Appendix A

Catalog of Moves
to a Transition to Nuclear Zero

Bruce D. Larkin

This is a selective, draft, preliminary list cataloguing measures to advance weapon denuclearization. The plan is to identify each move concisely, add a sentence or two of explanation, and then—with assistance of colleagues—identify one or more especially significant source (description, document, article, book) about the measure.

Some of these ‘moves’ are actually stubs: topical placeholders inviting more specific ‘moves’.

Listing numbers may be changed in subsequent versions.

The complementary list of WMD Commission (Blix Commission) recommendations is attached at the end of this document.

SECTION HEADINGS

A. The Treaty Regime
B. US-Russian Bilateral Relations, &c.
C. Fissile Material
D. Nuclear Systems
E. Deployment Practices. Inventory Reduction.
F. Dismantling Weapons and Facilities
G. Accounting
H. Stability Measures
I. Institutional and Processual Measures
J. Enhanced Verification Capabilities
L. Addressing Political Obstacles to Denuclearization
M. Nuclear Weapons-Free Zones
N. Enforcement
O. Authoritative Decision

Abbreviations and Revision History: at the end of the appendix.

Bruce D. Larkin: Catalog of Moves in a Transition to Nuclear Zero
A. The Treaty Regime

[A.1] UN Security Council

The UN Security Council bears, under the Charter, “principal responsibility for the maintenance of international peace and security.” It could seize itself of nuclear weapons; it could hold that mere possession, in itself, threatens international security. The 2000 NPT Review Conference “reaffirms that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State … ” It also said that “the total elimination of nuclear weapons is the only absolute guarantee against the use or threat of use of nuclear weapons.”

By Resolution 1540 the UNSC declared that proliferation of nuclear weapons “constitutes a threat to international peace and security.” That resolution carefully avoids addressing ‘mere’ possession.

Cf. Recommendation 60 of the WMD Commission (Blix Commission) on UNSC action.²

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² WMD Commission Recommendation 60:

“The United Nations Security Council should make greater use of its potential to reduce and eliminate threats of weapons of mass destruction – whether they are linked to existing arsenals, proliferation or terrorists. It should take up for consideration any withdrawal from or breach of an obligation not to acquire weapons of mass destruction.

“Making use of its authority under the Charter to take decisions with binding effect for all members, the Council may, inter alia: require individual states to accept effective and comprehensive monitoring, inspection and verification; require member states to enact legislation to secure global implementation of specific rules or measures; and decide, as instance of last resort, on the use of economic or military enforcement measures.

“Before UN reform has made the Security Council more representative of the UN membership, it is especially important that binding decisions should be preceded by effective consultation to ensure that they are supported by the
[A.2] The Non-Proliferation Regime: NPT and IAEA.

[A.2a] Additional Protocol (INFCIRC/540)

The Gulf War (1990-1991) exposed the inability of IAEA to identify an illicit nuclear weapon program. The remedy was to draft recommended provisions to which IAEA member States would commit voluntarily, including broader IAEA on-site inspection rights. States’ completing steps to adhere to the Additional Protocol is a priority objective of the regime.

[A.2b] NPT Universalization

Only Israel, Pakistan, and India have not signed the Nuclear Non-proliferation Treaty. North Korea signed and ratified, but amid controversy withdrew.


At the 2005 NPT Review Conference the United States—that is, the GW Bush Administration—dismissed positions to which the United States had committed in 1995 and 2000. The ‘13 Points’ were nothing more than “suggestions.” US reaffirmation of 1995 and 2000 commitments would heal this breach of commonality.\(^3\)

\[^3\] Washington asserts that “the ‘Thirteen Steps’ [declared at the 2000 NPT Review Conference] now constitute an inadequate set of policy priorities for achieving the goals of Article VI and the Preamble of the Treaty.” Further, it asserts a distinction between ‘legal’ results and “statements of political rather than legal agreement,” and diminishes the ‘Thirteen Steps’ as mere “political statements”, as “suggestions.” The White House has concluded that “the ‘Thirteen Steps’ formulation from 2000 does not fit today’s conditions.” “The security environment has changed substantially since 2000, and we cannot assume that all suggestions made then necessarily remain relevant today.” Critics of this White House position believe Washington’s claims violate the principle of irreversibility.

