



FRANCE AND THE UNITED KINGDOM

With articles by
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PREFACE

I am pleased to present *France and the United Kingdom*, the first in a new series of Stimson Center publications addressing the question of how the elimination of nuclear weapons might be achieved. The Nuclear Security Project is aimed at exploring the practical dimensions of this critical 21st century debate, to identify both political and technical obstacles that could block the road to “zero,” and to outline how each of these could be removed. Led by Stimson's co-founder and Distinguished Fellow Dr. Barry Blechman, our project aims to provide useful analysis that can help US and world leaders make the elimination of nuclear weapons a realistic and viable option. The series comprises country assessments, to be published in six different monographs, and a separate volume on technical issues.

This first volume, by Dr. Bruno Tertrais of the Fondation pour la Recherche Stratégique, and Sir Lawrence Freedman of King's College, addresses nuclear disarmament as seen by US allies Britain and France.

Each of the country assessments, to be published ad seriatum, considers the security conditions that need to be met before the government in question would participate in a multilateral disarmament process. Next in the series is another pair of countries, the emerging world powers, China and India. Later volumes will examine the two newest nuclear aspirants—North Korea and Iran; the two nuclear superpowers, Russia and the United States; Pakistan and Israel, both of which view their nuclear weapons as vital to offset a strategic adversary's greater size and conventional capability; and countries with advanced civilian nuclear capabilities that could be future weapons states, such as Brazil, Japan, and Turkey.

Later in the year, a set of papers assessing such technical issues as verification, warhead dismantling, and governance of a disarmament treaty regime, will be published in a single volume, complementing this series of country assessments.

This new series will make an important contribution to the new and renewed debate about how to rid the world of the dangers of nuclear weapons. This enduring strategic issue has been a central concern of the Stimson Center since its founding twenty years ago. I hope that this new publication will provide insights and pragmatic ideas to facilitate wise policymaking, in keeping with Stimson tradition.

Sincerely,



Ellen Laipson

INTRODUCTION

In recent years, the twin threats of proliferation and terrorism have led to a growing chorus of world leaders calling for the global elimination of nuclear weapons. Now, thousands of individuals from around the world and across political lines have come together in a new project called *Global Zero*. The project combines policy research and analyses with broad-based and sustained public outreach to encourage key governments to negotiate a comprehensive agreement to eliminate all nuclear weapons through phased and verified reductions.

In support of *Global Zero* and the many other ongoing efforts to eliminate nuclear weapons, and in collaboration with the World Security Institute, the Stimson Center has commissioned a series of papers examining the strategic obstacles that block the achievement of zero nuclear weapons world-wide. Written from the perspectives of individual countries that either possess nuclear weapons or have the potential to develop them relatively quickly, the papers describe those nations' official views on, and plans for, nuclear weapons, as well as how the prospect of wide-spread proliferation and the possibility of nuclear disarmament might change those perspectives. The primary purpose of each paper is to identify the policies and international developments that would encourage decision-makers in each nation to look favorably on a treaty to eliminate nuclear weapons by a date certain.

The first two papers in the series, *France*, by Bruno Tertrais, and the *United Kingdom*, by Lawrence Freedman, published together in this volume, present an interesting contrast. Nuclear weapons play a central role in French security policy; it would therefore require a united initiative by other nuclear weapon states, and especially by the United States and Russia, to persuade France to join disarmament negotiations. In UK security policies, on the other hand, nuclear weapons play far less important roles, making it likely that any serious disarmament initiative by the United States would gain support in the United Kingdom. Together, the papers make clear that if the US and Russia make significant progress toward deep reductions in their own arsenals, in the context of seeking to stimulate multilateral disarmament negotiations, the two West European nuclear powers are likely to come to the table, as well.

This series of papers has been made possible by grants from the World Security Institute and the Ploughshares Fund, as well as by gifts from individual donors. The Stimson Center and the series' editor are grateful for their generosity. The views expressed in the papers are those of the writers. They do not necessarily represent the views of the Stimson Center, the sponsoring organizations, or of *Global Zero*.

Barry M. Blechman

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FRANCE

FRENCH PERSPECTIVES ON NUCLEAR WEAPONS AND NUCLEAR DISARMAMENT

Dr. Bruno Tertrais

When it comes to nuclear policy, France is the most conservative of the three Western nuclear weapon states, and President Nicolas Sarkozy has confirmed that he will maintain continuity in this domain. Since the end of the Cold War, however, France has also taken major, irreversible unilateral steps toward disarmament—in tune with its policy of “sufficiency” in nuclear deterrence.

Thus, while the issue of nuclear abolition continues to be met with much skepticism in the country, Paris may not want to be isolated if a major global political movement was initiated in this direction. But any decision by France to give up its nuclear weapons entirely would require extraordinary circumstances and profound changes in the strategic and political environment.

FRENCH RATIONALES FOR MAINTAINING NUCLEAR WEAPONS

France maintains nuclear weapons both because of security concerns and to support its regional and global political ambitions.

SECURITY CONCERNS

While there was undoubtedly a major political dimension in France’s original decision to build a nuclear force, security concerns were paramount, and today it is mostly security rationales that explain France’s policy to maintain nuclear weapons in the post-Cold War environment.

Among European powers, few countries felt as unsafe as France at the beginning of the second part of the 20th century. French territory had been invaded three times in a few decades, the last one resulting in its humiliating 1940 defeat—an event that traumatized future President Charles de Gaulle to the point of saying in 1943, “We must want the existence of France. Never again will it be self-evident.”* Thus, in

*Quoted in Pierre Messmer & Alain Larcen, *Les écrits militaires du général de Gaulle* (Paris: Presses Universitaires de France, 1985), page 201. The 1940 trauma was also a significant motivation for the Fourth Republic’s politicians. One of the political fathers of the French atom bomb, Felix Gaillard, said that his first reaction when hearing the news about the first test in 1960 was that France had finally overcome the 1940 defeat (André Bendjebbar, *Histoire secrète de la bombe atomique française* (Paris: Le Cherche-Midi éditeur, 2000), page 290).

the 1950s, the perception that a major new threat to the country's existence was emerging (the Soviet Western Group of Forces was stationed in East Germany, not far from French territory) caused French leaders to perceive a pressing need for a security guarantee. But French leaders did not believe the US nuclear guarantee, then being extended to the West European members of NATO, was enough of an assurance, and sought their own nuclear deterrent.

