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Eliminating NATO Tactical Nuclear Weapons

May 2008

An initiative launched by four prominent American statesmen - George Shultz, William Perry, Henry Kissinger and Sam Nunn - has recently boosted international efforts to free the world of nuclear weapons.

USPID, Italy's Union of Scientists for Disarmament, supports this initiative and calls attention to it. In this context, USPID believes that whatever role NATO might have assigned to tactical nuclear weapons deployed in Europe is now completely obsolete and calls for their withdrawal.

Toward a Nuclear Free World

Twenty years ago, the entry into force on June 1st 1988 of the Intermediate-Range Nuclear Forces (INF) Treaty, marked a watershed in the history of nuclear disarmament. For the first time, a whole category of weapons – U.S. and Soviet missiles with a range comprised between 500 and 5.500 kilometers – were banned and actually destroyed as a consequence of an arms control agreement.

The treaty was of particular importance to Europe, because the old continent, East and West, was the place where most of these weapons (U.S. Pershing and cruise missiles, Soviet SS-20s) were both targeted and deployed. In 1979, after a heated and bitter domestic debate, Italy had agreed to deploy at the Sicilian base of Comiso 112 Ground-Launched Cruise Missiles (GLCM).

The INF Treaty had been signed on December 8, 1987, crowning more than a year of an unprecedented nuclear thaw initiated by Presidents Ronald Reagan and Mikhail Gorbachev at the October 1986 U.S.-Soviet summit meeting in Reykjavik. At that meeting, the two leaders went very close to eliminating all ballistic missiles and even discussed the possibility of getting rid of all nuclear weapons.

Over the following few years, the political landscape of the world radically changed. The Berlin wall fell in November 1989, the Soviet Union ceased to exist in December 1991. With them went the Warsaw Pact, the Soviet-led military alliance that confronted NATO in Central Europe. Its former Central European members and the three former Soviet Baltic republics today belong to NATO and the European Union.

The impact of these great political changes on nuclear weapon arsenals, although certainly not negligible, has been disappointing. In a world where major ideological confrontations have disappeared, there still are close to 30,000 nuclear warheads, if one accounts for both deployed and non-deployed weapons: about 15,000 in Russia, 10,000 in the U.S., 1,000 among the other three



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nuclear states of the Nuclear Non-Proliferation (NPT) Treaty, i.e. China, France and the UK, and some 300 among the only three nations remaining outside the NPT, i.e. Israel, India and Pakistan.

While estimates made by the Natural Resources Defense Council, an independent research center, suggest that some two thirds of Russian warheads and about half of the U.S. ones are held in reserve,¹ those kept on active status on strategic delivery vehicles are still at a very high level of alert – ready to be launched in a matter of minutes. A disturbing and dangerous state of affairs, which is totally incongruous with a Russian-U.S. relationship that both parties like to describe as “friendly”.

What’s equally, or perhaps more worrying, even NPT adherents have signalled a strong interest for acquiring a nuclear deterrent, as is the case with North Korea (that ran an underground test of a nuclear device). Iran (that is pursuing a nuclear enrichment capability) is also suspected to have such interest.

On top of that, the nuclear threat comes today also under the guise of terrorism. There is little doubt that if a 9/11-like band of fanatics happened to lay their hands on a nuclear device, and acquired the capability of detonating it, they would use it. Thus, it is chiefly with the risks of proliferation and nuclear terrorism in their mind, that a group of prominent former American statesmen organized a conference at the Hoover Institution two years ago - in coincidence with the 20th anniversary of the Reykjavik summit – to discuss the total elimination of nuclear weapons.

As a result of that conference, George P. Shultz (former Secretary of State 1982-1989), William J. Perry (former Secretary of Defense 1994-1997), Henry A. Kissinger (former Secretary of State 1973-1977) and Sam Nunn (former chairman of the Senate Armed Services Committee) published in early 2007 an appeal for the elimination of nuclear weapons which instantly obtained wide resonance.²

Of course, the four authors foresaw a series of gradual steps toward that goal, without making any prediction on the time it would take to get there. Nonetheless, such authoritative representatives of the American defense and foreign affairs establishment, both Democrats (Nunn and Perry) and Republicans (Kissinger and Shultz) had set for their country and the world a goal (“a world free of nuclear weapons”) that that very establishment had always considered unrealistic, utopian, or outright dangerous.