In fact, the US presentation endeavors to redefine irreversibility, replacing its plain meaning by an economistic calculation of a “balance of costs and benefits” in the minds of “would-be violators.” Of course, that’s not what the White House means: what it means is that the United States can abandon its prior commitment to positions agreed among States Party whenever it determines that such-and-such is in the minds of the membership of the UN and will be accepted and respected.”
[A.3] CTBT Ratification and Entry Into Force

The CTBT opened to signature in September 1996. Its ‘entry into force’ provision requires that all of a group of 44 countries ratify. The 44 include a number of states which have not signed, or have signed but not ratified. Iran and Israel have signed but not ratified; India, Pakistan and North Korea have not signed. France, Russia, and the United Kingdom have ratified. China and the United States have signed but not ratified. [CTBT ratification would be a symbolic step toward Zero, but with few practical effects.]

[A3.a] Test Moratorium

… pending CTBT entry into force.⁴

[A.4] Negotiating Forum to Address Nuclear Disarmament

For example, within the CD.⁵

The WMD Commission (Blix Commission) wrote that “There is an urgent need to revive meaningful negotiations, through all available intergovernmental mechanisms, on the three main objectives of reducing the danger of present arsenals, preventing proliferation, and outlawing all weapons of mass destruction once and for all.”⁶

[A.5] Irreversibility

Attach the norm of ‘irreversibility’ to steps toward denuclearization. [This might require, for example, leadership of a state which may or might be a ‘violator’ sometime in the future. Why would States negotiate with Washington if it insisted on this caveat? The point is that the GW Bush White House did not want these subjects negotiated.

⁴ [A.2] and [A.2a] are among the ‘practical steps’ agreed at the 2000 NPT Review Conference.
⁵ The 2000 NPT Review Conference called for such a body within the CD, among agreed ‘practical steps’.
abandoning the conventional treaty provision that states may withdraw from a treaty because of changes threatening its vital interests.]’

[A.6] ‘Unequivocal Undertaking’ to Zero

The key language of paragraph 6 of the ‘practical steps’ agreed at the 2000 NPT Review Conference: “6. An unequivocal undertaking by the nuclear weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all States parties are committed under article VI.”


The GW Bush administration abandoned the 1972 Anti-Ballistic Missile Treaty. Its aims could be brought within the terms of a treaty banning ‘strategic missiles’ with nuclear warheads, which we could call a ZBM Treaty.

B. US-Russian Bilateral Relations, &c.

[B.1] START Treaty Extension

The US-Russian Strategic Arms Reduction Treaty (‘START I’) expires at the end of 2009. It includes verification provisions; there is call for their extension beyond 2009.

[B.2] Trilateral Initiative

“Those seeking to design a system for verifying the dismantlement of nuclear weapons do not have to start from a blank slate. They can benefit a great deal from building on the experience of the Trilateral Initiative. This was a six-year (1996-2002) effort to develop a verification system under which Russia and the United States could submit classified forms of weapons-origin fissile material to International Atomic Energy Agency (IAEA) verification

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7 The 2000 NPT Review Conference also called for irreversibility among agreed ‘practical steps’.

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and monitoring in a irreversible manner and for an indefinite period of time.”

[B.3] US ABM System Element Deployment to Poland and Czechoslovakia

The Bush Administration has insisted that its proposed deployment is defensive against Iran. Russia insists that the deployment would threaten it.

[B.4] Collaborations

Cf. the US-Russian collaborative programs: the MPC&A (Material Protection, Control & Accounting) Program, for which the US partner is the Department of Energy, and the parallel Nunn-Lugar Cooperative Threat Reduction Program, partnered with the Department of Defense.

C. Fissile Material

[C.1] Management of Uranium Enrichment

Although the NPT permits all States Party to enrich uranium for civil purposes, the Bush Administration, and others, insist that Iranian uranium enrichment is part of alleged Iranian striving for nuclear weapons and therefore must not be permitted. The UN Security Council has adopted resolutions imposing modulated strictures and sanctions on Iran.

[C.1a] A ‘Fuel Bank’ to Manage Uranium for Civil Reactor Use

Mohamed ElBaradei and others have proposed various forms of a ‘Fuel Bank’ which would place uranium enrichment, delivery of fuel, and retrieval of spent fuel under an agreed system of management and control.