Today, major threats to Europe have disappeared, but the French still believe there is value in maintaining a nuclear deterrent for security reasons. Two rationales are put forward. The first refers to what the French often call the "life insurance" function. Most French leaders and analysts believe that the world can change rapidly and that the emergence of a new major threat to Europe within fifteen to thirty years is not a far-fetched scenario. Accordingly, it is deemed prudent to maintain a national nuclear deterrent. As then-President Jacques Chirac stated in 2006, "In light of the concerns of the present and the uncertainties of the future, nuclear deterrence remains the fundamental guarantee of our security."¹ He insisted that France is "not shielded from an unforeseen reversal of the international system, nor from a strategic surprise."² He emphasized further that the rise of nationalism and the competition between poles of power could give rise to new major threats. In short, the French logic is that even in the absence of a major threat today, it might as well keep its nuclear weapons to protect against the possibility of future threats, so long as the cost of doing so remains bearable.

While mindful that the world has changed drastically and that the notion of a bilateral strategic balance does not make sense anymore, the French consider the unraveling of the arms control process since 2001 to be an additional reason for caution. The US withdrawal from the Anti-Ballistic Missile (ABM) Treaty, Russia's subsequent abandonment of the START-2 Treaty, Moscow's decision to suspend its implementation of the Conventional Forces in Europe (CFE) Treaty and its threat to withdraw from the Intermediate-range Nuclear Forces (INF) Treaty, are all seen as factors that enhance the unpredictability of the strategic environment and thus bolster France's resolve to maintain a nuclear deterrent.

Despite France's traditionally good relations with Moscow and Beijing, the idea that one of these two countries could one day pose a major threat to Europe also is far from being dismissed in French political circles. While Russia is traditionally first on the list of "major" powers that could potentially be a threat to Europe, China now appears to come in second. In 1999, then-Prime Minister Lionel Jospin indicated that the French deterrent should be able to counter any serious threat, "even a distant one."³ This was interpreted as signifying that the build-up of nuclear arsenals in

Asia was deemed a matter of concern for Europe. Arguably, one would be hard pressed to imagine a credible scenario in which China would directly threaten France, but Paris worries about a future scenario in which, for instance, Beijing seeks to deter French involvement in a crisis in Asia by exerting a veiled nuclear threat.

The second security rationale is to guarantee that no regional power could blackmail or pressure France with weapons of mass destruction (WMD). This emerged as a serious concern with the discovery of the scope of Iraq's pre-1991 WMD program, followed by the break-up of the Soviet Union in 1991 and the fear that Belarus, Kazakhstan, or Ukraine would retain the former Soviet nuclear weapons that remained on their soil. Starting in 1992, French official texts and speeches began mentioning the validity of nuclear deterrence to protect against nuclear and other WMD regional threats, provided of course that they were serious enough to threaten the country's vital interests.

Among potential threats to French vital interests, nuclear and ballistic missile proliferation in the greater Middle East is a topic of particular attention. Breaking with a sometimes lenient attitude towards proliferation during the Cold War, France has bolstered its efforts to fight against the spread of nuclear weapons aggressively since the early 1990s. As one of the three European countries which initiated a dialogue with Iran about its nuclear program in the summer of 2003, it has become a key player on the nuclear non-proliferation scene. Specifically, France has made various suggestions to reinforce the existing non-proliferation regime. For instance, French officials have proposed means to ensure that a country leaving the NPT does not go unpunished for the violations it may have committed as a member.

A nuclear-capable Iran with the ability to strike Europe with ballistic missiles would certainly reinforce the general trend in France towards nuclear conservatism and continued modernization of its nuclear forces. Iran has had a tense relationship with France since the 1979 revolution and, in French eyes, the manner in which the current nuclear crisis is resolved is important for the future of non-proliferation and security in the Middle East. In addition, Paris has security agreements with Kuwait, Qatar, and the United Arab Emirates. The contents of these agreements have not been made public, but it could be argued that the opening of a permanent French military base in Abu Dhabi in 2008 is tantamount to extending a security guarantee.

In a worse-case scenario of free-for-all nuclear proliferation, the possibility of new nuclear-armed states in North Africa would be a particular source of worry in France. One country of particular concern to the French would be Algeria, for

obvious geographical and historical reasons, especially since it had secret nuclear activities in the 1980s.

Asian countries other than China also could be of direct concern to France if they developed Intercontinental Range Ballistic Missiles (ICBMs). This could be the case for North Korea, for example: As Pyongyang's missile ranges increase, geography will ensure that European territory will be technically at risk before US territory is endangered.

With regard to dealing with the consequences of nuclear proliferation, the prevailing opinion in Paris is that nuclear deterrence is a better and safer choice than relying on missile defenses. The kind of scenario that has French officials worried is one, for instance, in which a country tries to block military intervention by threatening to strike French national territory. This concept could be called "counter-deterrence" or "counter-blackmail." No specific countries of concern are identified in French official discourse; Paris has not adopted the US practice of "naming names," in line with a consistent practice of refusing to establish a sharp distinction between "good guys and bad guys" in the international community. However, Iran is now mentioned regularly in official foreign and security policy speeches.

GLOBAL AND REGIONAL AMBITIONS

In its origins, France's nuclear program was partly driven by a quest for global status. It was particularly important for the politicians of the Fourth Republic (1945-1958), as well as for Charles de Gaulle upon his return to power in 1958, to have equal status with the other two major Western powers, the United States and the United Kingdom. In 1954, Pierre Mendès-France, then head-of-government, came back from a meeting at the United Nations stating that "if you do not have the Bomb you are nothing in international negotiations."⁴ That same year, a note by the Ministry of Foreign Affairs stated that, "The direction of strategy will from now on, increasingly, belong to the powers possessing the atomic weapon...It is essential that France undertakes an atomic military program. Otherwise, its security will be entirely assured by the Anglo-Saxons."⁵ When De Gaulle returned to power in 1958, he considered the bomb "a political means to allow him to sit at the Great [powers'] table."⁶

Today, this concern for global status has largely disappeared. In discussing the need to maintain nuclear forces in 2008, President Sarkozy said clearly, "It is neither a matter of prestige nor a question of rank, it is quite simply the nation's insurance policy."⁷ There is no link made today in France between the country's possession of nuclear weapons and its status as a permanent member of the United Nations

Security Council. The French consider that they have special responsibilities stemming from this status and that they exert it through voluntary financial contributions to the UN organizations and through significant military contributions to UN-mandated operations. Paris actively supports opening the UNSC to new permanent members, be they nuclear (India) or not (Japan, Brazil, etc.).

