

FACING NUCLEAR DANGERS:  
AN ACTION PLAN FOR THE 21ST CENTURY

The Report of the Tokyo Forum  
for Nuclear Non-Proliferation and Disarmament

Tokyo

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Japan Institute of International Affairs  
Hiroshima Peace Institute

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Preface

The Tokyo Forum for Nuclear Non-Proliferation and Disarmament was organised at the initiative of the then Prime Minister of Japan, Mr Ryutaro Hashimoto, in August 1998. The initiative was taken up by the then Foreign Minister and current Prime Minister of

Japan, Mr Keizo Obuchi. It was co-chaired by former Ambassador Mr Nobuo Matsunaga of the Japan Institute of International Affairs and former UN Under-Secretary-General and former President of the Hiroshima Peace Institute Mr Yasushi Akashi. The Forum met four times: in August 1998, in Tokyo; in December 1998, in Hiroshima; in April 1999, at Pocantico, New York; and in July 1999, in Tokyo.

The following report and its recommendations are the result of discussions in those meetings. The members of the Tokyo Forum subscribe to the general thrust of the report but not every member may agree to every point in the report. They have participated in their personal capacities, thus the views expressed in the report do not necessarily reflect the views of the governments or organisations to which they belong. Special acknowledgement is given to the valuable contributions made by Ambassador Qian Jiadong of China, who attended the first, second and third meetings of the Forum and was succeeded by Mr Hu Xiaodi\*, who, in the end, had dissenting views on some significant points in the report. Acknowledgement is also given to the valuable contributions made by Mr Jasjit Singh of India who attended the first and second meetings of the Forum. While the Forum was initiated by the Japanese Government, the views in this report are those of the Forum, an independent panel of experts, and should not be understood as necessarily reflecting policies of the Japanese Government.

The Forum received many proposals from concerned non-government organisations and citizens. The Forum welcomed these proposals, and considered them carefully in preparing its report.

The Forum was supported by a Secretariat constituted from the Japan Institute of International Affairs, the Hiroshima Peace Institute, and the Japanese Ministry of Foreign Affairs (Arms Control and Scientific Affairs Bureau). The Secretariat notes the contribution to its work made by Mr Rory Medcalf, seconded in a personal capacity from the Australian Department of Foreign Affairs and Trade.

\* Mr Hu Xiaodi has disagreement over, inter alia, issues of MTCR, missile defences, fissile material moratorium, transparency, Korea, paragraphs 30 and 39 of Part 2 of the report, and the fourth key recommendation.

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Members of the Tokyo Forum

Lt. Gen. Nishat AHMAD

Former President of the Institute of Regional Studies, Islamabad

Mr Yasushi AKASHI

Former President of Hiroshima Peace Institute

Amb. Marcos Castrioto DE AZAMBUJA

Ambassador of Brazil to France

Prof. Sergei Yevgenevich BLAGOVOLIN

Deputy Director, World Economy and International Relations Institute (IMEMO),  
Moscow

Amb. Emilio Jorge CARDENAS

Executive Director, HSBC Argentine S.A.

Former Ambassador of Argentina to the United Nations

Dr Therese DELPECH

Director, Strategic Affairs, Atomic Energy Commission (CEA), Paris

Amb. Rolf EKEUS

Ambassador of Sweden to the United States

Dr Robert GALLUCCI

Dean, School of Foreign Service, Georgetown University

Prof. HAN Sung-Joo

Professor of Korea University

Mr HU Xiaodi

Deputy Director-General, Department of Arms Control and Disarmament, Ministry of

Foreign Affairs, China

Amb. Ryukichi IMAI

Distinguished Fellow, Institute for International Policy Studies, Tokyo

Dr Joachim KRAUSE

Deputy Director, Research Institute of the German Society for Foreign Affairs (DGAP),  
Berlin

Mr Michael KREPON

President, Henry L. Stimson Center, Washington D.C.

Mr Pierre LELLOUCHE

Member of the Council, International Institute of Strategic Studies, London

Dr Patricia M. LEWIS

Director, United Nations Institute for Disarmament (UNIDIR), Geneva

Amb. Margaret MASON

Director of Council Development, Canadian Council for International Peace and  
Security, Ottawa

Mr Nobuo MATSUNAGA

Vice-Chairman, Japan Institute of International Affairs, Tokyo

Dr Joseph S. NYE, Jr.

Dean, JFK School of Government, Harvard University, Boston

Prof. Robert O'NEILL

Chichele Professor of the History of War, All Souls College, University of Oxford

Dr Abdel Monem SAID Aly

Director, Al-Ahram Center for Political and Strategic Studies, Cairo

Prof. John SIMPSON

Director, Mountbatten Center for International Studies, Department of Politics,

University of Southampton

Amb. Hennadiy UDOVENKO

Former Minister of Foreign Affairs

President of 52nd Session of the UN General Assembly

Prof. ZAKARIA Haji Ahamad

Dean, Faculty of Social Science and Humanities, National University of Malaysia

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## I. THE NEW NUCLEAR DANGERS

1. A decade after the end of the Cold War, at the threshold of the 21st century, the fabric of international security is showing signs of unraveling. Relations among major powers are deteriorating. The United Nations is in political and financial crisis. The global regimes to stop the proliferation of nuclear weapons and other weapons of mass destruction (WMD) are under siege. Nuclear tests by India and Pakistan have shown that not all countries share the view that the usefulness of nuclear weapons is declining. Years of relentless effort have not eliminated the clandestine WMD programs of the most determined proliferators. The US-Russia nuclear disarmament process is stalled, with adverse consequences for the global disarmament agenda. The situation in Asia is particularly fluid, portending negative changes for disarmament and non-proliferation in coming years. Political violence is taking an increasingly worrisome turn, with the possible advent of sub-state terrorist groups armed with weapons of mass destruction. And economic crises, sweeping over continents, generate instability and unpredictability well beyond the markets.

