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## NATO's Nuclear Forces in the New Security Environment

### Background



The dramatic changes in the Euro-Atlantic strategic landscape brought by the end of the Cold War have been reflected in the Alliance's 1991 Strategic Concept.

With its implementation, the Alliance has taken far-reaching steps to adapt its overall policy and defence posture to the new security environment. In realizing their new broad approach to security, which recognizes the importance of political, social and environmental factors in addition to the indispensable defence dimension, Allies have taken full advantage of the opportunities provided by the momentous improvements in the security environment. NATO's nuclear strategy and force posture were among the first areas to be reviewed. They were also the areas that, beginning in 1991, were subjected to some of the most radical changes.

There have, however, been further deep-reaching political and security developments since then which are addressed in the Alliance's 1999 Strategic Concept. Paragraphs 46 and 62-64 of this Strategic Concept set forth the essential principles for the role and characteristics of NATO's Nuclear Forces.

The Alliance's Heads of State and Government met in Prague, on 21 November 2002, to enlarge the Alliance and further strengthen NATO to meet the grave new threats and profound security challenges of the 21st century.

### Purpose

This Fact Sheet provides an account of the most significant changes to NATO's nuclear policy and force posture. It highlights the consistency with which the Alliance has lived up to its commitment to maintain only the minimum number of nuclear weapons necessary to support its strategy of preserving peace and preventing war. Furthermore, it lays out the determination and realism demonstrated by Allies in their pursuit of a wide-ranging and ambitious arms control agenda, as an integral part of NATO's security policy. Lastly, this paper reviews the role of the Alliance's remaining nuclear forces.

### Reduced Reliance on Nuclear Forces

During the Cold War, NATO's nuclear forces played a central role in the Alliance's strategy of flexible response. To deter major war in Europe, nuclear weapons were integrated into the whole of NATO's force structure, and the Alliance maintained a variety of targeting plans which could be executed at short notice. This role entailed high readiness levels and quick-reaction alert postures for significant parts of NATO's nuclear forces.



In the new security environment, NATO has radically reduced its reliance on nuclear forces. Its strategy remains one of war prevention but it is no longer dominated by the possibility of nuclear escalation. Its nuclear forces are no longer targeted against any country, and the circumstances in which their use might have to be contemplated are considered to be extremely remote. NATO's

nuclear forces continue to play an essential role in war prevention, but their role is now more fundamentally political, and they are no longer directed towards a specific threat.

## Reduced Nuclear Posture

NATO's reduced reliance on nuclear forces has been manifested in the dramatic reduction in the forces themselves. (The terms 'NATO nuclear forces' and 'NATO nuclear stockpile' are collective terms used in this document to delineate the total number of Alliance sub-strategic nuclear forces and weapons, respectively.)

- **Number and Types of Nuclear Delivery Systems**

Throughout most of the 1970s and 1980s, NATO maintained a broad mix of nuclear weapon systems, including nuclear land mines, nuclear artillery, air-to-surface missiles (ASM), anti-submarine warfare (ASW) depth bombs, surface-to-air missiles (SAM), short and intermediate range surface-to-surface missiles (SSM), Ground-Launched Cruise Missiles (GLCM), and gravity bombs delivered by dual-capable aircraft (DCA). The following graphic shows which systems were deployed by year, illustrating the significant reduction in the types of nuclear systems deployed.

	1971	1981	1987	1991	1999	2003
• Mines	x	x				
• Nike Hercules SAM	x	x	x			
• Honest John SSM	x	x				
• Lance SSM	x	x	x	x		
• Sergeant SSM	x					
• Pershing IA	x	x	x			
• Pershing II			x			
• GLCM			x			
• 155mm Howitzer	x	x	x	x		
• 8-inch Howitzer	x	x	x	x		
• Walleye ASM	x					
• ASW Depth Bombs	x	x	x	x		
• DCA Bombs	x	x	x	x	x	x
<b>Total Systems</b>	<b>11</b>	<b>9</b>	<b>9</b>	<b>5</b>	<b>1</b>	<b>1</b>

Nuclear Systems Deployed in Europe

As the Cold War ended, NATO took several unilateral steps to cancel planned modernization programmes for its nuclear forces. The United States and the United Kingdom, after intensive consultations with NATO Allies, both cancelled plans for a nuclear tactical air-to-surface missile. As a precursor of later decisions to eliminate all ground-launched sub-strategic forces, the U.S. also cancelled plans for a nuclear-capable follow-on system to the LANCE surface-to-surface missile, and for the production of a new 155 mm nuclear artillery shell. In addition, the United Kingdom

eliminated the nuclear role for its dual-capable aircraft; thus, the Royal Air Force no longer has a nuclear role.

