals of foreign policy be the deciding factor at the expense of those of non-proliferation. The reason for this is explained by Clausen.

> The consequences of proliferation, however serious, are generally perceived as long-term and hypothetical. The political and economic costs of hard-line nonproliferation policies, in contrast, are often immediate and concrete. This disparity, and the short-time horizons that normally dominate policy decisions, make it difficult to maintain a high priority for nonproliferation against seemingly more pressing, though perhaps ephemeral, interests.[53]

Thus, to be effective, a state's non-proliferation policy must be part of a comprehensive program with sharp focus and broad consensus.

The last area of conflict is related to Clausen's second trend from above and is particularly important in light of today's international environment. It concerns scaling back US overseas commitments while maintaining the security needs of potential nuclear powers. Noted neo-proliferation expert Leonard Spector argues that NATO was instrumental in checking proliferation among its members. However, with the end of the Cold War, the rationale underlying the US guarantee has evaporated and confidence has ebbed.[54] Additionally, Moscow is no longer in control of the former Warsaw Pact. Neo-proliferationists see danger of nuclear weapons spreading within Europe as a result. This danger is higher in Eastern Europe according to Max Jakobson. He notes that Russia retains a massive military preponderance over its neighbors but is weak in the global context. This "has the paradoxical effect of sharpening the security concerns of these countries, because it tends to lessen Western interest in the region."[55] The measured US

reaction to the Bosnian tragedy and NATO's slow response to the expansion issue suggests some truth in the idea.

A second aspect of this conflict is the role nuclear weapons play in the security of the NATO region. Historically, the American guarantee of nuclear response has been the linchpin of NATO security. Augmenting the massive US arsenal have been the nuclear forces of France and the UK. Now that confidence in the US guarantee is on the wane, the possibility exists that Europe may develop its own nuclear deterrence force and strategy. This creates a problem for US policy. Clausen notes, "Independent nuclear forces directly threatened America's ability to control the terms of its commitment to Europe. They could force the US hand by acting as a trigger for American strategic retaliation."[56] This concern is real based on current dialogue in Europe. Nicholas Whitney notes that the development of a bilateral nuclear relationship between the UK and France suggests that the possibility of an eventual 'European vocation' for their nuclear forces, in the context of a developing European Security and Defense Identity, exists.[57] Also, given the shifting balance of power in Europe, the possibility exists that the Germans will feel compelled to develop a nuclear capability. Jeffrey Boutwell concludes, "Despite the nightmare quality of such a vision . . . Germany's acquisition of nuclear weapons at some point in an uncertain future cannot be ruled out."[58] Obstacles to this course are enormous, so Germany may be compelled to do as Israel has done—that is develop the necessary infrastructure to permit rapid deployment of nuclear weapons should a crisis arise. This possibility further complicates the planning process.

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Chapter 2

Current Control Apparatus

Organizations and Treaties

The end of WW II and the dropping of atomic bombs by the US on Japan brought to the scene a new concern—the nuclear menace. The ensuing nuclear arms race brought on by the Cold War produced huge nuclear arsenals. In 1945 the WW II victors created the United Nations with the purpose of avoiding another global conflict. Likewise, the world's major powers realized that their own nuclear development had to be pursued prudently, and they began initial efforts to confront nuclear proliferation.

International Atomic Energy Agency (IAEA)

In 1957 the United Nations formed the International Atomic Energy Agency. The IAEA is an independent inter-governmental organization composed of two principal policy-making organs—the General Conference, which consists of all 122 UN member states, and the Board of Governors. Article III.A.5 of the Statute of the IAEA authorizes it "to apply safeguards, at the request of the parties to any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of atomic energy."[1]

The IAEA seeks to verify that states are not using nuclear material or equipment to develop or produce nuclear weapons. To the IAEA has been given a growing role in matters such as issuing standards, providing assistance and services and arranging for the exchange of expertise. Nuclear safety and the physical security of nuclear material remains the responsibility of the states themselves.

The capacity of the IAEA to apply safeguards to nuclear activities depends on information made available to it. The IAEA is introducing the necessary measures to obtain and analyze this information. Some measures are already in place:

- The early provision of information on the design of new plants
- Systematic collection and analysis of the information in the public domain concerning nuclear activities within the state and imports and exports of nuclear-related equipment and material
- The voluntary reporting by member states of exports and imports of certain equipment and non-nuclear materials used in the nuclear industry
- The voluntary reporting by members states, over and above the requirement in their safeguards agreements, of their imports, exports and production of nuclear material
- The provision by member states to the IAEA of information obtained from satellites and other means

The IAEA will ask for an explanation or will perform additional inspections if any of the measures outlined above suggest that the state is undertaking undeclared activities. If such activities are confirmed, the IAEA statute specifies actions such as: alerting the international community; curtailing further IAEA assistance being provided; and suspending the privileges and rights which the state derives from IAEA membership.[2]

US-European Atomic Energy Commission (EURATOM) Agreement

In 1958, the US and EURATOM negotiated a two-part agreement. This pact is composed of a Joint Program Agreement, which entered into force in February 1959, and

an additional Agreement for Cooperation effective in 1960. Both arrangements are concerned with peaceful uses of atomic energy. The agreement gives the US the authority to veto any export or retransfer of US-originated nuclear fuel and equipment from Europe to a third party. The US Government appreciates the importance of maintaining cooperation with EURATOM. In President Clinton's words: "I believe that it's essential that cooperation between US and EURATOM continue, and likewise, that we work closely with our allies to counter the threat of proliferation of nuclear explosives. . . ."[3]

Conference on Security and Cooperation in Europe (CSCE) 1975

In 1972, multilateral conversations took place in preparation for a conference concerning security and cooperation in Europe. A total of 35 countries participated in these conversations which included the US, Canada all the European countries, with the exception of Albania. This conference concluded in 1973 with a proposed agenda for the future divided into three main areas:

- European security issues including relations among states and confidence-building measures
- Cooperation in areas such as economy, science, technology and the environment
- Cooperation in humanitarian endeavors with special emphasis on human rights and cultural and education exchanges

In 1975 the participating Heads of State signed the conference's final act, which provides the framework for improved relations among members.[4] Simultaneously, the Mutual and Balanced Force Reductions (MBFR) convention, discussing security matters, took place in Vienna as a complement to the Helsinki Act.

Since 1975, the CSCE (renamed Organization for Security and Cooperation in Europe, or OSCE, in 1994) has been adapted to the new realities in Europe and

progressively promulgates a community of values, objectives and responsibilities. During its few years of existence, the Conference has had high points in:

- Paris, 1990. The "Paris decree for a new Europe" announced the end of the Cold War and declared that "an era of confrontation and division in Europe was over"[5]. In this meeting a certain number of institutions and structures were implemented, giving the CSCE a new executive role. At the same time, the Conventional Forces in Europe (CFE) Treaty and a Joint Declaration of Non Aggression were signed by the members of NATO and the former Warsaw Treaty Organization (WTO).
- Helsinki, 1992. At the follow-up conference, the leaders of the participating states approved a final document presenting propositions for the improvement of the CSCE structure giving it operational capabilities in terms of a new European security.
- Budapest, 1994. The OSCE reiterated the commitment of the state members on the non-proliferation of weapons of mass destruction.