However, the possession of nuclear weapons is not without connection to French foreign policy defined broadly. The underlying idea that nuclear weapons make a nation free and independent is still present in the national strategic culture. The country's nuclear status seems to be present in the back of the minds of any French president, prime minister or foreign minister in their daily pursuit of foreign policy. As President Chirac stated in 2006, “[Nuclear weapons] give us, wherever the pressures may come from, the power to be the masters of our actions, of our policy, of the enduring character of our democratic values.”⁸

One may even wonder: Would France have taken the stance it did take in early 2003—actively opposing war in Iraq to the point of threatening to veto the passing of a United Nations Security Council resolution—had it not been an independent nuclear power which did not depend on the United States for guaranteeing its security?[†]

Generally speaking, there has never been a direct link between France's political status in Europe and the possession of nuclear weapons. Throughout the Cold War, the European integration process did not see a weakening of France's relative place and role on the continent. Germany, France's foremost partner in this process, was economically strong but politically weak, and the United Kingdom was not a central player in the European game.

However, since the early 1990s, the nuclear issue has been linked with the European integration process in two different ways. One reason, as first raised by President Francois Mitterrand in 1992—at the time the European Union (EU) was created—is the difference in status between, on the one hand, France and the United Kingdom, and, on the other hand, the non-nuclear weapon states of the EU. Mitterrand worried that this difference in status in the EU could make the continuation of political integration more difficult. A second reason is that Paris would like Europe

[†] Germany became an active opponent of the Iraq war only after the French-German summit of January 2003. It is doubtful that Berlin would have opposed the war actively had it been on its own.

to benefit from the same strategic autonomy that it has enjoyed since acquiring nuclear weapons in the 1960s. French leaders are keen to transpose their concept of strategic autonomy through the possession of nuclear weapons to the EU, suggesting since 1994 that Europe will not be fully autonomous without taking into account the nuclear dimension.⁹

The sensitivity of this issue in Germany, in particular, seems to have precluded any in-depth pan-European debate on the subject, at least publicly. Furthermore, in the absence of a single political authority in the European Union, the French are not willing to share the decision to use nuclear weapons with its partners. A future “European deterrent” would entail consultations before use, some measure of risk- and responsibility-sharing, and perhaps a set of common principles for nuclear deterrence, but certainly not, for the foreseeable future at least, a common nuclear force with a single finger on the button.

So far, France has fallen short of declaring explicitly that its nuclear deterrent covers its EU partners. But French leaders have suggested increasingly that the country’s nuclear deterrent already plays an implicit role in the protection of Europe. In January 2006, President Chirac stated that

The development of the European Security and Defense Policy, the growing intermeshing of the interests of European Union countries, the solidarity that now exists between them, make the French nuclear deterrent, by its mere existence, an unavoidable element of the security of the European continent.¹⁰

In March 2008, Sarkozy used almost identical words, but also implied that the “collective solidarity clause” inserted in the new Lisbon Treaty made the existence of French nuclear deterrence even more important for Europe: “By their very existence, French nuclear forces are a key element in Europe’s security. Any aggressor who might consider challenging it must be mindful of this (...) Our commitment to the security of our European partners is the natural expression of our ever-closer union.”¹¹

ROLES, MISSIONS, AND PLANS FOR FRENCH NUCLEAR FORCES

Nuclear forces have a fundamental, but narrow role in French defense policy. Consequently, France deploys relatively small forces but plans to maintain a modern force fully capable of the missions assigned to it.

Roles and missions in French security policy

France takes a fairly traditional approach to the overall concept of deterrence. Few contemporary heads-of-state of nuclear-endowed countries would devote an entire speech to matters related to nuclear deterrence as President Chirac did in January 2006. The White Paper on National Defense and Security that was published in June 2008 has not substantially altered the French stance on nuclear policy.¹² Indeed, President Sarkozy made a speech in March 2008 on strategic issues, which while announcing some reductions in forces and arms control initiatives, essentially reaffirmed President Chirac's statements on the roles and missions of French nuclear forces. President Sarkozy's speech had been informed by the work of the White Paper's commission, which by that time had already examined nuclear questions.

The French nuclear deterrent is intended to cover France's "vital interests." The 1994 White Paper defined them as follows: "The integrity of the national territory, including the mainland as well as the overseas departments and territories, the free exercise of our sovereignty and the protection of the population constitute the core [of these interests] today."¹³ This definition has not substantially evolved, although President Chirac stated in his 2006 speech that "the defense of allied countries" could be part of vital interests.¹⁴

French policy states that an attack on France's vital interests would bring on a nuclear response in the form of "unacceptable damage," regardless of the nature of the threat, the identity of the state concerned, or the means employed. A noted part of President Chirac's 2006 speech was its reference to state-sponsored terrorism:

Leaders of States resorting to terrorist means against us, as those who might consider, one way or the other, weapons of mass destruction, must understand that they risk a firm and adapted response from us. And this response can be of a conventional nature. It can also be of another nature."¹⁵

President Chirac made it clear that France considers that terrorism or weapons of mass destruction would not necessarily represent a threat to the country's vital interests, but that France would not hesitate to use nuclear means should the threshold of vital interests be crossed in the president's view—i.e., if it was clear that this was a state attack. In 2008, President Sarkozy did not reiterate explicitly his predecessor's reference to state-sponsored terrorism, but made it clear that France's deterrent protects the country "from any aggression against our vital

interests emanating from a State – wherever it may come from and whatever form it may take.”¹⁶

Current French doctrine is to deter an attack on its vital interests through the threat of destroying the attacker’s political, economic, and military centers of power. It also includes the option to threaten an adversary who may have misjudged French resolve or miscalculated the limits of French vital interests with a limited strike (“nuclear warning”), aimed at “restoring deterrence.”¹⁷ French military authorities let it be known in 2006 that a high altitude electromagnetic pulse (HA-EMP) strike also could be an option.