The steps mentioned in the appeal were the following.

¹ See “Nuclear Notebook”, *Bulletin of the Atomic Scientist*, March/April 2007 and September/October 2007 for data on the Russian and U.S. arsenals respectively.

² See “A World Free of Nuclear Weapons”, *The Wall Street Journal*, January 4, 2007.



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- *Changing the Cold War posture of deployed nuclear weapons to increase warning time and thereby reduce the danger of an accidental or unauthorized use of a nuclear weapon.*
- *Continuing to reduce substantially the size of nuclear forces in all states that possess them.*
- *Eliminating short-range nuclear weapons designed to be forward-deployed.*
- *Initiating a bipartisan process with the Senate, including understandings to increase confidence and provide for periodic review, to achieve ratification of the Comprehensive Test Ban Treaty, taking advantage of recent technical advances, and working to secure ratification by other key states.*
- *Providing the highest possible standards of security for all stocks of weapons, weapons-usable plutonium, and highly enriched uranium everywhere in the world.*
- *Getting control of the uranium enrichment process, combined with the guarantee that uranium for nuclear power reactors could be obtained at a reasonable price, first from the Nuclear Suppliers Group and then from the International Atomic Energy Agency (IAEA) or other controlled international reserves. It will also be necessary to deal with proliferation issues presented by spent fuel from reactors producing electricity.*
- *Halting the production of fissile material for weapons globally; phasing out the use of highly enriched uranium in civil commerce and removing weapons-usable uranium from research facilities around the world and rendering the materials safe.*
- *Redoubling our efforts to resolve regional confrontations and conflicts that give rise to new nuclear powers.*

The earliest endorsement to the four prominent Americans' call came from Mikhail Gorbachev.³ But then many others came, especially on the occasion of a second Hoover Institution conference held in October 2007 on the same topic, and of the publication of a follow-up article in early 2008.⁴

In this article, the authors acknowledged to “have also been encouraged by additional indications of general support for this project from other former U.S. officials with extensive experience as secretaries of state and defense and national security advisors. These include: Madeleine Albright, Richard V. Allen, James A. Baker III, Samuel R. Berger, Zbigniew Brzezinski, Frank Carlucci, Warren Christopher, William Cohen, Lawrence Eagleburger, Melvin Laird, Anthony Lake, Robert McFarlane, Robert McNamara and Colin Powell.”

The initiative has symbolically crossed the Atlantic and landed in Europe with the International Conference on Achieving the Vision of a World Free of Nuclear Weapons, sponsored by the Norwegian Government and held in Oslo on February 26-27, 2008.⁵

Nuclear weapons in Europe

USPID, Italy's Union of Scientists for Disarmament, shares the vision of a world free of nuclear weapons and intends to contribute to the achievement of every step leading to that goal. Since its

³ See his “The Nuclear Threat”, *The Wall Street Journal*, January 31, 2007.

⁴ See George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, “Toward a Nuclear Free World”, *The Wall Street Journal*, January 15, 2008.

⁵ Information on the conference is available at <http://disarmament.nropa.no/index.php>.



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very early years, USPID has been working on these topics and already in 1985 devoted the First Castiglioncello International Conference to “Nuclear Weapons and Europe”.

It is remarkably unfortunate how little attention has been paid by Italy’s policymakers and major media to the issue of nuclear weapons in Europe, and more recently to the debate launched by the Hoover Institution and the four American statesmen. A distraction perhaps echoed by the fact that at the Oslo meeting there were no Italian participants - Ms. Annalisa Giannella attended in her capacity as a European Union official.