[C.2] Control of HEU Used as Reactor Fuel

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Retrieval of spent fuel aside, several ad hoc agreements have been made and executed to return HEU, held by non-nuclear-weapon states for civil purposes, to the nuclear weapon state by which it was supplied. Other HEU is not the subject of such an agreement.

[C.2a] Removal of HEU From Research Reactors

[C.2b] Cease Using HEU as Fuel in Reactors for Naval Propulsion

[C.3] ‘Denaturing’ of ‘Excess’ HEU

The Acheson-Lilienthal Report included as one step that could be taken further diluting HEU by mixing the $^{235}\text{U}$ with quantities of $^{238}\text{U}$ until the level of $^{235}\text{U}$ was below 25%. The term they used to describe this is ‘denaturing’. Some Russian HEU is being delivered to the United States in diluted form as part of a bilateral deal.

[C.4] Designing ‘Proliferation Resistant’ Nuclear Reactors

[C.5] Placing Spent Reactor Fuel ‘Beyond Reach’

The aim is to prevent, or render far more difficult, access to spent reactor fuel to extract from it fissile material (Pu, $^{235}\text{U}$). One proposal is to ‘vitrify’ the spent fuel, encasing it in glass, and placing the resultant cylinders into a deep shaft. Another is to recycle separated fissile material as reactor fuel.


A treaty might, for example, prohibit producing unsafeguarded weapons-grade $^{235}\text{U}$ or Pu.9

9 The 1995 NPT Review and Extension Conference called for a fissile material convention. “The immediate commencement and early conclusion of negotiations on a non-discriminatory and universally applicable convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices … ” The 2000 NPT Review Conference put the ‘practical step’ this way: “The necessity of
[C.8] Transfer ‘Excess’ Military FM to Verified Peaceful Purposes

This step was called for in 2000 NPT Review section 15.10

[C.9] Systematic Study of Fissile Material Control

For example, consider work of the International Panel on Fissile Materials, established in 2006, especially their annual reports.11

D. Nuclear Systems

[D.1] Foregoing Delivery System Enhancements

Nuclear weapon states could agree to forego refinements of their delivery systems. The Russian announcement that it intended to improve the penetration capabilities of Russian nuclear missiles is an example of intent to enhance declared.12

negotiations in the Conference on Disarmament on a nondiscriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices … “ Consensus on two key issues—what constitutes ‘verifiability’? and how to achieve a ‘non-discriminatory’ text which does not advantage those with nuclear weapon inventories—has been elusive.

10 15.10: “Arrangements by all nuclear-weapon States to place, as soon as practicable, fissile material designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside military programmes.”

11 http://www.fissilematerials.org/ IPFM declares its purpose: “The mission of the IPFM is to analyze the technical basis for practical and achievable policy initiatives to secure, consolidate, and reduce stockpiles of highly enriched uranium and plutonium. These fissile materials are the key ingredients in nuclear weapons, and their control is critical to nuclear weapons disarmament, to halting the proliferation of nuclear weapons, and to ensuring that terrorists do not acquire nuclear weapons.”

[D.2] Foregoing Warhead Enhancements

Bush Administration efforts to win Congressional support for development of a ‘Reliable Replacement Warhead’ is an example of a proposed enhancement.

[D.3] Developing ‘Conventional’ Equivalents

The declared role, and justification, for some deployed nuclear weapons would be challenged if ‘conventional’ equivalents could be deployed in their place. For example, precision guidance of a ‘conventional’ HE weapon could bring about as much destruction as was needed, where it was needed, rather than relying on a more powerful nuclear explosion to destroy the target.

E. Deployment Practices. Inventory Reductions.

[E.1] Dealerting Deployed Nuclear Weapon Systems

Deployed nuclear systems are ‘ready’, or can be ‘ready’ soon after a command to prepare to launch. ‘Dealerting’ moves systems to a state one or more steps removed from being ‘ready’, with the aim of reducing probability of unauthorized launch or launch by error, and giving time for reconsideration.13

[E.2] Abandoning Categories of Nuclear Weapons, or Moving Them to an ‘Unalerted’ Status

intercontinental ballistic missiles would be modernized to protect them from space-based components of the United States missile defense system, the news agency Interfax reported. He also said the military would commission new RS-24 missiles with systems to help penetrate a missile shield. The Kremlin has fiercely opposed the United States plan to deploy 10 missile interceptors in Poland and a related radar system in the Czech Republic.”