Non-Proliferation Treaty (NPT) 1968

The NPT is the centerpiece of a network of interlocking and mutually-reinforcing mechanisms and arrangements that together make up the international non-proliferation regime. The membership of the NPT seeks to stop the spread of nuclear weapons and nuclear weapons technology, to further the goals of disarmament and to promote cooperation in the peaceful uses of nuclear energy. The NPT was signed in London, Moscow and Washington in 1968. The UK, the FSU and the US were designated repository governments of the treaty that entered into force in March 1970. The NPT contains eleven Articles which establish a safeguard system and a set of confidence-building measures designed to verify compliance with the NPT through IAEA inspections. After the UN Charter, the NPT, with 179 States parties, is the world's most widely adhered to multilateral instrument.[6]

Intermediate Nuclear Forces Treaty (INF) 1988

From the Baruch Plan in 1946 to the INF Treaty in 1988 numerous negotiations and treaties concerning the verification, monitoring, limitation and reduction of nuclear weapons have taken place. Eisenhower's Open Skies Plan, the Antarctic Treaty in 1959, the Limited Test Ban Treaty in 1963, SALT I in 1972, SALT II in 1979 and START, initiated in 1982, are some of the most important attempts supporting the goals of nuclear non-proliferation. The INF treaty is quite closely related to the subject of this research. For this reason, we shall explain it in depth.

In the late 1940s, as an alternative to the high cost of maintaining sizable conventional forces in Europe, nuclear weapons were placed on bombers stationed in Great Britain as part of NATO's strategy of massive retaliation in the event of a attack by the Soviet Union. By the end of the 1950s, the Soviet Union had acquired its own theater nuclear weapons and deployed them in the European part of the Soviet Union. Throughout the 1960s and 1970s, both sides continued a buildup of nuclear weapons. In late 1979, NATO Ministers expressed the view that an arms control initiative should be undertaken to make the strategic situation between East and West more stable.

In support of this desire, the INF negotiations began in late 1981. Establishing the terms for negotiations was especially difficult in the European theater, because each country had its own interests and view of the problems involved. The main weapons to eliminate were Pershing IIs, cruise missiles, SS-20s, SS-4s and SS-5s. At the end of the initial round of negotiations in Geneva, there were four fundamental issues on which the sides differed:[7]

- The US proposed elimination of all American and Soviet intermediate—range nuclear missiles. The Soviets sought to block the US's planned missile deployment but were not willing to abandon its intermediate—range missiles in return.
- The US objective was to limit only US and Soviet systems. The Soviets insisted on including the British and French forces.
- The US called for global limits on intermediate—range missiles. The Soviets called for limits on systems only in Europe or intended for use in Europe.
- The US proposed limitations only on intermediate—range missile systems. The Soviets wanted to include nuclear capable aircraft.

No progress was made until 1986. In January of that year, Mikhail Gorbachev proposed the elimination of all SS-20s in exchange for the elimination of American Pershing II and cruise missiles stationed in Europe. He did not include in his proposal any limits on the British and French nuclear forces. He also agreed to include a ban on all other missile systems with ranges in excess of 300 miles. In 1987, the United States and the Soviet Union agreed to on-site inspection measures. The treaty was signed at the Washington Summit in December and ratified by Congress in 1988. Thus, both superpowers committed themselves to the long-term goal of ridding the world of nuclear weapons, or at least creating a world with no role for such weapons.

Nuclear Non-Proliferation Treaty Status

Historical Background[8]

As previously noted, the goal of the NPT is to keep international peace and security and, ultimately, to attain elimination of nuclear weapons under strict and effective international control. In addition to the NPT, two regional treaties which have the same objectives were concluded. The Treaty of Tlatelolco (1967) is in force for most countries in South America and may be expected to enter into force for all of them soon. This

treaty required its members to conclude comprehensive safeguards agreements with the IAEA. The ultimate goal is the creation of a nuclear weapons-free region. The South Pacific Nuclear Free Zone Treaty, or the Treaty of Rarotonga (1985), also requires its signatories to conclude comprehensive safeguards agreements with the IAEA. These agreements will be equivalent in scope and effect to agreements required in connection with the NPT.

Major Objectives[9]

The main objectives of the NPT may be summarized as follows:

- Reaffirm the determination of the parties to achieve the interruption of all tests of nuclear weapons (Preamble)
- Each non nuclear-weapon state that becomes party to the NPT agrees not to acquire nuclear weapons or other nuclear explosive devices (Art. II)
- The state also agrees to conclude a comprehensive safeguards agreement with the IAEA applicable to all its peaceful nuclear activities, present or future (Art.III)
- The treaty recognizes the rights of all parties to participate in the fullest possible exchange of equipment, materials, and scientific and technological information for peaceful uses of nuclear energy (Art. IV)
- The parties undertake to pursue negotiations in good faith towards nuclear disarmament (Art. VI)

The Extension of the Treaty—The New York Conference[10]

The original NPT was only valid for 25 years, thus, in 1995, the Review and Extension Conference was held in New York between April and May to decide the treaty's future. Delegates from 175 of the 178 signatory states attended the conference, with Chile joining the treaty as its 179th member on the event's final day. The New York Conference's main objective was the extension of the NPT. The treaty was extended indefinitely without conditions, a decision which surprised the more pessimistic observers. Even the more optimistic proponents of indefinite extension were stunned by

the breadth of support for this decision and the fact that the measure passed without a divisive vote.

Two other decisions were also adopted without a vote: one strengthening the review process for the treaty and another concerning principles and objectives for nuclear nonproliferation and disarmament. Regarding the first, the conference decided that, beginning in 1997, its preparatory committee would meet in each of the three years before the quinquennial review conference. These meetings will evaluate proliferation during the period and propose methods to promote and strengthen the implementation of the NPT and achieve its universality.

With respect to principles and objectives for nuclear nonproliferation and disarmament, the conference stressed that nuclear disarmament should be pursued with determination. Nuclear weapons states reaffirmed their commitment to pursue negotiations in that direction in good faith. The conference also decided that the principles of the treaty should be: universality, nonproliferation, nuclear disarmament, nuclear weapons free zones, security assurances, safeguards and peaceful uses of nuclear energy.