French policy makes clear that when referring to deterrence, they are referring to nuclear deterrence; the two words are still very much associated in the nation’s strategic culture. The 1994 White Paper, for example, expressed considerable reservations about the relevance of “conventional deterrence” as a possible substitute for nuclear weapons.¹⁸

France has consistently rejected the adoption of a “no first-use” posture. This has been manifested by reservations attached to the Negative Security Assurances (NSAs) conferred in 1995 by France, as by the other declared nuclear powers, to the non-nuclear State Parties to the NPT. Paris sees nuclear retaliation as being consistent with the right to self-defense, as recognized by Article 51 of the UN Charter, and believes this right would prevail in the case of aggression over commitments of nuclear non-use that had been made in peacetime. France also asserts that countries that do not respect their own non-proliferation commitments—including with respect to chemical and biological weapons—should not expect that the NSA would apply to them. These reservations to the NSAs were reaffirmed in 2003.¹⁹ Similar reservations have been made whenever France ratified protocols to treaties establishing nuclear-weapon-free zones.

French authorities, including President Chirac in 2006, regularly reaffirm that their nuclear forces are solely for deterrence and “are in no way war-fighting weapons.”²⁰ In the eyes of French authorities, doctrinal and weapon system adaptations that were made following the end of the Cold War were necessary to ensure the credibility of deterrence in a wider range of scenarios than were necessary in the past, and did not signify a doctrinal change. In 2006, the then-Chief of the Defense Staff let it be known that a minimum yield for new weapons had been fixed, in order to make it clear that France was not adopting a war-fighting strategy: “We have made sure to limit downwards the yield of the weapons we maintain, so that nobody could ever forget that nuclear weapons are, by their very nature, different.”²¹ In 2008,

President Sarkozy referred to the potential use of nuclear weapons as being possible only in “extreme circumstances of self-defense.”²² The use of this expression, taken from the language of the July 1996 International Court of Justice advisory opinion, carried a subtle message. Even though France is reluctant to consider itself legally bound by political commitments made in the context of the NPT review process, such as the idea of a “diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used,” Paris was keen to show that it has not broadened the role of its nuclear deterrent.²³

Finally, there is a traditional defiance in French policy vis-à-vis missile defenses, for both strategic and budgetary reasons. France defended the Anti-Ballistic Missile (ABM) Treaty until 2001, motivated in part by the concern that demise of the Treaty would prompt Russia and other potential adversaries to bolster their defenses, potentially undermining the French deterrent or at least forcing Paris to increase its financial and technical efforts to maintain the credibility of the deterrent. Meanwhile, budgetary limitations have constrained the attractiveness of missile defenses for France itself.

However, since 2001, Paris has shown an increasing pragmatism in this domain. In 2002, it subscribed to the common NATO decision to conduct a feasibility study regarding a missile defense system for the protection of NATO European territory, forces, and population centers.²⁴ In 2006, President Chirac stated that missile defense could be a complement to nuclear deterrence “by diminishing our vulnerabilities.”²⁵ In 2008, President Sarkozy expressed a similar view: “In order to preserve our freedom of action, missile defense capabilities against a limited strike could be a useful complement to nuclear deterrence, without being a substitute for it.”²⁶ France will thus almost certainly participate in the future NATO missile defense system, be it in a direct way, through its own Sol-Air Moyenne Portée–Terre (SAMP-T) short-range defense systems, or indirectly through technical and industrial inputs by such French companies as EADS and Thales, who are involved in NATO-sponsored studies. In light of France’s long-standing reservations about territorial missile defenses, this is a significant evolution.

CURRENT FORCES AND MODERNIZATION PLANS

Nuclear programs make up about 10 percent of the entire French defense budget and about 20 percent of the country’s military equipment budget. In the 2003-2008 defense plan, on average, the nuclear budget (as voted by the Parliament in 2002) would be €2.8 billion per year. The defense nuclear budget voted for 2008 was €2.3 billion in program authorizations and €3.4 billion in payment credits, including

€1.3 billion earmarked for transfer to the Commissariat à l'énergie atomique (CEA), which fabricates French nuclear weapons.

Since the 1996 defense review, the number of French strategic submarines carrying nuclear-armed ballistic missiles (SSBNs) has been reduced from five to four. Three SSBNs of the second generation have already entered service; the fourth and final boat of this new series is due to enter service in 2010. Out of four boats in the fleet, three are always in the operational cycle, making it possible to maintain continuous patrols at-sea, with at least one vessel on patrol at all times, and even two for protracted periods of time if the president so decided.[‡]

If the force was fully generated, a total of 48 missiles and perhaps some 250-260 warheads on-board three SSBNs would be available. According to open sources, the M45 submarine-launched ballistic missile (SLBM) has a range of at least 4,000 kilometres and can carry up to six TN75 warheads, each in the 100-150 kiloton range, but some SLBMs carry a reduced payload.[§] The fourth new-generation SSBN will be the first to carry the new M51 SLBM, which initially will be the M51.1 version, loaded with the same TN75 warhead. A M51.2 will begin entering service in 2015; it will be armed with the new TNO warhead.

The range of the M51 with a full payload of warheads and penetration aids is reported to be 6,000 kilometres. However, many sources suggest that the missile could have a much greater range with a reduced payload (8,000-9,000 kilometres),²⁷ in particular in its M51.2 version. This would make it able to threaten very distant targets, including in Asia.

France also has two squadrons of land-based Mirage 2000N aircraft and a small naval carrier-based fleet of Super-Etendard aircraft, carrying the 300-kilometre range Air-Sol Moyenne Portée (ASMP) air-breathing missile. The successor to the ASMP is the "improved" ASMP (ASMP Amélioré), which entered service at the end of 2008 and is armed with the new TNA warhead. Rafale aircraft will gradually replace both the Mirage 2000N and Super-Etendard, starting in 2010. The range of

[‡] The period 2008-2010 is an exception to this rule, as during this period France has only three SSBNs, all in the operational cycle. This is due to the retirement of the last SSBN of the first generation, while the fourth new one will only enter service in 2010.