2. Relations among major powers, a primary factor in world order, are crucial to the

future of nuclear non-proliferation and disarmament. Following a short rapprochement, relations between the United States and Russia have deteriorated. The United States no longer has a matching rival, and is perceived as a sole military superpower. Russia, concerned about its status, has revalued nuclear weapons, especially for "tactical" use. Misunderstanding on both sides is made worse by crises over issues such as enlargement of the North Atlantic Treaty Organization, the United Nations Special Commission on Iraq, missile defences and Kosovo. Russia's growing irritation at US initiatives, which frequently ignore its views, has clear consequences for disarmament: ratification of the Strategic Arms Reduction Treaty II in the Russian Duma is repeatedly held hostage to bilateral disagreements. Relations are also troubled between the United States and China. These two countries not only differ in their approaches to such fundamental issues as human rights, missile defences, Taiwan and non-proliferation but also have potentially conflicting visions of their roles in Asia which could intensify in the next century. Europe, meanwhile, still lacks the sway it could hold in world politics. The European Union is going through further integration and enlargement, and is taking active steps to strengthen the implementation of its common foreign and security policies. At this stage, however, it is still punching below its weight on the world stage. Europe has a limited role even on such matters of vital interest as the former Soviet Union's WMD legacy, especially when compared with the US cooperative threat-reduction programs. Finally, the cast of major powers on the world stage is changing, with more states aspiring to play a larger role.

3. Without a strong, effective United Nations, nuclear non-proliferation and disarmament efforts will fall short. But the UN system is adrift, financially compromised, and playing a limited role in international relations, sometimes performing vital services but sometimes bypassed entirely. The UN system reflects power relations and has suffered from deteriorating relations among major powers. This has left the United Nations Organization poorly equipped to face complexities arising from the proliferation of weapons of mass destruction, the growing importance of non-state actors ignoring basic international law, and new forms of violence involving mass civilian casualties. Unable to respond to some of the dramatic changes in the world in the 50 years since its creation, its effectiveness and to some extent its authority have been undermined. The divergent views on a UN standing military force, and on the new permanent membership of the Security Council, for example, illustrate the United Nations' problems. The United Nations, however, remains an essential institution for moving international relations towards cooperative security. Its

operational capabilities must be strengthened. To deal effectively with international security problems in the next century, Security Council reform, new normative principles, operational arrangements, financial compliance and new sources of financing are urgently needed.

4. Recent advances in science and technology have made chemical and biological weapons more accessible. Furthermore, the bio-science revolution has opened possibilities for the making of a new generation of biological weapons which are more dangerous and difficult to protect against. Some of this activity is difficult to distinguish from legitimate civilian research, which makes proliferation harder to prevent. In the proliferation of nuclear weapons and other weapons of mass destruction, increasingly complex methods of concealment and sources of supply are used. Delivery systems are also giving rise to increased concern, as missiles with extended ranges and increased launch readiness become more accessible. The uses proposed for nuclear weapons by the new nuclear-armed states are unclear; those of potential proliferators of biological weapons even more so. As a consequence, profound questions must now be raised concerning the new WMD arsenals. Are they intended as weapons of last resort? Are they seen as decisive weapons for use against countries armed with advanced conventional capabilities? Are they for the ultimate protection of authoritarian regimes? Or are they seen as instruments of regional domination?

5. At stages during the Cold War, the common interests of the superpowers to avoid nuclear conflict were strong enough to moderate hostile behaviour and create, through dialogue and confidence-building measures, some level of trust. Nothing of the like exists among the new proliferators and some of their neighbours. The world must now contemplate new and dangerous patterns of behaviour. The risks of cataclysmic war between major powers have subsided, but those of regional aggression with weapons of mass destruction have increased. Warnings have been sounded, including in Kashmir, the Persian Gulf and the Korean Peninsula. Non-proliferation and disarmament treaties have been used as smokescreens for clandestine weapon programs. Concerns over WMD programs in North Korea and Iraq, in two unstable regions, have proved strikingly difficult to resolve, either through cooperation or pressure. In both cases, 1998 and 1999 have been years of reassessment and latent crisis.

6. The May 1998 tests in India and Pakistan have significantly changed the global non-proliferation and disarmament picture. Their message runs counter to wide

expectations and hopes that the end of the Cold War would make nuclear weapons relics of the past. Instead, the tests signal that nuclear weapons could be a growing part of the strategic landscape of the future. They raise doubts about the extent to which nuclear weapons were linked only to the singular historical circumstances of the Cold War. They also pose a fundamental problem for the regime based on the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) by creating two states with demonstrated nuclear weapon capabilities but no recognised status. Achieving NPT universality under these circumstances is extremely difficult. Many countries that acceded to the NPT assuming there would be only five nuclear-weapon states (NWS) resent India's and Pakistan's tests as a challenge to their own policies of restraint. These tests, as well as complementary missile flight tests, greatly increase nuclear dangers in an area where four major conflicts between India and Pakistan, and one between India and China, have been fought since 1947. A capacity for mutual destruction does not ensure restraint. In the Middle East, where several armed conflicts have taken place since World War II, there is also the genuine possibility that further wars may involve weapons of mass destruction. During the 1973 Arab-Israeli war there were reports that Israel had contemplated using nuclear weapons; and even the United States ordered a nuclear alert. Chemical weapons were used in the Iran-Iraq war of 1980-1988. And the 1991 Gulf War raised fears about the use of chemical and biological weapons.