- **Number and Types of Nuclear Warheads**

In October 1991, following an initiative by U.S. President George H. W. Bush, NATO decided to reduce the number of weapons available for its sub-strategic forces in Europe by over 85 percent. This reduction was completed in 1993. As part of these reductions, all nuclear warheads for NATO's ground-launched sub-strategic forces (including nuclear artillery and surface-to-surface missiles) were eliminated and air-delivered gravity bombs were reduced by well over 50 percent. The elimination process included some 1300 nuclear artillery weapons and 850 LANCE missile warheads. All of the nuclear warheads that had been assigned to nuclear artillery and surface-to-surface missile forces have been removed from the NATO inventory and have all been dismantled. In 1998, the United Kingdom retired – and has in the meantime also completely dismantled – all of its WE-177 nuclear bombs.

In addition, all nuclear weapons for surface maritime forces were removed.

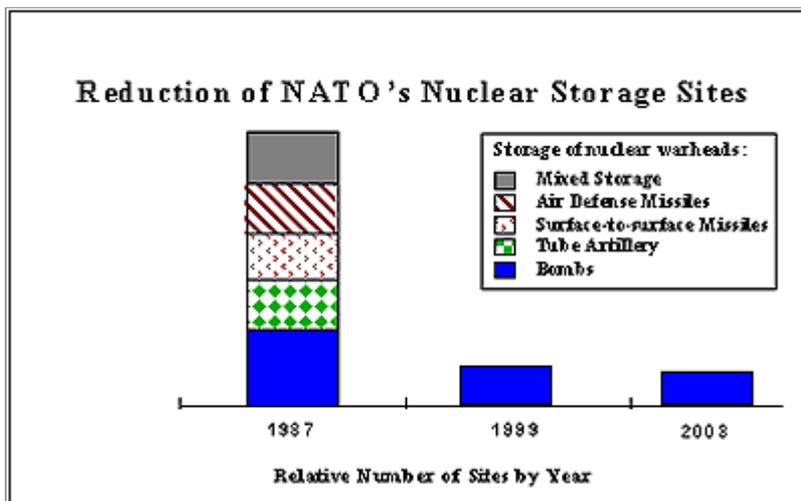
The chart below illustrates the dramatic reduction in the number of NATO's nuclear weapons stockpiled in Europe.

Not depicted on the chart are the sea-based nuclear systems belonging to the United States and/or the United Kingdom that could have been made available to NATO in crisis/conflict. The United States has completely removed all naval non-strategic/sub-strategic nuclear warheads from its surface ships and attack submarines, to include nuclear-armed Tomahawk sea-launched cruise missiles (SLCMs), which are no longer routinely deployed. The United States has also completely eliminated the nuclear role for its carrier-based dual-capable aircraft. Royal Navy surface ships no longer have any capability to carry or deploy nuclear weapons.

The chart also does not reflect a small number of UK Trident weapons on nuclear-powered ballistic missile submarines (SSBN), available for a sub-strategic role. Today, the only land-based sub-strategic nuclear weapons available to NATO are U.S. nuclear bombs capable of being delivered by dual-capable aircraft of several Allies.

• **Nuclear Storage Sites**

Continuing the trend begun during the Cold War, NATO nuclear storage sites have also undergone a massive reduction (about 80%) as weapon systems were eliminated and the number of weapons reduced. At the same time, a new, more survivable and secure weapon storage system has been installed. Today, the remaining gravity bombs associated with DCA are stored safely in very few storage sites under highly secure conditions. The following graphic illustrates this significant reduction.