Thus, at present, USPID first goal is to increase the awareness in Italy of the sea change taking place in the world thinking on nuclear deterrence and the role of nuclear weapons, by stimulating a parallel debate at the national level. The time has come, we believe, to rekindle a domestic nuclear debate that flared at the time of the deployment of NATO’s cruise missiles in Comiso, but that, after the signing of the INF Treaty, remained dormant.

Within this framework it is important to recall that, although Italy is an active member of all the international nuclear non-proliferation bodies – the NPT, the Zangger Committee and the Nuclear Suppliers Group - it also still plays host to a certain number of U.S. tactical nuclear weapons, assigned to NATO missions.

At the time of the Gorbachev-Reagan summit in Reykjavik, NATO deployed 5,845 U.S. tactical nuclear weapons in Europe, an arsenal that included aerial bombs, depth bombs, demolition mines, artillery rounds, air-to-air and surface-to-surface missiles. Of these, 426 were estimated to be in Italy.⁶

NATO doctrine at the time saw this vast nuclear underbrush as a means to compensate for what was perceived as a strong conventional superiority of the Warsaw Pact. Tactical nuclear weapons were expected to act as a “trigger” to make any east-west conflict in Europe quickly escalate to a strategic U.S.-Soviet nuclear exchange – a prospect that was supposed to play in favour of Western European interests by making overall deterrence stronger. It is of course very fortunate that these ideas were never put to a real-world test.

Indeed when a real-world test came, it was of a completely unforeseen nature. In August 1991, in fact, a coup d’état in Moscow briefly removed Gorbachev from power. For a few days, the world did not really know who was in charge of the Soviet Union – and of the chain of nuclear command and control that comes with it. Suddenly, avoiding the geographical dispersion of nuclear warheads, consolidating them in as few centers as possible under strict control was seen as a matter of very

⁶ See Marco De Andreis, “The nuclear Debate in Italy”, *Survival*, May/June 1986.



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urgent priority. Being the most scattered, tactical nukes were the prime candidates for such consolidation.

Thus, President George H.W. Bush proceeded on September 27, 1991 to unilaterally withdraw from forward bases all land-based and sea-based tactical nuclear weapons except aerial bombs, inviting at the same time the re-instated Soviet leader to do the same. Gorbachev did reciprocate a few days later, on October 5.

Today, “The United States possesses some 1,100 tactical nuclear warheads, of which approximately 480 are nuclear gravity bombs stored in six European countries (Belgium, Germany, Italy, the Netherlands, Turkey, and the United Kingdom). Russia retains an estimated 3,000 to 6,000 nonstrategic weapons, all of which it claims are stored on Russian territory.”⁷

The figure of 480 nuclear bombs deployed in Europe comes from a study of the Natural Resources Defense Council that also contains a country breakdown according to which Italy would host at two bases, Aviano and Ghedi Torre, 90 of these weapons.⁸ The 40 B-61 bombs deployed at Ghedi Torre are intended for use by Italian Tornado fighter-bombers, under a so-called NATO “dual key” arrangement whereby the host country provides the delivery means and the U.S. the actual nuclear weapon. The 50 bombs stored in Aviano are for use by U.S. airplanes.

The different types of B-61 bombs deployed in Europe have variable yields, from 0.3 to 170 Kilotons.⁹ The yields of the bombs dropped in August 1945 on Hiroshima and Nagasaki were about 13 and 21 Kilotons respectively.

More recently it became known that in all likelihood 130 bombs have been withdrawn from the airbase of Ramstein in Germany. This would bring the number of U.S. short-range nuclear weapons in Europe down to 350 and leave Germany with 20 bombs for German aircraft at the airbase of Büchel.¹⁰

If this new figure is to be trusted, for whatever reason – including the most likely, i.e. bureaucratic inertia – Italy now hosts 1 in 4 of all NATO tactical nuclear weapons, as opposed to 1 in 14 twenty years ago.

⁷ Arms Control Association, “The Presidential Nuclear Initiatives (PSI) on Tactical Nuclear Weapons at Glance”, Fact Sheet, March 2006.

⁸ See Hans M. Kristensen, *U.S. Nuclear Weapons in Europe*, Natural Resources Defense Council, February 2005.