7. Implementation of the bilateral US-Russia disarmament agenda is stalled, with major repercussions for global disarmament and non-proliferation. The Russian Duma will have difficulty ratifying START II in the near future; START III may remain an unrealised treaty unless new efforts are made to reaffirm the START process. It would be a major setback if the two major nuclear powers abandoned their joint efforts in strategic reductions. It is too early to tell if the US-Russian Joint Statement of 20 June 1999 can revive START.

8. Tactical nuclear arsenals are also of increasing concern. Despite accounting for more than half of the global stockpile of nuclear warheads, they are not covered by any agreement. Both the United States and Russia maintain high alert rates for large numbers of nuclear weapons, based on plans of massive attack which have lost their meaning. Such plans are especially dangerous when Russia's early warning and command and control systems are weakened and its political structure is unstable.

9. The issue of fissile material control has become critical. Large stockpiles have been



produced since the 1940s, and now plutonium and highly enriched uranium are being extracted from thousands of dismantled nuclear warheads. Despite international cooperation to strengthen Russia's capacity to control its fissile material, much remains to be accomplished; concerns persist that its fissile material may disseminate beyond its borders. Four nuclear-weapon states (the United States, Russia, France and the United Kingdom) have announced moratoria on producing fissile materials for weapons. It is hoped that China, India, Israel and Pakistan will also declare moratoria and adhere to them.

10. The US-China relationship has been deteriorating and is very unstable, with adverse consequences for disarmament. The United States is concerned about China's possible cooperation with Pakistan's nuclear and missile programmes and China's development of its nuclear arsenal. China has already undertaken certain commitments: the unconditional no first use of nuclear weapons, no-use or threat of use of nuclear weapons against non-nuclear-weapon states, and the policy of no deployment of nuclear weapons outside its borders. China, however, has put in place few transparency measures. The implementation of further transparency measures would help dispel regional concerns and would support global nuclear disarmament efforts. For its part, China is concerned over aspects of US nuclear deterrence doctrine and the development of ballistic missile defences. The United States has put in place many transparency measures concerning its doctrines, deployments, fissile materials and technical developments. Further information, however, on reserve stocks would have a positive impact on steps towards nuclear disarmament.

11. Relationships between China and Russia, marked by China's new strength and Russia's present weakness, will be equally important in shaping the emerging international system. Reports about the development of a new missile by Russia, and about changes in Russian operational doctrine that could make nuclear weapons more readily useable, could over time raise concerns in China. On the other hand, China is not constrained by strategic arms reduction treaties while Moscow has agreed to forego land-based multiple warhead missiles and current Russian nuclear forces face block obsolescence. This juxtaposition of factors could cause increased concern in Russia.

12. Terrorism using nuclear, chemical or biological weapons has been possible for some time, but serious policymakers have traditionally seen other threats as more pressing. This perception has been changing since the early 1990s. The probability of WMD

terrorism may still be relatively low, but it is growing with the ability of sub-state terrorist groups to master the technical challenges of developing and using these weapons, and their growing access to the very significant monies obtained from the traffic in illicit drugs. National controls on weapons-grade fissile materials were tight during the Cold War; now it is increasingly possible that non-state actors might obtain them. The prospect of WMD terrorism is particularly alarming because it would be hard to prevent and the perpetrators hard to identify. The effects of WMD terrorism could be so severe that it must be regarded as a serious security challenge for the coming decades. Trends in political violence and a propensity towards inflicting mass casualties appear to be rising in recent years. Chemical weapons have already been used against civilian populations in internal conflicts, setting a dangerous precedent, especially when civilian casualties and displacement are war aims in some ethno-nationalist conflicts.

13. Maintaining and reinforcing the WMD non-proliferation regimes is vital to global peace and security. Despite increased membership, key states remain outside the NPT, the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC). Implementation decisions have weakened verification of the CWC, and the BWC verification protocol remains distant. Compliance challenges generate increasing concern, and there are no accepted multilateral processes for assessing and enforcing compliance, despite an array of non-proliferation norms, treaties and institutions. Political issues also divide the parties, including the pace of disarmament, commitments to peaceful cooperation, and the specific regional challenges of implementing a Middle East zone free of weapons of mass destruction and missiles.

14. Prospective missile defence deployments complicate the picture and are causing much debate. Proliferation may increase the perceived need for missile defences: the dramatic changes in threat assessment caused by the emergence of Iranian, Israeli, North Korean, Indian and Pakistani medium-range missile systems contributed to the new interest in missile defences. Alternatively, defences could, among other things, also increase and diversify the threat of WMD proliferation, as some states, including some of the five nuclear-weapon states, may try to compensate for defensive deployments. The question of missile defences should take into account all these implications, so as to have the net effect of reducing, not increasing, nuclear dangers, and avoiding further destabilisation of the international security system. The 1997 Protocol to the Anti-Ballistic Missile (ABM) Treaty governing advanced missile defences does not fundamentally affect the ABM Treaty or undermine the mutual deterrence model.

Prospective US-Russia discussions on the ABM Treaty should also meet these criteria.