In September and October 1991 GHW Bush and Mikhail Gorbachev took unilateral steps to reduce the number of deployed nuclear weapons. Each removed nuclear weapons from surface ships; cruise missiles were removed from submarines (but for retention, not dismantlement); and tactical nuclear weapons (not deliverable by attack aircraft) were repatriated from Western and Eastern Europe.

France abandoned its ground-based nuclear systems. The United Kingdom has given up aircraft-borne systems.

The Blix Commission urged: “Take nuclear weapons off high-alert status to reduce the risk of launching by error’; make deep reductions in strategic nuclear weapons” and placing “all non-strategic nuclear weapons in centralized storage.”

[E.3] Sequential Reduction of Warhead Inventories
[E.4] ‘Jump to Zero’ (‘Last Mile’) Nuclear Abolition
[E.5] Agreed Multilateral Cacheing of Nuclear Weapons
[E.5a] … By an International Body (e.g. UNSC)
[E.5b] … Jointly, by the Nuclear Weapons States
[E.5c] … As an Enforcement Capability
[E.5d] … As a Temporary Measure Pending Abolition

F. Dismantling Weapons and Facilities
[F.1] Dismantling Retired Warheads

Some dismantlement takes place. The United States, however, has a long backlog of retired weapons awaiting dismantlement.

[F.2] Techniques to Trace and Evidence Dismantlement

See [J.1] Enhanced Verification

[F.3] ‘General and Complete Disarmament … ’

The 2000 NPT Review Conference includes among ‘practical steps’: “11. Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.”

G. Accounting

[G.1] Accounting: Declarations

Declaring facts germane to accounting of fissile material and warheads will contribute to subsequent complete disclosure. For example, the United States, during the Clinton Administration, made much fuller declaration of nuclear tests than had been made previously.

No strategic harm would occur from disclosing, for example, the deployment histories of dismantled warheads, or deployments of thirty years ago.

[G.2] Accounting: Preserving Archives

Multiple copies of documents and computer records required to achieve complete disclosure should be made and deposited in secure repositories. The existence and completeness of those records should be periodically verified by audit.


The nuclear weapon states, and those states which began but abandoned nuclear weapon programs, could interview personnel who took part in the programs to develop detailed accounts of procedures for inventorying weapon production and tracking warheads. Interviews could include
explanations of the typical handling of key documents. Who prepared these records? On what evidence? Subject to what procures for subsequent correction? &c. *Mutatis mutandis* the same should be done for fissile material streams.

**H. Stability Measures**\(^{15}\)

[H.1] Downsizing of Nuclear arsenals

*See* [E.3] Sequential Reduction of Warhead Inventories

[H.2] Greater NW State Transparency

[H.3] Unilateral Reductions in ‘Non-Strategic’ NWs

Eliminating ‘tactical nuclear weapons’, ‘sub-strategic weapons’, and functionally equivalent ‘variable-yield warheads’ from inventories. The argument is that these tempt use for purposes other than nuclear deterrence, such as ‘war-fighting’.


*See* [E.1] Dealerting Deployed Nuclear Weapon Systems.

[H.5] Reduced Defense Reliance on NWs

*See* [H.7] NW States’ Restricting Uses to Nuclear Deterrence Only

[H.6] NW States’ Joining in Process Leading to Zero NWs

*See* [A.3] Negotiating Forum to Address Nuclear Disarmament.

[H.7] NW States’ Restricting Uses to Nuclear Deterrence Only

That is, neither adopting as policy, nor making preparations, to use nuclear weapons to deter non-nuclear

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\(^{15}\) Cf. section 15 paragraph 9 of the 2000 NPT Review Conference conclusions, in which a number of these measures with aim to promote “international stability” are listed.
attack or suppress ‘WMD’ capabilities, as ‘bunker busters’, for engineering purposes, to produce EMP or directed energy, or for any other purpose than nuclear deterrence.

I. Institutional and Processual Measures

[I.1] See [A.4] Negotiating Forum to Address Nuclear Disarmament

[I.2] Accountability Measures

2000 NPT Review Conference [15.12]: “Regular reports, within the framework of the strengthened review process for the Non-Proliferation Treaty, by all States parties on the implementation of article VI and paragraph 4 © of the 1995 Decision on “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”, and recalling the advisory opinion of the International Court of Justice of 8 July 1996.”