⁹ See “Nuclear Notebook”, *Bulletin of the Atomic Scientist*, March/April 2008.

¹⁰ See Oliver Meier, “U.S. Cuts Tactical Nuclear Weapons in Europe”, *Arms Control Today*, September 2007.



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Getting rid of NATO tactical nuclear weapons

USPID sees no role for nuclear weapons in general – we share the view that their continuing existence is going to make non-proliferation efforts increasingly difficult, as other state and non-state actors see in them the same virtues (deterrence, power equalization) claimed over the past decades by the recognized nuclear states.

However, USPID sees no role *in particular* for tactical nuclear weapons. The idea that by threatening escalation to nuclear Armageddon they made NATO more secure vis-à-vis the Warsaw Pact has always been as shaky as it was frightening. Now that NATO has enlarged to include most of the former adversaries and has simply *no adversary*, we just see no reason to keep them in Europe. Note that NATO itself is keen to point out that “NATO’s nuclear forces no longer target any country” and that the readiness of NATO’s so-called dual-capable aircraft is “now being measured in *months*”¹¹ – which begs the question, why these weapons are still in Europe at all?

It is no coincidence, perhaps, that “eliminating short-range nuclear weapons designed to be forward-deployed” is one of the first steps mentioned by the four Americans on the road toward a world free of nuclear weapons (see above). And today, the U.S. has the only short-range nuclear weapons that are *actually* forward-deployed (in Europe) – besides being “designed to”.

Unless one believes that the best course of action to withdraw these weapons is to do it quietly – a route apparently taken by Greece in 2001 and Canada in 1984 – a public debate, especially among policymakers, is in order. There is the risk, in fact, that their continuing deployment in Europe be only the product of a gigantic misunderstanding whereby the Europeans believe it is the U.S. who still sees a role for them, and the U.S. believes it is the Europeans who still see a role for them – when in reality neither does.

It should not be forgotten that the U.S. began in the late fifties/early sixties to deploy nuclear weapons in Western Europe to, among other things, persuade its allies, all of whom possessed the technical capability to go nuclear, that they did not need to, since they could count on the American nuclear umbrella and its in-built linkage between theatre and strategic weapons. France did not buy the argument, but all the others did – except Britain that had decided to pursue its own bomb much earlier - and they eventually adhered to the NPT.

To make the argument stronger, the U.S. also agreed to share with the allies the control of some of the nuclear weapons deployed in Europe. These dual-key arrangements recalled above are still alive today and apparently regard 140 B-61 bombs (out of a NATO total of 350) that are assigned to

¹¹ “NATO’s Nuclear Forces in the New Security Environment”, background paper available on NATO website at <http://www.nato.int/issues/nuclear/sec-environment.html>. Emphasis added.



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European planes. Note that over the years these arrangements have raised strong criticism on the part of several non-nuclear members to the NPT, who claimed that they represent a circumvention of the European NATO members' pledge not to have or control nuclear weapons under the NPT itself.¹²

But while once nuclear-sharing used to be a privilege, granting prestige and exclusive access to NATO's Nuclear Planning Group, today the Alliance takes pain to explain that the Group is open to all members, providing "a forum in which the Defense Ministers of nuclear and non-nuclear Allies alike participate in the development of the Alliance's nuclear policy and in decisions on NATO's nuclear posture".¹³

Similarly, the argument of nuclear burden-sharing might have had some plausibility back in the early eighties, when two-thirds of NATO member states either possessed or deployed in their territory nuclear weapons. Today, only five out of twenty-three NATO non-nuclear member states deploy nuclear weapons in their territory – which is a clear indication of how most allies dislike and reject this particular burden.