15. A realistic dialogue on the most effective means to address underlying security concerns must replace outdated nuclear doctrines on the one hand and artificial disarmament deadlines on the other. The international community must find new approaches to reduce nuclear dangers in these troubled times. Non-proliferation norms will need to be strengthened if the regime is to be kept alive in the next century. Not only regional but also global security is at stake. The 1991 Gulf War showed how a regional conflict could have global implications. Nuclear non-proliferation and disarmament are not the preserve of the nuclear-weapon states or powers in troubled regions. The NPT is based on a contract involving all parties. While the nuclear-weapon states have to fulfil their Article I, IV and VI obligations and pursue nuclear disarmament, the non-nuclear-weapon states (NNWS) need to firmly support effective action in the most difficult cases of non-compliance. Concerted action by both camps is the only way to renew the partnership to reduce nuclear dangers. New approaches in US-Russia bilateral nuclear reductions and steps by China to cap its arsenal and fissile material stocks could assist progress towards multilateral negotiations on nuclear disarmament. At the same time, regional security threats in the Middle East and Northeast Asia need close attention, as do the security problems among India, Pakistan and China. These three areas are potential flashpoints where use of weapons of mass destruction cannot be dismissed.

16. It will be hard to maintain stability and nuclear security under these circumstances. It will require a vision and a roadmap of how these complex issues can be solved. It will also require, at the global and regional level, new initiatives to stop the spread of nuclear weapons and new spheres of strategic cooperation among major powers. The world has witnessed a decade of unexpected challenges and disturbances since the end of the Cold War. As a new century begins, there is a strong risk that the world will become more chaotic and troubled, threatening the security of all, unless work begins now to turn recent setbacks into potential solutions. This calls for understanding the stakes, and putting in place new means of maintaining stability, reducing WMD threats and increasing transparency.

17. Much has therefore changed since the Canberra Commission on the Elimination of Nuclear Weapons issued its important report in 1996. Troubling signs are now evident on many fronts. The report and recommendations of the Tokyo Forum are aimed at

clarifying the alarming nature of recent developments and the urgent need for steps to stop the decline in regional and international security. We call on the international community to meet the challenges posed by proliferation and increasing nuclear dangers. In the body of its report, the Tokyo Forum will identify how these challenges can be addressed in three mutually-reinforcing ways: mending strategic relations to reduce nuclear dangers, both among major powers and at a regional level; stopping and reversing the proliferation of nuclear weapons; and developing the architecture of, and taking new initiatives for, nuclear disarmament.

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## II. MENDING STRATEGIC RELATIONS TO REDUCE NUCLEAR DANGERS

1. Suspicion and rivalry between existing or potential nuclear-armed states bode ill for nuclear non-proliferation and disarmament. This problem must be addressed both among major powers---the United States, Russia and China---and in those conflict-prone regions where nuclear confrontation is most likely---South Asia, the Middle East and Northeast Asia. Mending relations and reducing mistrust among major powers will significantly improve the conditions for progress on non-proliferation and disarmament in all three regions. At the same time, important steps can and should be taken by states in the regions regardless of the state of major power relations.

### MENDING RELATIONS BETWEEN MAJOR POWERS

2. Success in nuclear non-proliferation and disarmament requires cooperation in all bilateral relationships among the United States, Russia and China. The US-Russia and US-China relationships have deteriorated badly in recent years. Unless and until they

are repaired, nuclear dangers will increase.

### Repairing US-Russia Relations

3. Since the release of the Canberra Commission report in 1996, US-Russian relations have been marked by greater imbalances in economic and military power, greater divisiveness and partisanship in the domestic politics in both countries, and a retreat from cooperation towards unilateralism. As a result, collaborative efforts in non-proliferation and new disarmament initiatives have been sorely lacking. The common wish to avoid unpredictability that marked US-Russian relations in the Cold War--- including agreed parameters of arms control, reduction, and ballistic missile defence treaties---is now dangerously lacking.

4. A partnership forged with great effort as the Cold War waned, producing extraordinary strategic arms reduction treaties and cooperation in the Gulf War, is breaking down. The causes include domestic political divisions, deep differences over foreign policy issues, and the absence of the concerted leadership necessary to regain common ground. To understand the current state of the relationship, it is useful to assess what was achieved before recent strains, including events in Yugoslavia in 1999, emerged. The euphoria of the first years after the end of the Cold War has ended. Some positive trends continue, but difficulties have increased.

5. In the years immediately before and after the end of the Cold War, serious progress was made in furthering arms control and improving strategic stability. Substantial reductions were made in strategic nuclear arsenals and efforts were pursued towards ensuring the inviolability of the Anti-Ballistic Missile (ABM) Treaty. Under START II, United States and Russia promised to reduce their deployed strategic arsenals to 3,000-3,500 warheads each. Agreement was reached to begin talks for further strategic reductions (START III) as soon as Russia ratified START II, so as to reduce strategic arsenals to 2,000-2,500 warheads each.

6. The most significant achievement of US-Russian interaction in this period was far greater predictability in the behaviour of each state. Progress was made in comprehending the new shape of international relations, distinguishing genuine from imagined problems, and developing common understandings of the changed character

of threats to their security, globally and regionally. They seemed to share concerns about regional conflicts including ethno-nationalist wars, international terrorism, illegal trade in conventional arms, and global economic crises. This consensus was reflected in the Joint Statement on Common Challenges to Security on the Threshold of the 21st Century, signed by Presidents Yeltsin and Clinton in September 1998. The United States and Russia have repeatedly demonstrated that dialogue and compromise between them have eased international tensions, for example over Iraq and, at some stages, the former Yugoslavia. But this pattern has deteriorated badly. The North Atlantic Treaty Organization's action in Yugoslavia in 1999 has widened the gulf between Washington and Moscow.