J. Verification

[J.1] Enhanced Verification

2000 NPT Review Conference [15.13]: “13. The further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world.”


[K.1] The Blix Commission: “States, individually and collectively, should consistently pursue policies designed to ensure that no state feels a need to acquire weapons of mass destruction.”

[K.2] Issues Posed By: North Korea

[K.3] Issues Posed By: Iran

[K.4] Issues Posed By: Israel

[K.5] Issues Posed By: India

[K.6] Issues Posed By: Pakistan

[K.7] Acerbic Disputes: Israeli Occupation of Palestinian Territories

[K.8] Acerbic Disputes: Chinese Claim to Taiwan

[K.9] Acerbic Disputes: India-Pakistan

[K.10] Risk Analyses

Martin Hellman urges systematic study of ‘risk’ that an episode could lead to nuclear weapon use.\(^\text{17}\)

\*L. Addressing Political Obstacles to Denuclearization*

[L.1] United States

[L.2] United Kingdom

[L.3] France

[L.4] Russia

[L.5] China

[L.6] Israel

[L.7] India

[L.8] Pakistan

\*M. Nuclear Weapon-Free Zones*

[M.1] Zones: Exponents of Regional Denuclearization

\(^{17}\) http://nuclearrisk.org/statement.php

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Zones: Nuclear Weapon States’ Adherence to Zonal Protocols

Zones’ treaties typically include protocols to which the nuclear weapon states are invited to adhere. Those which have not done so could adhere. Terms leading regions toward global ZNW could be negotiated.

N. Enforcement

[N.1] Stand-By: State-Designated Stand-By Military Units


[N.3] Support Readiness: Communications and Logistics

N. Authoritative Decision

[O.1] See UNSC

[O.2] Compliance Orders

[O.3] Non-Military Enforcement

[O.4] Armed Enforcement
The Blix Commission: 13 Nuclear Recommendations

We’ve noted a number of Blix Commission proposals, above. The Commission summarised its recommendations on nuclear weapons in thirteen initial points, reproduced here.

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ANNEX 1: WMDC RECOMMENDATIONS

NUCLEAR WEAPONS
Preventing the proliferation of nuclear weapons

WMDC RECOMMENDATION

1 All parties to the Non-Proliferation Treaty need to revert to the fundamental and balanced non-proliferation and disarmament commitments that were made under the treaty and confirmed in 1995 when the treaty was extended indefinitely.

WMDC RECOMMENDATION

2 All parties to the Non-Proliferation Treaty should implement the decision on principles and objectives for non-proliferation and disarmament, the decision on strengthening the Non-Proliferation Treaty review process, and the resolution on the Middle East as a zone free of nuclear and all other weapons of mass destruction, all adopted in 1995. They should also promote the implementation of ‘the thirteen practical steps’ for nuclear disarmament that were adopted in 2000.

WMDC RECOMMENDATION

3 To enhance the effectiveness of the nuclear non-proliferation regime, all Non-Proliferation Treaty non-nuclear-weapon states parties should accept comprehensive safeguards as strengthened by the International Atomic Energy Commission.

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Agency Additional Protocol.

WMDC RECOMMENDATION

4 The states parties to the Non-Proliferation Treaty should establish a standing secretariat to handle administrative matters for the parties to the treaty. This secretariat should organize the treaty’s Review Conferences and their Preparatory Committee sessions. It should also organize other treaty related meetings upon the request of a majority of the states parties.

WMDC RECOMMENDATION

5 Negotiations with North Korea should aim at a verifiable agreement including, as a principal element, North Korea’s manifesting its adherence to the Non-Proliferation Treaty and accepting the 1997 Additional Protocol, as well as revival and legal confirmation of the commitments made in the 1992 Joint Declaration on the Denuclearization of the Korean Peninsula: notably, that neither North nor South Korea shall have nuclear weapons or nuclear reprocessing and uranium enrichment facilities. Fuel-cycle services should be assured through international arrangements. The agreement should also cover biological and chemical weapons, as well as the Comprehensive Nuclear-Test-Ban Treaty, thus making the Korean peninsula a zone free of weapons of mass destruction.