In accordance with these principles, the conference agreed on the following objectives:[11]

- The importance of universal adherence to the NPT as an urgent priority
- A program of action that calls for a Comprehensive Test Ban Treaty no later than 1996
- Establishing additional nuclear weapons free zones as a matter of priority
- Implementation of UN Security Council Resolution 984 (1995) on security assurances and that further steps should be considered which could take the form of a legally binding international instrument
- Endorsement of the importance of supporting and implementing measures for further strengthening the effectiveness of IAEA safeguards and increasing the IAEA's capabilities to detect undeclared nuclear activities

- A statement that new nuclear supply arrangements should require, as a necessary precondition, acceptance of full IAEA safeguards
- The conclusion that nuclear fissile material transferred from military use to peaceful nuclear activities should, as soon as practicable, be placed under the voluntary safeguards agreement of the nuclear weapons states with the IAEA
- A call to promote transparency in nuclear—related export controls

Several factors led to the remarkable success of the indefinite extension without condition. They consist of the following:[12]

- The United States had launched a diplomatic initiative in favor of indefinite extension and, in so doing, gained early momentum. Since the summer of 1994, this campaign had been supported by the full diplomatic weight of the European Union (EU), Japan, Russia and other "northern" countries such as Canada and Australia.
- Since many Third World countries were already willing to agree to this option, the campaign by "northern" countries merely solidified support.
- There was no counter-campaign by the leading opponent to the indefinite extension.
- After spending about one-and-a-half weeks attempting to position itself alongside the more radical non-aligned countries, China acted constructively and with restraint. When it came to divisive questions, the Chinese delegation sought compromise.
- The United States, Russia, Great Britain and France presented a solid front and did not allow themselves to be deterred.
- South Africa played an outstanding part as mediator between "north" and "south." It was entirely credible in this role, having been the first country in the world to renounce its nuclear weapons status.

The indefinite extension of the NPT makes it clear that this treaty, more than any other arms control agreement, embodies an important principle for international security: arms control, transparency and mutual trust.

The renewed global solidarity born at this conference requires NATO to consider the relevance and suitability of using nuclear weapons, even as weapons of last resort, in its military strategy. Arguably, the NPT serves the interests of the alliance. NATO should, therefore, ensure its own security policies are compatible with the NPT. A NATO nonproliferation effort seems quite in order.

Weaknesses and Violations of the NPT[13]

In spite of a constellation of international treaties, bilateral undertakings and multilateral inspections aimed at halting the spread of nuclear weapons, the NPT has shown serious flaws that undermine its effectiveness. India, Israel and Pakistan remain outside the regime while continuing to enhance their nuclear and missile delivery capabilities. Iraq, although a party to the NPT, deliberately and successfully circumvented IAEA inspections. Knowing that the agency limited its monitoring under the NPT to declared nuclear sites, Saddam Hussein built a series of clandestine facilities. Had it not been for the Gulf War, Iraq would probably have been a nuclear power by 1994.

Likewise, when the Agency first attempted to use its authority to conduct "special inspections" to investigate North Korea's plutonium production facilities, Pyongyang refused to cooperate, creating an impasse that has yet to be fully resolved. The IAEA has also conducted two especial "visits" in Iran to expose rumored clandestine nuclear facilities. Despite continued insistence by the United States that Iran has an active nuclear-weapons development program, the agency found no supporting evidence. These episodes dramatize the weaknesses of the current system which, although flawed, is still powerful. There are attempts to enhance its effectiveness. Also, states are aware that violations are increasingly likely to be found out and will expose them to potentially painful sanctions.

Changes After the Cold War and the New Europe

Political Situation

The collapse of the Soviet regime brought to Europe a general feeling of euphoria. This feeling was abruptly interrupted when it became evident that the ethnic rivalry and the intolerance did not disappear with communism. The Balkan conflict brought some of the dreamers back to reality and proved that contradiction and division remain in Europe. The economic recession and attendant unemployment provided confirmation. In fact, the Cold War left Europe facing as difficult a set of challenges as existed at the end of the Second World War. For example:

- Half of Europe is seeking, within democracy, the progress threatened by economic and political collapse.
- The other half is looking for possible ways to overcome an economic crisis that threatens the loss of competitiveness.
- A former superpower with a destroyed economy is looking for a place in the "new order."
- A potentially dangerous southern periphery is charged with a wealth of energy, demographic explosion, economic inadequacy, political incapacity, ethnic-religious extremism and an excess of arms.

New nations, institutions and leaders fight for influence in an ever-more competitive world. To integrate this diversity in a democratic and safe system is a daunting task. The new situation in Europe demands strategic strictness, attention and strong conviction. In that part of Europe between Germany and Russia, an historical area of conflict, there is a vacuum of safety that needs to be filled with balance and political wisdom. Should Germany and Russia become allies, we will face the danger of a new hegemony. If they fight, many other nations will face crisis of a different dimension.

If we wish a future Europe different from that of the past, positive answers must be found to the following questions:

- How can America's allies be convinced of the US commitment to the security of Europe?
- How can the interests of most countries in Europe be harmonized without a common enemy?
- How can Russia be motivated to have a more constructive role in European and World affairs?
- How can EU members be persuaded to assume more responsibility in the safeguard of their own peace and stability?

European Security and Defense Concepts after the Maastricht Treaty

In 1991, negotiations took place among EC members which resulted in the Treaty of Maastricht. The treaty created a European Union with its own foreign and security policy. The implementation of the treaty provisions is likely to lead to enhanced European roles, responsibilities and contributions in the management of international crises and contingencies in which military capabilities may be required. It has paved the way for the EU to deal with the military aspect of security.[14] Article J1 of the treaty states the following:[15]

The objectives of the common foreign and security policy shall be:

- to safeguard the common values, fundamental interests and independence of the Union;
- to strengthen the security of the Union and Member States in all ways;
- to preserve peace and strengthen international security, in accordance with the principles of the United Nations Charter as well as the principles of the Helsinki Final Act and the objectives of the Paris Charter;
- to promote international cooperation;
- to develop and consolidate democracy and the rule of law and the respect for human rights and fundamental freedoms.

Likewise, under Title V, Article J4, it is stated that "the common foreign and security policy shall include all questions related to the security of the European Union, including

the eventual framing of a common security policy, which might in time lead to a common defence."[16] This goal may be implemented by the Western European Union (WEU), the military organization of the EU. This proposed common defense was not designed to supplant NATO, but rather to complement the alliance. This idea was reinforced at the NATO Summit in January 1994 with the reinforcement of the alliance's European pillar through the WEU.[17]

NATO Evolution

The fall of the Berlin Wall in November 1989 was the culminating point of a series of events that demonstrated East European steps toward democracy and freedom. In March 1989, the NATO Summit in Brussels recognized that changes had occurred in the USSR and Eastern Europe. They further described how the alliance should overcome the division of Europe and establish peace on the continent. At the Summit of London in July 1990, the allied Heads of State proclaimed the most audacious declaration since NATO's creation. The alliance recognized that the Soviet Union should no longer be seen as an adversary and a replacement for NATO's doctrine of flexible response was clearly needed.[18]

While keeping the main features of flexible response (readiness by NATO to initiate the use of nuclear weapons if necessary) the new strategic concept provided new political and military guidance to NATO. In particular, the new strategic concept gave NATO's (hence America's) blessing to enhance West European security and defense cooperation arrangements. Although this support was noted at several points in the new strategic concept, it was stated most fully in paragraph 3:

> The fact that the countries of the European Community are working towards the goal of political union, including the development of a European security identity, and the enhancement of the role of the WEU, are important factors for European security. The strengthening of the security dimension in the process of the European integration, and the enhancement of the role and responsibilities of the European members of the Alliance are positive and mutually reinforcing. The development of the European security identity and defense role, reflected in the strengthening of the European pillar within the Alliance, will not only serve the interests of the European States but also reinforce the integrity and effectiveness of the Alliance as a whole.[19]

Besides the new relationship between NATO and the WEU, two major issues have been added to the NATO agenda: the enlargement of the alliance and the Partnership for Peace. NATO's enlargement should make a decisive contribution to extend to the East the values of democracy, respect for fundamental freedoms and the rule of law on which the Atlantic Community is founded. The alliance has agreed on the general conditions new NATO members must fulfill: democratic governments, respect for human rights, free market economies, and civilian-controlled militaries. They must also, of course, be able to integrate their forces into the alliance militarily. NATO's enlargement would be viewed as part of the broader process of building a new Euro-Atlantic security architecture.[20]

Enlargement is a two-way street; security in Europe will be extended only if enlargement is backed by strong consensus both within each of the members of the alliance and within each of the countries invited to join. Interaction and dialogue are indispensable.[21] One must be cognizant, however, of the potential of Russia as the spoiler of any security arrangement in Eastern Europe.

The Partnership for Peace (PFP), based on the wider political dialogue fostered by the North Atlantic Cooperation Council (NACC), is the best instrument for bringing

together allies and their former adversaries.[22] PFP is a military cooperation structure that allows "the partners" to participate side-by-side with the allied forces in operations such as humanitarian and peace efforts. Bosnia is a good example of PFP cooperation. At this writing, 23 countries from Central Asia and Central and Eastern Europe have joined PFP.

Regardless of the "good news" coming from East Europe and the new architecture for security and defense in the EU, NATO is still concerned with nuclear proliferation. NATO's new strategic concept states that the stability of peripheral countries is important for the security of the alliance because of the proliferation of armaments and associated technologies capable of targeting the allies' territory.[23]

Sources of Nuclear Proliferation Risks in the NATO Region

Today there is no uniform proliferation risk. According to the Alliance Policy Framework on Proliferation of Weapons of Mass Destruction (WMD), NATO defined the following sources of proliferation risks:[24]

- Some states (e.g., Iraq, North Korea) have not complied with, and even willfully disregarded, their international nonproliferation commitments, in particular those stemming from membership of the 1968 Nuclear Non-Proliferation Treaty.
- Major political changes on the European continent following the break-up of the Soviet Union have potential proliferation implications.
- A number of states on the periphery of the alliance continue in their attempts to develop or acquire the capability to produce WMD or their delivery means or to acquire illegally such systems.
- Non-state actors such as terrorist groups may also try to acquire WMD capabilities.
- Ever-increasing trade in today's world economy, including transfers of dual-use commodities, is leading to greater diffusion of technology, which complicates efforts to detect and prevent transfers of material and technology for the purpose of developing WMD and their delivery means.
- The growth of indigenously developed WMD-related technology has also made proliferation more difficult to control.
- There is the risk that a proliferator might seek to profit or gain political benefit by selling WMD and the delivery means; such a trade could result in allies being

threatened by an adversary that obtained WMD capabilities developed in areas beyond NATO's periphery.

From these comments we can infer that NATO could face some of the following types of risk with different strategic implications, both on the global and regional level:[25]

- Opponents armed with nuclear weapons and ballistic missiles may confront the armed forces of Western States operating in various regional theaters under differing missions (peacekeeping; enforcing UN trade sanctions or Security Council decisions). This possibility seems quite plausible in light of Iraq's employment of Scud missiles during the Gulf War.
- Direct military threats against the territories and societies of Western states by "rogue states" acquiring missiles capabilities and WMD. Gaddafi attempted to buy nuclear weapons in the 1970s
- Risks from shifting regional power balances have global implications. If Iraq had possessed nuclear weapons in August 1990, Operations Desert Storm and Desert Shield might not have taken place. As a consequence, the states of the Arab peninsula would most likely have pursued rapid accommodation that would have brought them under Baghdad's control.
- Regional instabilities fueled by proliferation. A possible scenario involves the danger that, as a consequence of the disintegration of Russia and other CIS states, nuclear weapons may be used in local armed conflicts or disputes between various Soviet successor states.
- Negative consequences of the erosion of international norms and international or regional systems of order. Proliferation will compromise and impede the functioning of international cooperative systems that could provide non-traditional forms of security, like the UN or the OSCE.
- The danger of an accident involving nuclear weapons or their unauthorized use. It is reported that a lack of safety measures is one of the reasons that Pakistan and India have not completed the final assembly of their otherwise finalized nuclear devices.
- The opening up of a new dimension of terrorism. Terrorists could attempt to use nuclear blackmail to destabilize society and compromise a government. The recent nerve gas attack in the Tokyo subway has demonstrated the potential of WMD in the wrong hands.

In sum, the risks associated with nuclear proliferation have been recognized and are being dealt with by NATO Heads of State. One of NATO's principal goals is to avert proliferation. Prevention, however, might not always succeed. NATO, as a defensive alliance, must take account of proliferation risks in its defense policy in order protect

against the threat or use of nuclear weapons. The maintenance of such capabilities should help to protect against coercion, and preserve NATO's freedom of action in the face of any future threat from nuclear proliferators.

Notes

[1] Hans Blix, "Against the Spread of Nuclear Weapons: the Safeguards System of the IAEA," *NATO Review* 5 (September1995): 13.

[2] Ibid., 12–16.

[3] U.S.-Euratom Senior Policy Panel, "Negotiating a U.S.-Euratom Successor Agreement," *A Consensus Report of the CSIS* (Washington: CSIS, 1994), 23.

[4] This section summarizes the ideas of John Borawski, *Security for a New Europe* (London: Brassey's Inc., 1992), 86–105.

[5] Nils Elliason, "North Atlantic Council Communique," *NATO Review* 4 (August 1990): 21–31.

[6] Mitchell Reiss, "Nuclear Rollback Decisions: Future Lessons?" *Arms Control Today* (Jul/Aug 1995): 10–15.

[7] Teena K. Mayers, *Understanding Weapons and Arms Control* (New York: Brassey's, 1991), 117.

[8] "Non Proliferation Treaty Extended Indefinitely at Review Conference," *UN Chronicle* 32 (Sep 1995): 58–60.

[9] Gary T. Gardner, *Nuclear Nonproliferation: A Primer* (Boulder: Lynne Rienner Publishers, 1994), 121–126.

[10] Harald Muller, "A Cornerstone of World Order: Extending the NPT," *NATO Review* 5 (Sep 1995): 21–30.