[§] Theoretically, the French SSBN force could carry a total of 288 warheads (three boats with 12 missiles per boat, and six TN75 warheads per missile). The number mentioned here is guesswork, taking into account the fact that in 2006, President Chirac stated that the number of warheads on some of the SLBMs had been reduced, allowing for more flexibility in deterrence planning.

the ASMP-A is reported to be 300-400 kilometres, and its accuracy better than that of its predecessor.

In March 2008, President Sarkozy announced a cut of one-third of the air-based leg of the nuclear deterrent – a significant reduction by French standards. This cut includes weapons, missiles, and aircraft: One of three existing nuclear-trained squadrons is to be disbanded. The decision was driven primarily by a reassessment of deterrence needs in the current and projected international environment. It did not necessarily mean that French analysts foresaw a more benign strategic context. The reassessment took into account the ongoing modernization of the French forces, including the greater flexibility given to the strategic submarines by the new missiles and warheads, as well as the coming into service of the ASMP-A, which has a longer-range and is more accurate, and of the Rafale, a more modern aircraft. The decision also relied on political judgment, namely, “how much is enough” to ensure deterrence.

When critics point out that the United Kingdom has retained only a monad since the end of the Cold War (the last British WE-177 bomb was withdrawn in 1998), analysts favoring France’s status quo note that the UK’s Trident-2 ballistic missile is much more accurate than either the French M45 or the newer M51. They also point out that London’s status within NATO’s military command—which maintains its own air-launched weapons—makes the need for an independent aircraft-based nuclear component less important. Since the United Kingdom anticipates that dealing with a major threat would probably involve the Alliance as a whole, NATO deterrence would involve both UK missiles and US bombs delivered by European and US aircraft.**

As announced by President Sarkozy in March 2008, the current number of nuclear weapons in the French arsenal is less than 300. This is the total number of warheads in the stockpile and not only “operationally available weapons,” a measure cited by the United States and the United Kingdom after their own policy reviews of 2001 (for the United States) and 2006 (for the United Kingdom).

The next generation French warheads—the TNA for the ASMP-A, which entered service in 2008, and the TNO for the M51.2, which will enter service in 2015—are called “robust” warheads in France, as they are less sensitive to variations in

** See Henri Bentegeat in « Rapport d’information fait au nom de la commission des Affaires étrangères, de la défense et des forces armées sur le rôle de la dissuasion nucléaire française aujourd’hui, » page 24. It is anticipated that a reintegration of France in the NATO military structures would not change the status of the French nuclear forces in any way, and that France would not participate in NATO’s Nuclear Planning Group.

performance resulting from the ageing of components. This concept was developed during the 1995-1996 final nuclear warhead test series. The concept is not dissimilar to that behind the proposed US Reliable Replacement Warhead program.

The French “simulation” program is aimed at maintaining an enduring, reliable stockpile without “hot” nuclear testing. It includes in particular a high-power laser (Laser Méga-Joule, LMJ), a powerful X-Ray radiography machine (Accélérateur à Induction pour Radiographie pour l’Imagerie X, AIRIX), and a massively parallel computer architecture, aiming at a 100 Teraflop per second capability in 2010.

While specific weapon adaptations have not been made public, it is widely believed that the French have diversified their yield options in recent years. The option of exploding only the first-stage “primary” of a warhead to reduce the yield may have been exploited, since it is known to be an easy adaptation to make from a technical point of view. However, since 1996, all French weapons are lumped together in a single category of “strategic” systems, providing flexibility in nuclear planning and operations. France considers that any use of a nuclear weapon would be such a major decision that the very notion of “non-strategic” or “sub-strategic” weapons or use does not make sense anymore.

In sum, the French nuclear force is just beginning a transition towards a new generation of missiles and warheads, which will stretch from 2008 until 2020.

THE FRENCH APPROACH TO NUCLEAR ARMS CONTROL AND DISARMAMENT

During the Cold War, France put conditions on its possible participation in multilateral nuclear arms control negotiations. As stated by French authorities in 1983, there were three: (i) a reduction in the quantitative and qualitative difference that existed between the French nuclear arsenal and those of the superpowers; (ii) a reduction in the conventional imbalance in Europe and the global elimination of chemical and biological weapons; and (iii) the end of the offense-defense arms race, with limitations on defensive systems, such as anti-missile and anti-submarine weaponry, capable of neutralizing nuclear deterrence forces. In 1996, President Chirac stated that he still saw no reason to put French nuclear forces on the arms control agenda, mentioning the far greater size of US and Russian arsenals, and the uncertainties about the future of the ABM Treaty and non-proliferation regime.²⁸

France considers its nuclear policy to be consistent with its international legal obligations, including Article VI of the Non-Proliferation Treaty. The head of the French delegation to the 2005 NPT Review Conference stated that his country was

“intent on reaffirming its commitments under Article VI of the Treaty.”²⁹ France maintains its force at a level of “sufficiency” (a French expression broadly equivalent to “minimum deterrent”) and has chosen “not to equip itself with all the nuclear weapons systems it could have given the technological resources at its disposal.”³⁰

However, the French have also adopted a very strict interpretation of Article VI (which was not even referenced in the aforementioned 2005 brochure). France is keen to emphasize the multidimensional character of Article VI, including the goals of cessation of the arms race and of general and complete disarmament. It considers that its actions in favor of biological, chemical and conventional disarmament (including small arms and landmines) are part of its Article VI record – as is its assistance to nuclear threat reduction in Russia.³¹ As far as its own nuclear policy is concerned, the preferred point of reference for French diplomats seems to be the “Decision Number Two” of the 1995 NPT Review Conference, rather than the “Thirteen Steps” of the 2000 Conference.³² President Sarkozy’s disarmament and non-proliferation agenda as laid out in his March 2008 speech is meant to “[take] us forward on the path to both nuclear disarmament and general and complete disarmament,” a clear reference to the inseparability, in French eyes, of the two dimensions of Article VI.³³

France’s firmness on the Article VI issue has been made stronger by the unilateral decisions and moves toward reduced armaments it has made since 1990. France has reduced the size of its arsenal by about 50 percent since the height of the Cold War. The nuclear share of the equipment budget has been reduced by half since 1990 (from about 40 percent to about 20 percent). Paris has reduced its number of nuclear delivery vehicles by two-thirds since 1985 and the number of its SSBNs by two-thirds (from six to four). It is the only one of the five NPT declared nuclear weapon-states to have developed, deployed and then abandoned ground-launched ballistic missiles and to have dismantled its nuclear testing site and fissile material production facilities.^{††} It was the first of the five NPT nuclear powers to support officially the so-called “zero option” for the CTBT – no test whatever the yield. And it was the first of the five, along with the United Kingdom, to ratify the CTBT in 1998.