7. This deterioration stands in marked contrast to the early 1990s, when the United States and Russia appeared increasingly tolerant of policy differences. During this period, divergent views did not lead to confrontation; some differences based on national interests were perceived as natural, and tolerance of them helped maintain the US-Russian partnership. Now these differences are widening, particularly over unilateral and multilateral responses to international problems. Russia states that multilateral actions, under the UN flag, should take precedence, and considers the United States too prone to unilateral action and military measures, particularly in addressing conflicts. The United States and Western Europe, while wanting successful outcomes from multilateral efforts, have been unwilling to accept Russian vetoes in the UN Security Council that could disallow multilateral action to counter perceived crimes against humanity or violations of WMD treaty commitments.

8. When the US-Russian relationship is troubled, nuclear risk-reduction efforts suffer profoundly. Cooperation between the two powers is needed to dramatically reduce and eliminate their Cold War nuclear arsenals---deployed and non-deployed---in verifiable, reassuring and irreversible ways. Cooperative US-Russian efforts are also needed to dispose safely of Soviet-era nuclear weapons holdings. Considering Russia's difficult economic situation, it is unlikely to dedicate enough financial and other resources to this complex of problems. Outside assistance is crucial to minimise the possibility of nuclear bomb-making materials falling into the hands of states of proliferation concern or non-state or terrorist entities. Russian cooperation is also needed for resolving the most difficult regional security problems, where proliferation concerns and consequences are greatest.

9. Unless political leaders in the United States and Russia take urgent action to restore constructive relations, there is a grave risk of negative consequences for nuclear non-proliferation and disarmament efforts. At the very least, START II ratification would be delayed further and prospects for additional bilateral strategic arms reduction treaties would become remote. Russia would try harder to maintain its strategic nuclear forces beyond their service life and would place increasing importance on tactical nuclear weapons in its force postures and doctrines. Russia would try to build up its general-purpose military forces. There would be strong pressures in Belarus, and probably in Ukraine, to reassess their non-nuclear status, depending on political developments in these states and in Russia. And in the new geopolitical environment, Russia might widen its military and technological cooperation with countries of proliferation concern to others, but which it might consider strategic partners.

10. There would also be profoundly damaging global repercussions for nuclear non-proliferation and disarmament. Progress in US and Russian reductions is needed to lead the way for disarmament by all other nuclear-armed states, but it will be difficult to reaffirm a cooperative US-Russian relationship to reduce nuclear dangers. In addition to NATO action in Yugoslavia, prospective US national missile defences and NATO expansion are particularly contentious issues. The weakness of the Russian economy and the problems of creating a stable and democratic state have understandably generated resentment among the Russian people. The rhetoric of nationalism and strategic competition has re-emerged. Divisions between Moscow and Washington are widening on regional proliferation issues, particularly the control of sensitive exports to Iraq, Iran and India. Work needs to be done to reconcile US and Russian approaches on the urgent need to control the export of materials and technology that might be used for WMD programs.

11. The pace of the START process now lags far behind the rate of increase in new nuclear dangers. Ratification delays have lasted longer than the time spent to negotiate the agreements. Even when ratification is belatedly approved, legislators attach conditions that impose further delays or complications for implementing treaty provisions. The formal process of US-Russian strategic nuclear arms reduction, which played an essential role in reducing Cold War arsenals, remains helpful but is now clearly insufficient to deal with contemporary and future challenges.

12. Difficulties in the arms reduction process reflect larger political differences between

Moscow and Washington It is wrong to place upon arms control the burden of fixing overarching political problems. The reverse is true: the resumption of progress in reducing nuclear dangers requires the repair of major political differences, including those related to regional proliferation and security. Arms control arrangements can, however, help facilitate and reinforce concerted efforts by US and Russian leaders to reforge larger patterns of cooperation.

13. The degree of difficulty involved in reaffirming US-Russian cooperation might lead some to suggest that such efforts be postponed until new political leaders take their places after national elections in both countries in 2000. But nuclear dangers do not conform to election cycles, and keep growing. The Tokyo Forum strongly urges political leaders in the United States and Russia to take steps now to mend the bilateral relationship. Failure to do so will compound trends that threaten regional and global security.

14. The Forum welcomes the US-Russia Joint Statement of 20 June 1999, and the progress made at the Cologne meeting on that day, in which Presidents Clinton and Yeltsin agreed to try to facilitate the ratification of the START II accord while discussing changes in the ABM Treaty. The Joint Statement also noted that discussions on START III would begin without prior ratification of START II. But it is too early to tell if the 20 June meeting will lead to a sustained and effective revival of the bilateral arms reduction process. There are many obstacles ahead and, accordingly, pressure must be maintained on the two states to build on the progress made at Cologne.

15. The depths of the estrangement in US-Russian relations have the most serious consequences for initiatives to reduce nuclear dangers, and leaders in both countries need to place a high priority on repairing this relationship. To assist in this effort, the Tokyo Forum offers ideas on how dialogue on nuclear issues can help improve these bilateral ties, rather than exacerbate them, as has increasingly become the case. These ideas are set out in detail in the section of this report dealing with nuclear disarmament.

#### Repairing US-China Relations

16. To reduce nuclear dangers, a new partnership must also be forged between the United States and China. High-level visits in recent years have been helpful but have



not reconciled differences in this complex relationship. Whatever the differences between the two countries, cooperation between them is needed to help reduce nuclear proliferation concerns. Enhanced dialogue would help promote greater transparency about nuclear weapons and intentions, and could further consolidate the engagement of both countries in the range of nuclear non-proliferation and disarmament instruments, including the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and export controls. It would also begin to address Chinese concerns on missile defences, and so help prevent that issue from complicating regional and global security.