[11] Lewis A. Dunn, "High Noon for NPT," *Arms Control Today* (Jul/Aug 1995): 4.

[12] Muller, *Cornerstone,* 21–30.

[13] Leonard S. Spector, "Neo-Nonproliferation," *Survival* 37 (Spring 1995): 73–75.

[14] Alfred van Staden, "After Maastricht: Explaining the Movement towards a Common European Defense Policy," *European Foreign Policy—The EC and Changing Perspective in Europe* (London: SAGE Publications, 1994), 138–143.

[15] *Maastricht Treaty* (Lisbon: ARCO IRIS, 1992), 161.

[16] Ibid., 164.

[17] Jose Manuel Durao Barroso, "The transatlantic partnership in the new European security context," *NATO Review* 5 (Sep 1995): 3–6.

[18] *London Declaration on a Transformed North Atlantic Alliance* (Brussels: NATO Office of Information and Press, 1990), 32–33.

[19] "The Alliance's New Strategic Concept," *NATO Review* 6 (December 1990): 22–24.

[20] Reginald Dale, "Defending Europe," *Europe* (Nov 1995): 27–30.

Notes

[21] Barroso, "Transatlantic partnership," 3–6.

[22] Ibid., 3–6.

[23] "New Strategic Concept," 22–24.

[24] Gregory L. Schulte, "Responding to proliferation: NATO's Role," *NATO Review* 4 (Jul 1995): 16.

[25] Joachim Krause, "Proliferation Risks and their Strategic Relevance: What role for NATO?" *Survival* 37 (Summer 1995): 137.

Chapter 3

Nuclear Non-Proliferation: A NATO Role

Current Position—Policy And Program

The North Atlantic Treaty of April 1949 brought into being an alliance of independent countries with a common interest in maintaining peace and defending freedom through political solidarity and adequate military defense to deter and, if necessary , repel any aggression. Article 51 of the United Nations Charter reaffirms the inherent right of individual or collective defense. The alliance was formed under the auspices of this article as an association of free states united in the determination to preserve their security through mutual guarantees and stable relations with other countries.[1]

NATO's essential purpose is, thus, to safeguard the freedom and security of all its members by political and military means in accordance with the principles of the United Nations Charter. Based on common values of democracy, human rights and the rule of law, the alliance, since its inception, has worked for establishment of a just and lasting peaceful order in Europe. This alliance objective remains unchanged. NATO also embodies the transatlantic link by which the security of North America is tied to that of

Europe. This association is a practical expression of effective collective effort among it's members in support of common interests.

The fundamental operating principle of the alliance is that of common commitment and mutual cooperation among sovereign states based on the indivisibility of the security of its members. Solidarity within the alliance is sustained by NATO's continuous work in political, military and other spheres, ensuring that no member country is forced to rely solely upon its own national efforts in dealing with basic security challenges. Without depriving member states of the right and duty to assume sovereign responsibilities in the field of defense, the alliance enables them, through collective effort, to enhance their stability and to realize their essential national security objectives.

The resulting sense of security of the members of the alliance, regardless of differences in circumstances or national military capabilities, contributes to overall stability within Europe. This situation also creates conditions conducive to increased cooperation both between alliance members and with other countries. On this basis, members of the alliance, together with other states, are developing cooperative structures of security serving the interests of a Europe subject to division. Each member is, simultaneously, free to pursue its own political, economic, social and cultural destiny.

The Fundamental Tasks Of The Alliance

The tasks of NATO are many and varied, but there are several which are fundamental. The means by which the alliance carries out its security policies include:

- The maintenance of a military capability sufficient to prevent war and to provide for effective defense.
- An overall capability to manage successfully crises affecting the security of its members.

- Active political efforts favoring dialogue with other nations and a cooperative approach to European security, including measures to bring about further progress in the field of arms control and disarmament.

To achieve its essential purpose, the alliance performs the following fundamental security tasks:[2]

- It provides one of the indispensable foundations for stable security in Europe based on the growth of democratic institutions and commitment to the peaceful resolution of disputes. It seeks to create an environment in which no country would be able to intimidate or coerce any European nation or to impose hegemony through the threat or use of force.
- In accordance with Article 4 of the North Atlantic Treaty, it serves as a transatlantic forum for Allied consultations on any issues affecting the vital interests of its members, including developments which might pose risks to their security. It facilitates appropriate coordination of their efforts in field of common concern.
- It provides deterrence and defense against any form of aggression against the territory of any NATO member state.
- It preserves the strategic balance within Europe.

The structures created within NATO enable member countries to coordinate their policies in order to fulfill these complimentary tasks. They provide for continuous consultation and cooperation in political, economic and other non-military fields. They also provide for the formulation of joint plans for the common defense; the establishment of the infrastructure needed to enable military forces to operate; and arrangements for joint training programs and exercises. Underpinning these activities is a complex of civilian and military structures involving administrative, budgetary and planning staff. Other agencies have been established to coordinate work in specialized fields, such as the communications needed to facilitate political consultation and command and control of military forces and their logistics support.

NATO Today

The fall of the Berlin Wall in November 1989, the unification of Germany in October 1990, the disintegration of the Soviet Union in December 1991 and dramatic changes elsewhere in Central and Eastern Europe, marked the end of the Cold War era. Since these events, which have transformed the political situation in Europe , the nature of the risks faced by the members of the alliance has fundamentally changed. However, as events have proven, dangers to peace and threats to stability remain. Decisions made by the NATO Heads of State and Government at the Summit Meetings in London in July 1990 and in Rome in November 1991 have sought to adapt NATO strategy to this changing strategic and political environment. Attention has focused on the need to reinforce the political role of the alliance and the contributions it can make in providing the security and stability which are required for Europe's renewal process.

The strategic concept adopted in Rome outlines a broad approach to security based on dialogue, cooperation and the maintenance of collective defense capabilities. It integrates political and military elements of NATO's security policy into a coherent whole, establishing cooperation with new partners in Central and Eastern Europe as an integral part of the alliance's strategy. The concept provides for reduced dependence on nuclear weapons and major changes in NATO's integrated military forces, including substantial reductions in their size and readiness, improvements in their mobility, flexibility and adaptability to different contingencies and greater use of multinational formations. Measures have also been taken to streamline NATO's military command structure and to adapt the alliance's defense planning arrangements and procedures to the changed circumstances concerning security in Europe as a whole.

The Rome Summit also produced the Declaration of Peace and Cooperation.[3] The Declaration set out the context for the alliance's Strategic Concept, defining the future tasks and policies of NATO in relation to the overall institutional framework for Europe's future security. The alliance's commitment to strengthening the role of the Conference on Security and Cooperation in Europe was also reaffirmed (the CSCE was later renamed the Organization for Security and Cooperation in Europe or OSCE). Consensus was established among member countries for the development of a European security identity and defense role. The declaration the alliance's support for the steps being taken in the countries of Central and Eastern Europe towards reform; offered practical assistance to help them succeed in this difficult transition; invited them to participate in appropriate alliance forums; and extended to them the alliance's experience and expertise in political, military, economic and scientific consultation and cooperation.