^{††} The Centre d’Expérimentations du Pacifique is now dismantled. The highly-enriched uranium production facility at Pierrelatte will be fully dismantled by 2010. The plutonium production facility at Marcoule has been disabled and dismantlement has begun; however, for technical reasons, it will be fully dismantled only by 2040.

Public Opinion

France has never had a significant anti-nuclear movement. The French branches of such transnational organizations arguing in favor of nuclear disarmament as Greenpeace are in no way as strong and influential as they may be in other Western countries. Only a small number of grassroots organizations and interest groups devote their work to disarmament. About forty organizations are affiliated with the international Abolition 2000 network. José Bové, France's most well-known "anti-globalization" activist, is "personally in favor of the unilateral abandonment" of the nuclear deterrent.³⁴ The Green party, which became a government force in 1997 in an alliance with the Socialist Party, is the only significant force calling for nuclear disarmament. Its platform calls for a commitment to make Europe a nuclear-weapon-free-zone, a freeze on the nuclear deterrence budget, and the cancellation of the M51 program.³⁵ But the Greens tend to focus their criticism of French nuclear policy on the civilian side – as does the Sortir du nucléaire network, a federation of 765 small local associations. In recent years, due to the evolution of the Holy See's official stance, the Catholic Church has joined anti-nuclear movements in condemning nuclear deterrence and asking for unilateral disarmament. However, bishops remain fairly discreet on this issue – as on most public policy matters due to the strong separation that exists in France between the churches and the state.

A major reason why the anti-nuclear movement in France has never been as strong as in the United Kingdom is that, as suggested above, for the French, nuclear weapons remain the positive symbol of an independent foreign and defense policy, in particular from the United States. French political culture has long identified nuclear technology with independence. Also, the withdrawal from the NATO integrated command in 1967 largely insulated French public opinion from the broader Western strategy debate. During the Cold War, the nuclear debate in Europe was linked with the relationship with the United States and NATO. France was largely spared from this debate and did not have massive anti-nuclear protests. Finally, the French nuclear procurement cycle tends to be spread out over time and rarely lends itself to any critical decision point or moment. The current modernization of nuclear systems, for example, is spread out over more than twenty years. The first new-generation SSBN entered service in 1997; all four of them will be armed with the new-generation warhead only in 2020.

It is therefore not surprising that French public opinion supports the continued possession of nuclear weapons, and that this support has remained fairly high since the end of the Cold War. In June 2007, in response to the question, "Could a country like France ensure its defense without the deterrent force (nuclear force)?" 57 percent answered "No" against 34 percent "Yes." The number of those in favor

of “modernizing” (43 percent) and “maintaining in the current state” (35 percent) of the French deterrent has grown steadily since 2000. Conversely, those in favor of “reducing” are now a small minority (17 percent).³⁶ An Internet poll (4,573 respondents) conducted in October 2006 gave similar results: 71 percent judged that the possession of nuclear weapons by France was “vital” or “useful,” against 27 percent who thought it was “useless” or “dangerous.” The majority believed that nuclear weapons protected the country against military threats, be they nuclear or non-nuclear.³⁷

Prospects for Further Nuclear Reductions

Under what circumstances could France’s arsenal be further reduced? It is to be noted that because the future French SLBM warhead, the TNO, will be bigger and heavier than the current one (the TN75), each M51 SLBM will probably carry a smaller number of warheads than the current M45 SLBM. Thus, after 2010, when the M51 comes into service, a French president may be in a position to say that France is reducing the number of operationally available SLBM warheads.

For France to go significantly further, the international framework of strategic stability and non-proliferation would need to be maintained, and other nuclear weapon states would need to be ready to participate as well. As President Chirac stated in 2006, “it is obvious that we will only be able to go forward on the road towards disarmament in the event that the conditions of our overall security are maintained and if the will to make progress is unanimously shared.”³⁸ This position was reaffirmed by French representatives to the 2008 NPT Preparatory Committee.³⁹ President Sarkozy also insisted in 2008 that collective security and disarmament should be based on “reciprocity.”⁴⁰ Implementation of the Sarkozy initiatives of March 2008, which include, inter alia, the closing down of all testing sites and fissile material production installations by all states possessing nuclear weapons, might create a favorable atmosphere, but there is no reason why they, in themselves, would lead France to further reduce its arsenal.

What about the impact of further US and Russian reductions? France indicated in 2005 that if “the disproportion [between its forces and those of the US and Russia] changed its nature, it could envision to draw consequences” from such an evolution.⁴¹ If the United States and Russia reduced their arsenals to, say, about 1000 nuclear weapons each, it is doubtful that France would immediately feel compelled to reduce its arsenal. France’s weapons are not intended to seek to destroy the nuclear forces and conventional arsenals of other countries. Therefore, French political leaders have stated repeatedly that the level of the country’s arsenal is not dependent upon those of others.

On the other hand, if following such significant reductions in US and Russian arsenals, there was then a serious proposal initiated or supported by the United States to seek multilateral and proportional reductions, the French position might change. For political reasons, France would probably not ignore a general trend towards drastic nuclear reductions – especially if British, Chinese and French participation was a precondition for Moscow and Washington to move in this direction. In such a case, France might then perhaps be willing to move to a British-like posture: eliminating its aircraft delivered weapons and maintaining four SSBNs only, with a stockpile of perhaps no more than 150-200 warheads.

The Possibility of Reducing to Zero

Given the importance of nuclear weapons for France, the abandonment of nuclear deterrence by Paris is an extreme hypothesis. What could be the extraordinary circumstances under which France would give up this capability? Three different scenarios need to be envisioned.

Scenario One: Abolition by Example

Abolition by example is hardly a credible scenario. A British decision to give up its own deterrent, for instance, would not be enough: The “exemplary effect” that could be expected would in all likelihood be offset by the realization that France would then be the sole nuclear power in Europe – probably giving it a greater sense of responsibility, as well as a new status on the continent. An American decision to renounce nuclear weapons would be different – but France would still claim that it is the forces of its adversaries that matter for French decisions, not those of its allies.