One thing the European allies could do to avoid remain victims of the misunderstanding mentioned above would be to simply renounce to their own putative nuclear roles - leaving the U.S. to decide what to do with the tactical nuclear weapons assigned to U.S. planes. In NATO jargon the allied planes assigned to nuclear missions are called "nuclear-certified". So, all it would take would be to de-certify them by "the removal of all mechanical and electronic equipment [...] and the denuclearization of facilities on national air bases intended for storage and maintenance of nuclear weapons".¹⁴

USPID preferred course of action, however, would be a collective and public decision of the NATO alliance to remove, once and for all, the whole arsenal of U.S. tactical nuclear weapons from Europe and eventually destroy them.

¹² Under dual key arrangements, the U.S. fully retains positive control (arming the nuclear warhead). An ally would have positive control only when and if an armed nuclear weapon were to be assigned to its planes, i.e. in wartime and thus outside the scope of the NPT. The allies have negative control on the nuclear weapons deployed in their territory in peacetime, insofar as they can physically impede their launch.

¹³ "NATO's Nuclear Forces in the New Security Environment", *cit.*

¹⁴ Kristensen, *cit.*, pp. 6-7.



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Update

July 2008

After the release, in May 2008, of this USPID document, Hans M. Kristensen of the Natural Resources Defense Council provided new information on NATO deployments of tactical nuclear weapons.

According to Kristensen, the 110 U.S. B-61 bombs deployed at Lakenheath, in the UK, and assigned to the 48th Fighter Wing of the U.S. Air Force, have been withdrawn.¹⁵

This move further reduces NATO arsenal of tactical nukes by about a third. Three out of four of the remaining 240 weapons are now deployed on the Southern Flank, i.e. Italy and Turkey.

The current situation would thus be as in the following table, taken from the same source.

Country	Air Base	Estimated Weapons
Belgium	Kleine Brogel	10-20
Germany	Büchel	10-20
Holland	Volkel	10-20
Italy	Aviano	50
	Gheddi Torre	20-40
Turkey	Incirlik	50-90
Total		150-240

On Italy, though, the same author had hinted the previous week to the possibility that the 40 B-61 bombs deployed at Ghedi Torre Air base and assigned to the Italian Force might be about to be withdrawn due to a lack of security emerged after an investigation made by the U.S. Air Force.¹⁶

If true, this would bring the total number of NATO tactical nukes down to 200. Moreover, it would reduce to three (Belgium, Germany and the Netherlands) the number of U.S. allies still involved in nuclear burden sharing through dual-key arrangements - i.e. nuclear strike missions for national air

¹⁵ See Hans M. Kristensen, "U.S. Nuclear Weapons Withdrawn From the United Kingdom", FAS Strategic Security Blog (<http://www.fas.org/blog/ssp>), posted on June 26, 2008.

¹⁶ See Hans M. Kristensen, "'Most' Nuclear Weapon Sites In Europe Do Not Meet US Security Requirements", FAS Strategic Security Blog (<http://www.fas.org/blog/ssp>), posted on June 19, 2008.



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forces - while for two others (Italy and Turkey) nuclear burden sharing would now mean hosting U.S. airplanes and the nuclear warheads assigned to them.¹⁷

USPID of course welcomes these developments, wondering at the same time what may prevent NATO to: a) walk the extra mile down to zero; b) go public on its withdrawals; c) ask the Russian to reciprocate by withdrawing/dismantling as many as possible of its tactical nukes and providing information on its arsenal of these weapons.

This document (with its update), initially drafted by Marco De Andreis, has been discussed and unanimously endorsed by the USPID Scientific Council and National Coordinating Committee.

USPID Scientific Council and National Coordinating Committee:

Carlo BERNARDINI, Francesco CALOGERO, Giuliano COLOMBETTI, Paolo COTTA-RAMUSINO, Nicola CUFARO PETRONI, Marco DE ANDREIS, Mirco ELENA, Roberto FIESCHI, Diego LATELLA, Francesco LENCI, Giuseppe LONGO, Maurizio MARTELLINI, Giuseppe NARDULLI, Antonio PALAZZI, Mario ROCCA, Carlo SCHAERF, Fabio TARINI.

¹⁷ According to Kristensen “The National Turkish nuclear strike mission has probably expired”. See “U.S. Nuclear Weapons etc.”, *cit.*