North Atlantic Cooperation Council

A particularly significant step taken in this context was the establishment of a North Atlantic Cooperation Council (NACC) to oversee the future development of this partnership. Subsequent consultation has been wide-ranging but has focused on political and security-related matters. These issues include:

- Conceptual approaches to arms control and disarmament
- Defense planning issues and military matters
- Democratic concepts of civilian-military relations
- The conversion of defense production to civilian purposes
- Economic issues including defense expenditure and budgets
- Scientific cooperation and defense-related environmental issues
- Dissemination of information about NATO in the countries of cooperation partners
- Policy planning consultations and civil/military air traffic management

The inaugural meeting of the NACC took place on December 20, 1991 with the participation of the foreign ministers of the NATO countries, six Central and Eastern European countries and the three Baltic states. NACC's role is to facilitate cooperation on security-related issues and to oversee the process of developing closer institutional ties and informational links. The states of the former Soviet Union, which now constitute the Commonwealth of Independent States (CIS), became participants in this process in March 1992. Georgia and Albania joined the process in April and June 1992, respectively. The NACC is also making available its unique expertise and capabilities in the coordination of humanitarian aid to these new states.

NATO's Partnership For Peace Program

NATO began its outreach program to the East in July 1990 with the London Summit declaration, followed by the establishment of the NACC at the November 1991 Summit in Rome. While NACC had laudable goals of establishing security contacts and providing technical assistance to Eastern states, its limitations immediately became apparent. The immense diversity among NACC partners, for example between Poland and Uzbekistan, led to the call by the western NACC members for a more differentiated approach and to increasing the prerequisites for membership in NATO. At the same time, disagreements among the allies over how far NACC should go in satisfying operational requirements of the partner states (as opposed to serving mainly as a consultative body) further limited the scope of NACC activities. NATO's most recent response came in January 1994 when NATO Summit leaders in Brussels adopted the Partnership for Peace (PFP) Program, the goals of which are to:[4]

- Enhance operational cooperation between NATO and the partner states
- Develop defense transparency among partner states
- Advance the development of democratic means of control over military in the newly emerging democracies
- Provide a vehicle to help the partners realize that participation in NATO activities has obligations as well as benefits

Since the Brussels meeting, more than 20 states have become PFP partners, including Central and East European states, Sweden, Finland, Slovenia, Russia, Ukraine, and several other ex-Soviet Eurasian states. Offices have been constructed at both NATO headquarters in Brussels and at the Supreme Headquarters Allied Powers Europe in Mons, Belgium to accommodate representatives of these states. Exercises involving forces of NATO members and the new PFP partners have been planned, and some have already been conducted. The prospects for the PFP are not all rosy, however. Implementation of PFP, if not handled carefully, could to one degree or another, have some unwanted and unintended consequences.

Uncertain Effect of PFP

Rather than encouraging sub-regional cooperation and stability, the PFP program could have the unfortunate effect of transforming the region's potential security partners into competitors, diverting attention from cooperation with neighbors and toward a race to see which nations are most willing and able to meet the West's standards and expectations. NATO could minimize the potential negative consequences of its bilateral agreements with each PFP partner by encouraging partners to cooperate directly with their neighbors, ensuring each agreement remains transparent to neighbors and supporting Visegrad, Balkan and Baltic common security activities.

By deferring the NATO membership question, NATO leaders appear to have placated Russia and supported Yeltsin and other reformers in that country. NATO must work now to ensure that PFP also supports democratic reformers in Central and Eastern Europe and does not have the unintended effect of undermining their political bases of support, thereby undermining the credibility of NATO in Central and Eastern Europe. To the extent that Central and Eastern Europeans perceive the West succumbing to Russian pressure in terms of using the PFP as a device to stall NATO membership, the West will lose credibility and influence.

If the PFP does not soon generate highly visible programs that bolster support for the region's reform-orientated leaders, then the prestige, influence and support that NATO presently enjoys may be lost in future Central and East European leaders and publics. For such programs to be successful and visible, financial resources are necessary. Also, the challenge for the US is to persuade other NATO allies and partners to commit resources to PFP programs and to work with those allies to initiate cooperative programs with PFP partners.

Military rather than political forms of cooperation have been emphasized in the PFP.[5] As a result, the PFP could have a number of undesirable consequences. First, states with stronger military traditions and institutions could have an advantage. Second, pushing the military to the forefront in the East-West partnership could work against efforts in Central and East European states to establish civilian control over their militaries. Emphasizing the political dimension of the PFP and working to ensure a civilian Ministry of Defense component would moderate these potential negative effects.

By intentionally leaving vague any detailed criteria and time frame for NATO admission, the PFP suggests an undifferentiated Europe. This concept does not have much credibility in Central and Eastern Europe. Many Central and East Europeans believe that democratic reform has already failed in most of the former Soviet Union and that some form of authoritarian rule there is likely in the near future. They also fear that Russia is moving toward an imperial foreign policy that threatens their security and their democratic governments.

The PFP, if provided adequate resources and implemented properly, may reinvigorate NATO and herald a new European security architecture. If it is not provided adequate resources and is implemented carelessly, however, the PFP could undermine European security and widen the gulf that separates East and West.

Impact of NATO's Expansion

The issue of Allied forward presence in East-Central Europe is something for the alliance as a whole to decide. As the matter stands today, there is no security requirement for stationing NATO forces there. If there is a requirement for peacetime deployment, it derives from the need for political reassurance and credibility as well as peacetime training to develop interoperability. The requirements for forward presence, however, will be modest. Some and perhaps all needs can be met by rotational deployments and exercises. Hence, NATO can expect to rely primarily, if not exclusively, on power projection or mixed strategy unless and until a major military threat appears on the horizon. Similarly, the requirements for nuclear deterrence in an expanded NATO will also be radically different and smaller than during the Cold War, because the threat is different and the alliance can now build a more credible conventional posture. Article 5

of NATO's strategic concept involves a political commitment to defense and deterrence, not the employment of nuclear weapons on foreign soil.[6] During the Cold War, different kinds of nuclear arrangements were sought by and offered to the three front-line states facing the former Soviet Union—Norway, Turkey and West Germany. Working out future arrangements with new members should be easier than in past. Currently, there is little interest in East-Central Europe in deploying NATO nuclear weapons on their soil. Politically, NATO enlargement is currently being considered to extend stability to East-Central Europe, not to respond to a new Russian strategic threat.

Militarily, the situation has also been transformed. During the Cold War, NATO was highly dependent upon nuclear weapons to deter the Warsaw Pact. Changed geopolitical circumstances should allow the alliance to pursue a more credible conventional strategy with a more flexible nuclear posture. NATO has already embraced a more existential form of extended deterrence with nuclear weapons as "weapons of last resort." NATO expansion will not change this. Currently, only seven of the 14 European members of the alliance participate in nuclear burden-sharing arrangements. NATO members do not require nuclear weapons on their soil to be covered by a NATO security guarantee.