Scenario Two: A Unilateral Decision to Disarm

A unilateral decision by Paris to disarm is hardly credible either. A consistent feature of the French nuclear stance is the insistence on the need to retain nuclear weapons as long as other states can pose a major military threat to France. This was made clear at several occasions by various French leaders. As early as 1961, President de Gaulle said that “as long as others have the means to destroy her, [France] will need to have the means to defend itself.”⁴² In 1998, Prime Minister Lionel Jospin said that “as long as general and complete disarmament will not be realized, nuclear weapons will remain necessary [for France.]”⁴³ Finally, in 2000, President Jacques Chirac said that “as long as risks persist and we have not achieved general and verified disarmament, which does not concern nuclear weapons alone, France will retain the capability to protect itself from any threat to its vital interests.”⁴⁴

Nevertheless, the circumstances under which potential major threats to the security of France have disappeared can be imagined. A first prerequisite would be a fully democratic Russia, firmly entrenched in the “Western camp” in terms of fundamental values and policies. As the biggest nuclear power in Europe’s neighborhood, Russia’s status is the most important feature of France’s strategic environment. A second condition would be that proliferation is being “rolled-back” convincingly. The risks of short- to medium-term nuclear proliferation in the Middle East and North Africa would have to disappear. The development of medium- and long-range ballistic missiles in the same region would need to have ceased, as well. This does not mean that all major threats would have disappeared – only that the calculus of costs and benefits of maintaining a nuclear deterrent would then be drastically changed, to the point that it would be difficult for a French government to fund and prepare the “generation after next” of nuclear forces, those which would need to be fielded in the 2030s.

The continued possession by the United States of a nuclear deterrent might help a French decision to go to zero. The US extended deterrent to Europe would remain a “last line of defense” in case of a sudden and dramatic reversal of the strategic environment. In other words, paradoxically, a French decision to forego its nuclear arsenal may be impossible if the United States was to disarm unilaterally.

Scenario Three: A US-led Initiative to Go to Zero

France’s participation in a coordinated move toward zero would be another extreme scenario. However, it is possible to imagine the conditions under which Paris would willingly participate in such a move.

The prospect of a major proliferation wave among Europe’s regional neighbors would not suffice for Paris to consider abolition. If they confronted a proliferation “cascade,” as has been speculated upon as a possible reaction to Iran’s acquisition of a nuclear weapon capability, the French reaction would be, “better a bird in a hand than two in the bush;” that is, French officials would believe that the safer bet would be to maintain France’s nuclear deterrent rather than participating in a global attempt to abolish nuclear weapons. They would maintain that if there were a serious possibility of a world with 30 nuclear powers, then the political conditions for the global abolition of nuclear weapons would hardly be present.

For France to go along with a US initiative to abolish nuclear weapons, there would need to be a dramatic improvement in the international environment.^{‡‡} The coming into force of the CTBT and of a Fissile Material Cutoff Treaty would probably be essential components of such an improvement. Also, nuclear proliferation would have had to be stopped demonstrably and verifiably, and France would have to be convinced that all nuclear-capable states were ready to participate in a global move towards zero.

From a French point of view, there also would also need to be significant progress towards non-nuclear stability and disarmament. This would require, at the least, fully implementing and maintaining such existing instruments as the Conventional Forces in Europe Treaty, the Biological and Toxin Weapons Convention, and the Chemical Weapons Convention. A limitation on ballistic missile proliferation would also need to be ensured, and a NATO missile defense architecture which could effectively shield Europe from any significant missile attack (whatever the payload such missiles would carry) might be needed as an insurance policy. A democratic evolution in Russia, better relations between Moscow and its immediate neighbors, as well as the political stabilization of the greater Middle East region—from Morocco to Pakistan—would certainly be needed to help France consider a move toward zero.

Scenario Four: A “Great Powers” Initiative to Go to Zero

A variant of the previous scenario might alter the perspective. While Paris would find it easy to resist a US-only initiative—as it has done in the past on many different occasions—it would be more difficult politically to do so if both Russia and China also took part in it. Beijing’s participation would be seen as critical, because it would then imply very strong pressure on New Delhi, and therefore on Islamabad, to give up nuclear weapons, as well.^{§§} Pressure on Pakistan would also work indirectly through China, which would probably use its full weight to obtain Islamabad’s cooperation.

In such a dramatic scenario, there would in all likelihood be strong pressures from within the European Union for France to follow suit. Assuming the United Kingdom was ready to play along, there would then be very strong pressures from such key countries as Germany, Italy, Spain, and Sweden, in

^{‡‡} One alternative might be a scenario in which nuclear use had taken place and triggered a general trend towards general nuclear disarmament.

^{§§} France could probably live with the idea that Israel would remain nuclear as long as there is no durable peace in the region. And North Korea would not pose a direct problem for Europe’s security as long as it does not have ICBMs.

which public support for nuclear deterrence has never been very strong. Only some East European countries, such as Poland and the Baltic States, might refrain from such pressures, given their traditional fear of Russia – which may lead them, in the absence of a US nuclear guarantee, to see UK and French forces with increased sympathy. Given France’s determination to continue to be one of the key political actors in Europe, such political pressure would be hard to resist. Before giving up its arsenal, however, Paris would certainly attempt to secure its existence for several years, waiting for concrete disarmament steps by the major nuclear players – notably the United States and Russia, given the size of their arsenals – and for proof that verification measures would be effective.

CONCLUSION

In sum, the only credible circumstances where France would be willing to seriously consider the global abolition of nuclear weapons are those in which there is no foreseeable major threat against its vital interests and those of its European partners. However, it would be difficult for Paris to stay away from a coordinated US-Russia-China initiative to begin negotiations for a treaty to eliminate nuclear weapons from all nations.