17. China did not play a central role during the Cold War, but is likely to be a more important power in the next century. How Beijing exercises its growing power will have a direct bearing on the US presence in East Asia. On the other hand, the role of the United States in East Asia and the West Pacific will be a crucial determinant of China's security policies. In particular, it will be essential for the United States to show regard for China's security concerns in the way in which it conducts its security relationships in the region. Both policies will affect efforts to reduce nuclear dangers.

18. The possible introduction of theatre missile defence (TMD) systems in East Asia is a major subject of controversy between the United States and China. China argues that TMD systems in East Asia would have destabilising effects. As well, after having been ignored in most analyses of the future of nuclear weapons, China's reported development of two new types of solid-fuel intercontinental ballistic missiles---perhaps with multiple warheads---is becoming a major international concern.

19. Efforts to address perceived strategic and nuclear proliferation problems involving China and the United States need to be cooperative and constructive. The alarmist approaches of some elements of the US media and polity are not helpful in this regard. Perceptions of China's increasing military strength create unease among its neighbours and beyond. In explaining its nuclear weapons policies, and in further clarifying its non-proliferation policies, China like all nuclear-weapon states has an opportunity to reassure the international community.

20. Under the Treaty on the Non-Proliferation of Nuclear Weapons, all nuclear-weapon states have an obligation to take concrete steps to reduce, and eventually eliminate, their nuclear weapons. While Russia and the United States have sought to reduce their arsenals since the early 1990s, and France and the United Kingdom have cut their

nuclear forces, China has yet to begin similar steps. The Tokyo Forum therefore calls on the United States, Russia, France and the United Kingdom to continue the ongoing steps to reduce their nuclear arsenals. The Forum further calls on China to join the other nuclear-weapon states in taking concrete steps to reduce numbers of nuclear weapons, through negotiations or otherwise. In addition, the five nuclear-weapon states could begin a process of confidence-building and transparency in the nuclear-weapons arena. In this connection, all the nuclear-weapon states could confirm that there will be no increase in their nuclear arsenals.

#### Reinforcing Confidence between Russia and China

21. Good relations between Russia and China are of importance, not only to both these countries, but also to the rest of the world. Relations between the two countries have improved in the past years, and a breakthrough in talks mapped out their common borders in April 1999. Friendly relations will be essential in the coming decades.

22. Although Russia and China are on the threshold of a new era, the nature of their future relationship is difficult to foretell. China's growing strength, Russia's current weakness, and both countries' increased friction with the United States are the main new factors. The asymmetries between the two countries may grow. With the demise of the Soviet Union, Russia retains huge territory, sparsely populated and underdeveloped, east of the Urals in Asia. This has a direct bearing on Sino-Russian relations. Increased military capabilities on either side could adversely affect bilateral relations. Russia and China could approach near-parity in nuclear forces at some point. Nuclear restraint on both sides would be an important confidence-building measure between the two countries.

#### STOPPING AND REVERSING REGIONAL PROLIFERATION

23. The nuclear tests by India and Pakistan in May 1998 awoke the world to the reality that the spread of nuclear weapons had reached a dangerous new phase. Two regional powers with unresolved antagonisms had made their nuclear ambitions overt. The tests reflected the failure of global non-proliferation norms to prevail over regional security imperatives, and increased fears that regional conflicts could turn into real nuclear wars.

24. South Asia is not the only region where these fears are growing. There is a pressing need for measures to stop and reverse nuclear proliferation in the Middle East and Northeast Asia as well. In all three regions, national rivalries are combining with nuclear weapons ambitions to create new and potentially catastrophic nuclear dangers which carry long-term repercussions. Some recent developments offer opportunities for arresting and reversing regional nuclear proliferation. These must be seized. The positive Brazil-Argentina experience of abandoning nuclear weapons programs shows that regional nuclear ambitions can be prevented through similar regional and bilateral confidence-building and cooperative arrangements to those found in the Brazil-Argentina Agency for the Accounting and Control of Nuclear Materials (ABAAC).

25. The 1995 Review and Extension Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) was supposed to pave the way for further progress in nuclear disarmament and to make the Treaty as universal as possible. Apart from the fact that the nuclear-weapon states were not ready to commit to the elimination of nuclear weapons within a given time frame, most controversies at the conference arose from regional security problems such as those in the Middle East, South Asia and Northeast Asia. These regional security issues have to be taken seriously. They cannot be solved simply by admonishing the conflicting parties or demanding that they restrain from nuclear activities without any consideration of wider security concerns.

26. Nuclear dangers have different characteristics and causes in each of the three regions. What these cases have in common is the potential not only to thwart any further progress in nuclear disarmament, but also to result in a world in which nuclear weapons proliferation might become the norm. The international community must tailor its responses to each situation, as each of these proliferation cases is different.

#### South Asia

27. Nuclear testing and weapons proliferation in South Asia have been driven by India's ambition to be treated equally to the five nuclear-weapon states, domestic political factors, and security concerns, including perceptions of China. India considers the possession of nuclear weapons an attribute of great power status, and feels squeezed out by the distinction between nuclear-weapon states and non-nuclear-weapon states embedded in the Treaty on the Non-Proliferation of Nuclear Weapons in 1968.

28. For decades, India was an advocate of complete nuclear disarmament. Today, representatives of its political and intellectual elite argue that it was the rejection of this call for nuclear disarmament that brought India to seek nuclear weapons. What lends this contention little credibility, however, is that India's shift to an open nuclear weapons posture came at the very time that the United States and Russia were making deep cuts to their nuclear arsenals. The timing of India's action greatly compounds other nuclear dangers and makes nuclear disarmament harder to achieve.