Reduction of NATO's Nuclear Storage Sites

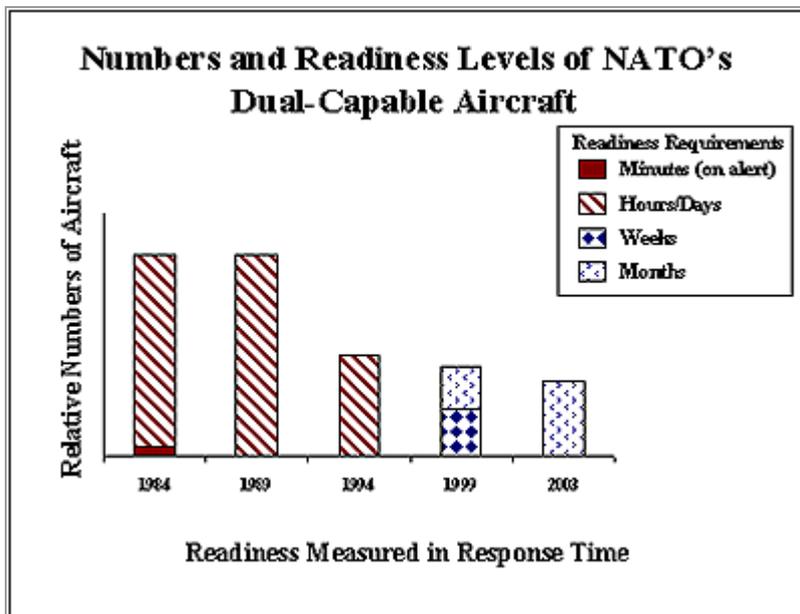
• **No Pre-Planned Targets**

With the end of the Cold War, NATO terminated the practice of maintaining standing peacetime nuclear contingency plans and associated targets for its sub-strategic nuclear forces. As a result, NATO's nuclear forces no longer target any country.

• **Numbers and Readiness Levels of Dual-Capable Aircraft**

Taking further advantage of the improved security environment, NATO has taken a number of steps to decrease the number and readiness levels of its dual-capable aircraft. At the height of the Cold War, NATO maintained a portion of these aircraft, together with other nuclear systems, on peacetime quick-reaction alert, capable of launching within minutes. During crisis or conflict, much larger numbers of nuclear delivery systems could be placed on alert. In 1995, in a first major step of relaxation, the readiness posture of dual-capable aircraft was greatly reduced, so that nuclear readiness was measured in weeks rather than in minutes. In 2002, in a second step, the readiness requirements for these aircraft were further reduced and are now being measured in months. Readiness levels over the years are illustrated graphically below.

• **NATO Enlargement**



Numbers and Readiness Levels of  
NATO's Dual-Capable Aircraft

The Allies have judged that the remaining much smaller sub-strategic force posture will, for the foreseeable future, continue to meet the Alliance's deterrence requirements. In another unilateral initiative, in December 1996, NATO Foreign and Defence Ministers announced that enlarging the Alliance would not require a change in this greatly reduced nuclear posture and that, therefore, NATO has "no intention, no plan, and no reason to deploy nuclear weapons on the territory of new member countries, nor any need to change any aspect of NATO's nuclear posture or nuclear policy, and that it does not foresee any future need to do so". NATO Heads of State and Government reiterated this statement in the Founding Act on Mutual

Relations, Co-operation and Security Between the North Atlantic Treaty Organization and the Russian Federation (May 1997). At the NATO-Russia Summit in Rome, in May 2002, when establishing the NATO-Russia Council (NRC), NATO and Russia's Heads of State and Government declared the continued validity of the Founding Act and reaffirmed the goals, principles and commitments set forth therein. At the November 2002 Prague Summit, the goals, principles and commitments in the Founding Act and Rome Declaration were reiterated by Allied leaders. New members are full members of the Alliance in all respects, including their commitment to the Alliance's policy on nuclear weapons and the guarantees which that policy affords to all Allies.

### • Strategic Force Reductions

The Strategic Arms Reductions Treaty (START) reduced the deployed strategic weapons of the United States and Russia from well over 10,000 to less than 6,000 weapons for each country. Under the U.S.-Russia Moscow Treaty on Strategic Offensive Reductions, signed on 24 May 2002, the United States will reduce and limit its operationally deployed strategic nuclear warheads to 1,700 – 2,200 by 31 December 2012. The Treaty obligates Russia to make comparable reductions. As part of the Moscow Treaty, the U.S. and Russia also agreed that the START Treaty will remain in force in accordance with its terms. Both the U.S. and Russia have ratified the Moscow Treaty and it entered into force on 1 June 2003.

Allies fully support START and the Moscow Treaty. They are convinced that both treaties help to establish more favourable conditions for actively promoting security and cooperation, and enhancing international stability.

In its 1998 Strategic Defence Review, the United Kingdom decided to reduce its independent nuclear forces by one third; it operates only one nuclear weapon system (submarine-based Trident missiles) and maintains fewer than 200 operationally available Trident warheads.

France has also made major reductions to its independent nuclear forces. Of the six types of delivery systems that were operational in 1991, only two remain, submarine-launched and air-launched missiles.