ENDNOTES

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- ¹ Allocution de M. Jacques Chirac, Président de la République, lors de sa visite aux forces aérienne et océanique stratégiques, (Landivisiau – l'Île Longue (Brest), 19 January 2006).
- ² Allocution de M. Jacques Chirac, *op. cit.*
- ³ Allocution de M. Lionel Jospin, Premier Ministre, devant l'Institut des Hautes Etudes de Défense Nationale (Paris: 22 October 1999).
- ⁴ Quoted in Dominique Mongin, *La bombe atomique française 1945-1958* (Brussels: Bruylant, 1997), page 333.
- ⁵ Quoted in Georges-Henri Soutou, "La politique nucléaire de Mendès-France," *Relations Internationales*, Vol. 59 (Fall 1989), page 320.
- ⁶ General Alfred Buchalet, "Les premières étapes, 1955-1960," in Université de Franche-Comté/Institut Charles de Gaulle, *L'aventure de la bombe: De Gaulle et la dissuasion nucléaire 1958-1969* (Paris: Plon, 1985), page 52.
- ⁷ «Discours de M. le Président de la République – Présentation du SNLE Le Terrible » (Cherbourg), 21 March 2008.
- ⁸ Allocution de M. Jacques Chirac, *op. cit.*
- ⁹ Livre Blanc sur la Défense 1994 (Paris: Editions 10/18, 1994), p. 98.
- ¹⁰ Allocution de M. Jacques Chirac, *op. cit.*
- ¹¹ Discours de M. le Président de la République, *op. cit.*
- ¹² Défense et sécurité nationale: le Livre blanc (Paris: éditions Odile Jacob, 2008).
- ¹³ Livre blanc sur la Défense 1994, op. cit., page 4.
- ¹⁴ Allocution de M. Jacques Chirac, *op. cit.*
- ¹⁵ Allocution de M. Jacques Chirac, *op. cit.*
- ¹⁶ Discours de M. le Président de la République, *op. cit.*
- ¹⁷ Discours de M. le Président de la République, *op. cit.*
- ¹⁸ See Livre Blanc sur la Défense 1994, *op. cit.*, page 99.
- ¹⁹ See Rapport de la France sur l'application de l'article VI et de l'alinéa C) du paragraphe 4 de la décision de 1995 sur les principes et objectifs de la non-prolifération et du désarmement nucléaires, Deuxième session du comité préparatoire de la conférence d'examen du TNP de 2005 (Geneva), 30 April 2003.

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- ²⁰ Conférence de presse conjointe de M. Jacques Chirac, Président de la République et de Mme Angela Merkel, Chancelière de la République Fédérale d'Allemagne à l'occasion de la rencontre franco-allemande (Versailles), 23 January 2006.
- ²¹ Henri Bentegeat, in *Rapport d'information fait au nom de la commission des Affaires étrangères, de la défense et des forces armées sur le rôle de la dissuasion nucléaire française aujourd'hui*, par M. Serge Vinçon, Sénateur, Document n° 36 (24 October 2006), page 25.
- ²² Discours de M. le Président de la République, *op. cit.*
- ²³ 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Volume I, NPT/CONF.2000/28 (New-York, 2000), page 15.
- ²⁴ See Prague Summit Declaration, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Prague on 21 November 2002, para. 4.
- ²⁵ Allocution de M. Jacques Chirac, *op. cit.*
- ²⁶ Discours de M. le Président de la République, *op. cit.*
- ²⁷ See for instance *Jane's Strategic Weapons Systems, M-5/M-51* (23 June 2006), and Jean-Dominique Merchet, « Premier tir d'essai 'réussi' du missile stratégique M51 », *Libération* (10 November 2006).
- ²⁸ Discours du Président de la République, M. Jacques Chirac, à l'Institut des Hautes Etudes de Défense Nationale (Paris), 8 June 1996.
- ²⁹ 2005 Review Conference of the State Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, General Debate, Statement by H. E. M. François Rivasseau, Ambassador, Permanent Representative of France to the Conference on Disarmament (New-York), 5 May 2005, page 7.
- ³⁰ Ministère de la défense, Secrétariat général de la défense nationale, & Ministère des affaires étrangères, *Fighting Proliferation, Promoting Arms Control and Disarmament : France's Contribution* (2005), page 64.
- ³¹ Conférence des Etats Parties chargée d'examiner en 2005 le Traité sur la Non-Prolifération des Armes Nucléaires, Comité I, Intervention prononcée par S.E.M. François Rivasseau, Ambassadeur, Représentant Permanent de la France auprès de la Conférence du Désarmement (New-York), 19 May 2005.
- ³² See 2005 Review Conference of the State Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, General Debate, Statement by H. E. M. François Rivasseau, Ambassador, Permanent Representative of France to the Conference on Disarmament (New-York), 5 May 2005.
- ³³ Second Session of the Preparatory Committee for the 2010 NPT Review Conference, Statement by H.E. Ambassador Jean-François Dobelle, Permanent Representative of France to the Conference on Disarmament, Head of the Delegation, "Cluster 1" (Geneva), 30 April 2008.
- ³⁴ José Bové, interview to I-TV television channel, « Le Franc-Parler », 30 October 2006.
- ³⁵ Les Verts, « Le monde change, avec les Verts changeons le monde » (3 August 2006), page 78.

³⁶ Annual poll by BVA for the French Defense Ministry. The data for 1991-2006 was published in *Les Français et la Défense : 15 ans de sondages (1991-2006)* (Paris : Ministère de la défense, Délégation à l'Information et à la Communication de la Défense, May 2008). The data for 2007 are not yet publicly available but were communicated privately to the author.

³⁷ Opinion poll conducted by Expression Publique, October 2006.

³⁸ Allocution de M. Jacques Chirac, *op. cit.*

³⁹ See Second Session of the Preparatory Committee for the 2010 NPT Review Conference, Statement by H.E. Ambassador Jean-François Dobelle, Permanent Representative of France to the Conference on Disarmament, Head of the Delegation, "Cluster 1", Geneva, 30 April 2008.

⁴⁰ Discours de M. le Président de la République, *op. cit.*

⁴¹ Conférence des Etats Parties chargée d'examiner en 2005 le Traité sur la Non-Prolifération des Armes Nucléaires, Comité I, Intervention prononcée par S.E.M. François Rivasseau (2005).

⁴² Press conference, 11 April 1961, in Charles de Gaulle, *Discours et Messages*, vol. III (Paris: Plon, 1970), page 72.

⁴³ Discours du Premier ministre, M. Lionel Jospin, à l'Institut des Hautes Etudes de Défense Nationale, 3 September 1998.

⁴⁴ Jacques Chirac, interview to *Armées d'Aujourd'hui*, January 2000.