29. Another motive for India's nuclear program relates to China. Some in India are concerned by Chinese long-range ballistic missiles, and by the short-range missiles it has allegedly stationed in Tibet. Now that India is developing long-range missiles capable of reaching much of China, Chinese perceptions of a threat from India may grow, increasing pressure on Beijing to harden its nuclear posture.

30. This emerging nuclear arms competition in South Asia is peculiarly dangerous because of its complexity, involving Pakistan as well as India and China. Except for its nuclear capability, Pakistan constitutes only a limited military threat to India. The dynamic of the Indian-Pakistani arms race is embedded in the division of the subcontinent in 1947 and the many conflicts and crises since then. Since Pakistan cannot compete with India in conventional military power, it seeks to equalise India's advantage with nuclear weapons. This has not produced a more peaceful situation in Kashmir.

31. As India's nuclear capabilities grow, there is no assurance that China would stand still. The resulting friction would weaken their security and further endanger southern Asia. Political crises between India and Pakistan are recurring phenomena, and have become more heated with overt nuclear weapons capabilities. Many strategists in India and Pakistan believe that making capabilities overt will increase strategic stability. But this is a far from automatic process; both countries have yet to put in place significant risk-reduction and stabilising measures. India and Pakistan have demonstrated their ability to flight test ballistic missiles that can be readily deployed. As a result, the time between the order to fire nuclear-capable missiles and its execution could be extremely short. Geographical factors also could increase instability in a crisis: Pakistan may feel compelled to maintain nuclear weapons at high alert, because it does not have strategic depth. Given the extremely short distances and flight times involved, decisions in a crisis might have to be made in a matter of minutes, raising the likelihood of

catastrophic miscalculation. There is also the risk of unauthorised or accidental launch of nuclear-armed missiles.

32. In the absence of stabilising measures another crisis has already erupted in South Asia. Overt nuclear capabilities have not produced stability and security for India and Pakistan. If the repercussions now evident on the subcontinent in the 1999 Kashmir crisis are not stopped, more crises will follow. The decisions by these countries to test nuclear weapons and flight-test nuclear-capable missiles could also have cascading effects. More states might reconsider their non-nuclear status, especially as regional security uncertainties arise elsewhere. The link between nuclear non-proliferation and nuclear arms reductions with the ultimate goal of nuclear disarmament would be weakened.

33. The Tokyo Forum therefore reaffirms the "benchmarks" for India and Pakistan articulated in UN Security Council Resolution 1172 and the G8 Foreign Ministers' communique of June 1998. The Forum calls on the international community to continue to urge India and Pakistan to implement all requirements in UN Security Council Resolution 1172, including: adherence to the CTBT without delay or conditions; immediate cessation of nuclear weapons and ballistic missile development programs, including refraining from weaponisation; cessation of production of fissile material for nuclear weapons purposes; and restraint from export of equipment, materials and technology that can contribute to the development of WMD or missiles capable of delivering them. The Tokyo Forum calls on India and Pakistan to maintain moratoria on nuclear testing.

34. The Tokyo Forum believes that international efforts to secure India's and Pakistan's acceptance of international norms must be sustained. Ultimately the goal is to persuade India and Pakistan to renounce nuclear weapons and to adhere to the NPT as non-nuclear-weapon states. The latter could only be achieved in connection with reconciliation on the subcontinent, a continued and revitalised US-Russia process of nuclear arms reductions and the widening of this process at a suitable stage to include China, France and the United Kingdom.

35. The Forum calls for India and Pakistan to each announce a national moratorium on the production of fissile material for weapons purposes until the Fissile Material Cut-off Treaty negotiations are concluded, and to contribute constructively to those negotiations.

In this context, and taking into account China's wish to be a stabilising force in international affairs, a declared Chinese moratorium on the production of fissile material for weapons purposes would encourage India and Pakistan to follow.

36. The Forum considers that India and Pakistan should acquire no special status under the NPT, let alone legal status as nuclear-weapon states, nor be rewarded with any other additional status as a result of their nuclear testing. As long as their actions continue to damage the global non-proliferation norms that are fundamental to international peace and security, it is difficult to envisage either country taking a permanent seat on the UN Security Council. The link between nuclear capability and the prestige and influence of a great power, including permanent membership of the UN Security Council, needs to be broken. Four of the P5 gained their permanent seats well before acquiring nuclear weapons. The United Kingdom and France owe much of their present-day status simply to the breadth of their engagement in world affairs, and have suffered no loss of status from major unilateral cuts to their nuclear forces. Germany and Japan have achieved their standing through economic development.

37. The Tokyo Forum calls on India and Pakistan to take concrete and verifiable steps to reduce nuclear dangers. The Lahore Declaration of February 1999 includes a constructive workplan in this direction, but this plan has been derailed by political turbulence in India and unwise initiatives by Pakistan in divided Kashmir. It is imperative that India and Pakistan finalise nuclear risk-reduction measures agreed to in the Lahore Declaration. Improved, reliable communication channels need to be established between both countries. Reassurance measures are needed so that nuclear-capable forces are not placed on alert or moved during crises. Prior notification of missile flight-tests and conventional force exercises in sensitive areas are essential. The Tokyo Forum strongly supports the process begun at Lahore and rejects any efforts to resolve differences by force. The Tokyo Forum calls on the Permanent Members of the UN Security Council and other nations to support the Lahore Declaration, and to offer to help implement any agreements reached in bilateral negotiations aimed at resolving the Kashmir dispute. New initiatives on Kashmir are especially needed in the wake of the 1999 conflict.