WMDC RECOMMENDATION

6 Negotiations must be continued to induce Iran to suspend any sensitive fuel-cycle-related activities and ratify the 1997 Additional Protocol and resume full cooperation with the International Atomic Energy Agency in order to avoid an increase in tensions and to improve the outlook for the common aim of establishing a Middle East zone free of weapons of mass destruction. The international community and Iran should build mutual confidence through measures that should include: reliable assurance regarding the supply of fuel-cycle services; suspending or renouncing sensitive fuel-cycle activities for a prolonged period of time by all states in the Middle East; assurances against attacks and subversion aiming at regime change; and facilitation of international trade and investment.

WMDC RECOMMENDATION

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The nuclear-weapon states parties to the Non-Proliferation Treaty should provide legally binding negative security assurances to non-nuclear weapon states parties. The states not party to the Non-Proliferation Treaty that possess nuclear weapons should separately provide such assurances.

**WMDC RECOMMENDATION**

8 States should make active use of the IAEA as a forum for exploring various ways to reduce proliferation risks connected with the nuclear fuel cycle, such as proposals for an international fuel bank; internationally safeguarded regional centres offering fuel-cycle services, including spent-fuel repositories; and the creation of a fuel-cycle system built on the concept that a few ‘fuel-cycle states’ will lease nuclear fuel to states that forgo enrichment and reprocessing activities.

**WMDC RECOMMENDATION**

9 States should develop means of using low-enriched uranium in ships and research reactors that presently require highly enriched uranium. The production of highly enriched uranium should be phased out. States that separate plutonium by reprocessing spent nuclear fuel should explore possibilities for reducing that activity.

**WMDC RECOMMENDATION**

10 All states should support the international initiatives taken to advance the global clean-out of fissile material. Such support should encompass the conversion of research reactors from highly enriched to low enriched uranium fuel, storing fissile material at centralized and secure locations, and returning exported nuclear materials to suppliers for secure disposal or elimination.

**WMDC RECOMMENDATION**

11 All Non-Proliferation Treaty nuclear-weapon states that have not yet done so should ratify the protocols of the treaties creating regional nuclear-weapon-free zones. All states in such zones should conclude their comprehensive safeguards agreements with the IAEA and agree to ratify and implement the Additional Protocol.

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WMDC RECOMMENDATION

12 All states should support continued efforts to establish a zone free of weapons of mass destruction in the Middle East as a part of the overall peace process. Steps can be taken even now. As a confidence building measure, all states in the region, including Iran and Israel, should for a prolonged period of time commit themselves to a verified arrangement not to have any enrichment, reprocessing or other sensitive fuel-cycle activities on their territories. Such a commitment should be coupled with reliable assurances about fuel-cycle services required for peaceful nuclear activities. Egypt, Iran and Israel should join the other states in the Middle East in ratifying the CTBT.

WMDC RECOMMENDATION

13 India and Pakistan should both ratify the CTBT and join those other states with nuclear weapons that have declared a moratorium on the production of fissile material for weapons, pending the conclusion of a treaty. They should continue to seek bilateral détente and build confidence through political, economic and military measures, reducing the risk of armed conflict, and increasing transparency in the nuclear and missile activities of both countries. Eventually, both states should become members of the Nuclear Suppliers Group and the Missile Technology Control Regime, as well as parties to International Atomic Energy Agency safeguards agreements under the terms of the 1997 Additional Protocol.
**Abbreviations**

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<thead>
<tr>
<th>Abbr</th>
<th>Description</th>
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<tbody>
<tr>
<td>CD</td>
<td>Conference on Disarmament</td>
</tr>
<tr>
<td>CTBT</td>
<td>Comprehensive Test Ban Treaty</td>
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<tr>
<td>FM</td>
<td>Fissile Material</td>
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<tr>
<td>FMCT</td>
<td>Fissile Material Control Treaty or Fissile Material Cutoff Treaty</td>
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<tr>
<td>HEU</td>
<td>Highly Enriched Uranium</td>
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<tr>
<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>NPT</td>
<td>Non-Proliferation Treaty [Treaty on the Non-Proliferation of Nuclear Weapons]</td>
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<td>NW</td>
<td>Nuclear Weapon(s)</td>
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<tr>
<td>UNSC</td>
<td>United Nations Security Council</td>
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<td>WMD</td>
<td>Weapons of Mass Destruction</td>
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