The budgetary costs will, of course, depend on the defense planning framework and the specifics of the package that is adopted. If the alliance chooses to rely on a power projection or mixed strategy and expects new members to contribute strong forces of their own, the cost of expansion should be moderate. They can be spread out over a number of years and can be paid for by cuts elsewhere in Western European border defense forces. Many of these changes and the new programs to improve alliance power projection

capabilities are steps that NATO should take, regardless of whether expansion occurs, to equip it for crisis management missions beyond current borders.

Conclusion

NATO must proceed carefully, balancing the desire of Central and East European states for full reintegration into Europe and NATO's desire to project security eastward with concerns about extending new security guaranties.[7] NATO will also have to balance the issue of NATO expansion keeping the alliance alive with the view that this will be a divisive issue in an alliance already troubled over Bosnia and the need to clarify a new trans-Atlantic relationship. NATO will also need to balance its intent to control its own destiny and not be subject to a veto by outside states, such as Russia, with its concern not to undercut reformers and promising developments in countries that are not invited to join. Russian president Yeltsin has warned of a "cold peace." Indeed, much will depend on the nature and strength of relations that NATO and others in the West establish with Russia and other Eastern states.

To balance these interests, NATO is taking careful and measured steps to strengthen the PFP. NATO is also moving to determine what internal steps are required to eventually expand membership and to assess the implications of this move. NATO must also help prospective members understand what membership entails. Consultations will be required to determine how to frame the expansion debate, how to decide which interested states should be admitted and when, and how to advance NATO relationships, not only with those states that may initially join, but also with other PFP partners not expected to join.

Notes

[1] *NATO Handbook* (Brussels: NATO Office of Information and Press, 1993), 11.

[2] Ibid., 13.

[3] Ibid., 16.

[4] This discussion of the PFP borrows heavily from Hans Binnendijk and Patrick Clawson, eds., *Strategic Assessment 1995* (Washington, 1995), 44–45.

[5] Binnendijk and Clawson, *Strategic Assessment*, 45.

[6] *NATO Handbook,* 31.

[7] These remarks summarize the comments of Binnendijk and Clawson, *Strategic* Assessment, 45.

Chapter 4

The Future Of NATO And Nuclear Proliferation

There can be no arguing that common among all state's security interests is security itself and that uncontrolled proliferation of nuclear weapons presents the greatest threat to that security. Indeed, President Clinton has stated his intention of doing ". . . everything in his power to reduce the danger posed by these weapons."[1] The capacity of NATO to meet this danger is, of course, dependent upon the continued strength of the alliance. A brief look at the link between the US and NATO is relevant at this point

What of the US and NATO? Again, NATO's ultimate success in meeting the proliferation challenge rests to a large extent on the viability of the alliance itself. Few can argue that such viability is dependent upon continued US involvement and support. John Duffield argues that point clearly yet states convincingly that US support should not be taken for granted in the future.[2] The US has a strong interest in the peace and security of the European continent, but these interests do not always appear tangible to the American public, a public which will ultimately decide the future of US support for NATO. Since the end of the Cold War, troop presence in Europe has declined to approximately 100,000 troops; this represents 7 percent of all active forces as opposed to 15 percent in the late 1980s.[3] Lack of apparent benefits combined with an ever-growing federal deficit may make future troop cuts in Europe an inviting option for policy makers.

Support for NATO must be sold and sold hard on a continuing basis if ultimate progress in combating proliferation is to made. NATO remains "the principal institutional vehicle through which the United States can influence West European policies."[4] The advantage of having such leverage, particularly in the economic field, must be continually advertised to the American public. Duffield reports on one American diplomat who stated that by "exerting its military weight in NATO, the United States is able to 'tell the Europeans what we want on a whole lot of issues—trade, agriculture, the gulf, you name it.'"[5] This is a very effective selling point yet one more might be added. The case for US support of NATO should include the dangers posed by nuclear weapons and that a strong alliance can help counter the proliferation threat. By adding a clear security interest to the economic factors, the case is strengthened substantially.

From our analysis of the nuclear threat and our breakdown of the roles and missions of NATO, what new mission can we discern for NATO? Has NATO already met the proliferation challenge we have outlined previously?

Within the past several years NATO has taken steps to acknowledge and counter the proliferation issue. In 1994 the heads of state of each NATO country met to address proliferation. Considering it a "matter of concern for the alliance," they proposed a policy framework for NATO to "reinforce current prevention efforts" (NPT, IAEA, etc.) and to develop ways to reduce the proliferation threat and protect each member nation.[6] The framework was to be based on the risk assumptions regarding the geopolitical environment and its relationship to nuclear weapons (see p. 45).

In response to the summit initiative, a key component of the policy framework was the formation of two organizations under NATO auspices to respond to the nuclear threat

and to specifically address the risk assumptions. The Senior Politico-Military Group on Proliferation (SGP), chaired by the NATO Assistant Secretary General for Political Affairs, focuses on the political aspects of countering proliferation. The Senior Defense Group on Proliferation is co-chaired by a European and Western Hemisphere nation, currently the United States and the United Kingdom. This group looks at the problem from the standpoint of defense, i.e., how can the defense posture NATO already has in place be used to control nuclear proliferation?

When examined within the framework of the aforementioned risk assumptions, the respective goals of these organizations seem to be compatible with them. The political dynamics of the post–Cold War world and the new economic opportunities prevalent in the world economy are the crux of the risk assumptions and should be the entering arguments in any strategy to counter nuclear weapons.

The balance of the summit framework dissects the nuclear issue specifically into two dimensions: defensive and political. Within the political dimension, NATO has identified prevention of proliferation through diplomacy as the "principal non-proliferation goal" of the alliance.[7] Specifically, the NATO allies will:

- asses the potential proliferation risk presented by neighboring states
- consult regularly on nuclear proliferation threats and related issues and coordinate current alliance activities that involve aspects of nuclear weapons
- examine whether there are ways to contribute, through diplomatic or technical measures, to the implementation and strengthening of international arms control, disarmament and non-proliferation norms and agreements.

In particular allies will:

- support efforts to broaden participation in international non-proliferation fora and activities;
- continue to share information on their various efforts to support the safe and secure dismantlement of nuclear weapons in the former Soviet Union.