## Nuclear Arms Control, Disarmament and Non-Proliferation

NATO Allies have maintained a long-standing commitment to nuclear arms control, disarmament, and non-proliferation as an integral part of their security policy, firmly embedded in the broader political context in which Allies seek to enhance stability and security by lowering arms levels and increasing military transparency and mutual confidence. For more detailed information on these matters, see the complementary NATO Fact Sheet on "NATO's Positions Regarding Nuclear Non-Proliferation, Arms

Control and Disarmament and Related Issues, updated in June 2004.

In its 1983 "Montebello Decision" the Alliance announced, and subsequently carried out, the withdrawal of 1400 nuclear warheads from Europe. The 1987 U.S.-Soviet Intermediate Range Nuclear Forces (INF) Treaty eliminated ground-launched intermediate range and shorter range nuclear missiles, thus bringing to fruition the arms control aspect of NATO's 1979 "dual-track decision". Further far-reaching efforts are under way.

- Allies are signatories and fully support the nuclear Non-Proliferation Treaty (NPT). NATO has urged all countries which have not yet done so to accede to and fully implement the NPT, and NATO member states agree on the importance of universal adherence to and compliance with the Treaty. They have reaffirmed their determination to contribute to the implementation of the conclusions of the 2000 NPT Review Conference.
- All Allies but one have ratified and continue to support the ratification, early entry into force, and full implementation of the Comprehensive Test Ban Treaty (CTBT). In October 1999, the U.S. Senate voted against a resolution which would have provided its consent to ratifying the Treaty. The U.S. Government no longer supports the Treaty, but abides by the existing unilateral moratorium on nuclear testing. All Allies support the existing moratoria on nuclear testing and urge all states to maintain these moratoria. All Allies acknowledge that the CTBT will enter into force when all 44 states listed in Annex II of the Treaty <sup>1</sup> deposit their instruments of ratification with the United Nations.
- NATO strongly supports efforts to reduce nuclear weapons in a prudent and graduated manner. The Alliance has consistently welcomed progress with the Strategic Arms Reduction Treaty (START) and has expressed its full support for the May 2002 U.S.-Russia Moscow Treaty on Strategic Offensive Reductions.
- Allies remain committed to the immediate commencement, in the Conference on Disarmament, of negotiations on a non-discriminatory, multilateral and internationally and effectively verifiable Fissile Material Cut-Off Treaty that advances Allies' respective national security interests.
- Allies have proposed nuclear Confidence and Security Building Measures with Russia; they are intended to be pursued in consultations on nuclear weapons issues, including doctrine and strategy, and on nuclear safety issues, in the NATO-Russia Council.
- At the November 2002 Prague Summit meeting, NATO Heads of State and Government reaffirmed that disarmament, arms control and non-proliferation make an essential contribution to preventing the spread and use of WMD and their means of delivery. They stressed the importance of abiding by and strengthening existing multilateral non-proliferation and export control regimes and international arms control and disarmament accords.

All these commitments and developments are convincing testimony of the long-standing and effective efforts by Allies to live up to their objective of ensuring security and stability at the lowest possible level of forces consistent with the requirements of defence.

## **Role of NATO's Remaining Nuclear Forces**

The fundamental purpose of the nuclear forces that remain is political: to preserve peace and prevent coercion. NATO's nuclear forces contribute to European peace and stability by underscoring the irrationality of a major war in the Euro-Atlantic region. They make the risks of aggression against NATO incalculable and unacceptable in a way that conventional forces alone cannot. Together with an appropriate mix of conventional capabilities, they also create real uncertainty for any country that might contemplate seeking political or military advantage through the threat or use of weapons of mass destruction against the Alliance.

The collective security provided by NATO's nuclear posture is shared among all members of the Alliance, providing reassurance to any member that might otherwise feel vulnerable. The presence of U.S. nuclear forces based in Europe and committed to NATO provides an essential political and military link between the European and North American members of the Alliance. At the same time, the participation of non-nuclear countries in the Alliance nuclear posture demonstrates Alliance solidarity, the common commitment of its member countries to maintaining their security, and the widespread sharing among them of burdens and risks.

Political oversight of NATO's nuclear posture is also shared among member nations. NATO's Nuclear Planning Group provides a forum in which the Defence 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.

NATO must retain - and must be seen to retain - a core of military capabilities with an appropriate mix of forces affording it the basic military strength necessary for collective self-defence. NATO's nuclear forces remain an essential element of that core capability. At the same time, the dramatic changes in the security environment since the Cold War have allowed NATO to undertake equally dramatic reductions in its nuclear posture and in its reliance on nuclear weapons.

This text is not a formally agreed NATO document and does not therefore necessarily represent the official opinion or position of individual member governments on all policy issues discussed.

1. The United States is a State included in Annex II of the CTBT.