- consider relevant initiatives that Allies might undertake to support non-proliferation objectives;
- consult with PFP partners with the aim of fostering a common understanding of, and approach to the proliferation problem, taking into account efforts in this field in other fora.[8]

Within the Defense field NATO will:

- examine the threat posed to all Allies by nuclear proliferation
- examine implications of proliferation for defense planning and defense capabilities of NATO members
- improve defense capabilities of NATO and its members to protect NATO territory, populations and forces against nuclear use.
- consider how its defense posture can support or influence diplomatic efforts to prevent proliferation[9]

Indeed, NATO views itself as an ideal vehicle for the exchange of views and ideas essential for diplomatic progress. NATO's Director for Nuclear Planning puts it this way:

> [Through the NATO forum] allies can exchange views on the situation concerning the proliferation of weapons of mass destruction, including developments in areas beyond NATO's periphery, and examine whether there are ways for NATO to contribute, through diplomatic or technical measures, to the implementation and strengthening of [nuclear non-proliferation agreements].[10]

The SGP has made its central focus the close examination of the motives of nuclear-seeking countries and the finding of ways to discourage their efforts, i.e., to make the disadvantages of nuclear ownership more real than the advantages. The functioning security apparatus of NATO does offer the opportunity for progress for the SGP. Through careful diplomacy and frank dialogue, the offering of real security guarantees to these nations may be seen as an attractive, and safer, alternative to either purchasing or developing nuclear weapons. Such guarantees would be contingent upon tangible evidence of nuclear-free status. Do the current security arrangements within NATO

contribute to an atmosphere which inhibits the desire of states to acquire nuclear weapons? The evidence suggests they do. Consider that of the 24 members of the OECD, only three have acquired nuclear weapons when, conceivably, many of those states could have acquired them years earlier.[11]

Understanding and appreciating the motives for nations to acquire nuclear weapons is critical. Is there a link between such a desire among smaller states to become nuclear and the numerous regional conflicts which predominate in the world? Against the backdrop of Strain's hierarchy detailed in chapter 1, Iraq's nuclear ambitions, for example, can be explained by Saddam Hussein's desire for "survival, security, and hegemony." Many other such states perceived a real vacuum in world leadership and world direction upon the Cold War's conclusion. Their motivations, though not often clearly articulated, are logical extensions of a natural desire for security and international respect. What better way to gain respect on the world stage than to be the proud owner of the world's most feared weapons? Likewise a rogue state may find the path towards recognition by engaging in regional conflict or aggression.

A noted German political scientist has suggested that efforts to reduce regional conflicts will have a positive effect on proliferation. In his words, ". . . countries [that] turn their attention to a greater extent to the solution of regional conflicts . . . could reduce the desire of other countries to acquire nuclear weapons."[12] Maybe so, but is this an area where NATO can play a role?

In two areas NATO appears equipped to engage the issue outright. In the face of a neighboring state's declared intention of acquiring nuclear weapons, the NATO structure can act with one voice in an effort to deter the threat as well as diffuse it. By providing a

security forum for such states to share their concerns, viable alternatives to acquiring nuclear weapons can be explored. Trust and confidence among the member states must be encouraged and supported. Accurate intelligence estimates and appraisals must be shared and disseminated. NATO's Senior Planning Officer for the Political Affairs Division puts it this way: "The consultation process makes it possible or conceivable that NATO and the threatened partner will coordinate policies to defuse tensions in the event of a threat. This substantial addition to the crisis management means the alliance has at its disposal could be another tool to diffuse the proliferation incentives."[13]

What options are available to NATO to counter nuclear proliferation within the military realm? One possibility has already been demonstrated. By enforcing international sanctions levied by other organizations, the UN and NATO will add significant pressure to any country considering acquiring nuclear weapons. The military forces of NATO operating under the mandate of the UN have already proven effective in the former Yugoslavia. As Michael Ruhle states, "NATO's enforcement of the UN embargo against Serbia . . . [has] shown that NATO's capability to orchestrate complex multinational military operations is unique and can serve a wider purpose. . . ."[14] Further, "NATO effectively set clear limits on the behavior of third parties and made its response conditional on the acceptance of NATO's terms...an important precedent for a role in nonproliferation where a direct threat to Allied territory is not necessarily immediate."[15] As Ruhle suggests, by increasing the link between the UN and NATO, Alliance contributions to proliferation strategy could very well become stronger.

Could NATO ever intervene directly and militarily against a state developing nuclear weapons, a preemptive strike for example against production facilities? This scenario is

highly unlikely. Even at the height of the Cold War, NATO was never envisioned as politically capable of offensive action. The more likely case is NATO involvement in a military action concurrent with the initial phases of a war, as was the case with the Gulf War.[16]

The natural defensive nature of the alliance suggests another opportunity for coping with the proliferation threat: ballistic missile defense (BMD). BMD took on increased importance in the aftermath of the Iraqi Scud attacks and the subsequent success of the allied Patriot missiles in countering them. Since then NATO has formed several working groups to study the issue and present recommendations for a coordinated NATO approach.

NATO has the tools at its disposal to make an important and lasting contribution to the worldwide proliferation threat. NATO has taken appropriate first steps with a well-crafted proliferation policy framework and the creation of the Senior Politico-Military Group on Proliferation and Senior Defense Group on Proliferation. Critical to success, however, are the results of that framework, i.e., will new ideas and strategies be explored and examined carefully by a united NATO or will internal political rivalries inhibit their fruition? Placing nuclear proliferation at the top of its list of priorities will do much to overcome political obstacles. As NATO struggles to find new missions in a new era, the Alliance should waste no opportunity in addressing and voicing its continued concern with the proliferation of nuclear weapons. NATO's past success in the Cold War will lend credence and credibility to its voice. By coordinating its policy with other international fora, that voice will be all that much stronger and influential. Again, United States support for NATO and the struggle against nuclear proliferation must be clear and

understood by all. Such an important common goal suggests strong common ground upon which to strengthen the US-NATO partnership and positively impact the threat of proliferation of weapons of mass destruction.

Notes

[1] Anthony Lake, "Viewpoint: A Year of Decision: Arms Control and Nonproliferation in 1995," *The Nonproliferation Review* (Winter 1995): 55.

[2] John Duffield, "NATO's Functions after the Cold War," *Political Science Quarterly* 109 (Winter 1994/95): 785.

[3] Ibid.

[4] Ibid.

[5] Ibid., 766.

[6] "NATO's Approach to Proliferation," *NATO Fact Sheet* (Brussels: NATO Office of Information and Press, 1995), 2.

[7] Gregory Schulte, "Responding to Proliferation—NATO's Role," *NATO Review* 4 (July 1995): 17.

[8] "Alliance Policy Framework on Proliferation of Weapons of Mass Destruction issued at the Ministerial Meeting of the North Atlantic Council held in Istanbul, June 9, 1994," *Comparative Strategy* 13 (1994): 455.

[9] Ibid., 458.

[10] Schulte, 18.

[11] Karl Heinz Borner, *Proliferation of Weapons of Mass Destruction and International Security—NATO's Approach to a New Threat* (Maxwell AFB, Ala: Air University Press, 1995), 19.

[12] Walter Schilling, "Putting Nuclear Proliferation to the Test," *German Foreign Affairs Review* 46 (September 1995): 2.

[13] Michael Ruhle, "View from NATO: NATO and the Coming Proliferation Threat," *Comparative Strategy* 13 (1994): 316–317.

[14] Ibid.

[15] Ibid.

[16] Ibid., 318.

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