38. While China's nuclear posture towards South Asia has been restrained, additional steps of reassurance by both India and China would help greatly in reducing mutual threat perceptions. The elimination of Chinese nuclear weapons is imaginable only in

connection with the elimination of US and Russian nuclear weapons, an unrealistic proposition for the near term. Once lower US-Russian ceilings are approached, however, China should play its part in the worldwide nuclear arms reduction process. As the strongest regional power, China's standing would be greatly enhanced if it took the lead in creating confidence in its immediate neighbourhood and reducing threat perceptions held, accurately or not, by adjacent states.

39. The Tokyo Forum calls on China and India to freeze or forgo nuclear deployments of long-range ballistic missiles in combination with a verifiable pledge not to station short-range missiles close to their common border. Furthermore, both China and India could announce that they consider themselves bound by the substantive provisions of the 1987 US-Soviet Treaty on Intermediate- and Shorter-Range Nuclear Forces (INF), and renounce possession of all land-based ballistic missiles with ranges between 500 and 5,500 km. Such a measure would be consistent with disarmament steps by Russia and the United States. It is reasonable to imagine that China would agree to such a proposal if the nuclear arms reduction process between Russia and the United States were to continue with renewed momentum, either by the START process or by parallel, reciprocal and verifiable reductions, as endorsed in this report.

#### The Middle East

40. The Middle East is a highly unstable and conflict-ridden region. It has suffered several major conflicts since 1945: the Arab-Israeli wars, the Iran-Iraq war of the 1980s, and the 1991 Gulf War. It is a region marked by the mutually-reinforcing combination of shifting power balances, unresolved antagonisms and active programs to develop weapons of mass destruction.

41. The first state to develop nuclear weapons in the Middle East was Israel which, unlike its neighbours, is not a member of the NPT. Israel's nuclear rationale has to be understood against the backdrop of perceptions of its strategic situation. While Israel neither confirms nor denies possessing nuclear weapons, it is widely believed to have a sophisticated nuclear arsenal ready to be deployed on aircraft and medium-range missiles. Israel sees itself in the midst of states unreconciled to its existence. Although Israel holds a conventional military edge against its neighbours it perceives itself as heavily outnumbered, in population, economic power and, eventually, in military might. Thus Israel sees nuclear weapons as a tool of existential deterrence, indispensable for

its very survival, in the absence of the encompassing peace involving Israel and its neighbouring states that would allow for a reappraisal.

42. From the perspective of Arab states the situation looks very different. While the majority of such states are ready to accept the existence of Israel, they do not accept Israel's position of not joining the NPT, its denial of statehood for the Palestinians, its continued occupation of Arab territories nor its policy of enhancing its missile and conventional capabilities. There are also concerns within the Arab world about Israel's chemical and biological warfare capabilities. Its Arab neighbours are also critical of the continuing technological support given by the United States to assist Israel in developing and deploying anti-missile missile systems (Arrow) and intelligence satellites. Israel's nuclear capabilities are also generating deeply-felt threat perceptions among its Arab and Islamic neighbours, and this continues to erode support for the NPT, as was especially evident during the 1995 Review and Extension Conference.

43. The launch of the peace process and the achievement of agreements may open a path towards peace between Israel and its Arab neighbours, including a solution to the nuclear problem. Only with a successful peace process as envisaged by the Egyptian-Israeli Peace Treaty, the Madrid Conference, the Oslo accords and the Israel-Jordanian Peace Treaty is it imaginable that the nuclear issue will be less salient and Israel's ultimate renunciation of nuclear weapons made possible. Israeli policies from 1996 to 1999 left the peace process in limbo. The revitalisation of this process is now underway. The Tokyo Forum therefore stresses the crucial importance of an Arab-Israeli peace process for the stability of the region and for the future of nuclear non-proliferation. A successful peace process would also permit progress in removing nuclear weapons and all other weapons of mass destruction from the Middle East in the medium and long-term period. Indeed, the processes of peace and WMD disarmament should proceed in parallel.

44. There are other proliferation risks in the region. Iraq and Iran constitute serious security concerns for Israel, as they do for other states in the region. Iraq has pursued a secret nuclear weapons program, and the US Administration has alleged that Iran is seeking to build nuclear weapons. The latter has recently tested a ballistic missile with a range of 1,500 km, while inspections of Iraq by the United Nations Special Commission (UNSCOM) have been in abeyance and may not be adequately reconstituted. If either or both states were to possess nuclear warheads on



medium-range ballistic missiles, in addition to Israel's nuclear arsenal, this would further destabilise the region. Differences in the size and strategic vulnerability of these states would create a fluid and dangerous dynamic, possibly with catastrophic consequences.

45. Imports of ballistic missiles and their technology are posing a special threat to the stability of the Middle East, giving the problem extra-regional dimensions. In the short-term the Tokyo Forum urgently appeals to all states in the Missile Technology Control Regime (MTCR) as well as the Nuclear Suppliers Group (NSG) export control arrangements---especially Russia---to do their utmost to avoid any relevant transfers, including both technology and expertise, to the Middle East. The Forum also strongly endorses efforts to persuade North Korea, and other states non-members of the MTCR, to refrain from any transfers of sensitive missile technology to the region.

46. Another source of concern is that would-be nuclear proliferators in the region might be tempted to seek nuclear-weapons material stored insecurely elsewhere, such as in Russia and Kazakhstan. The international community should make every effort to cooperate with Russia and Kazakhstan to ensure that this material is stored securely.

47. The Tokyo Forum calls on the UN Security Council, especially its five Permanent Members, to do its utmost to establish as soon as possible a long-term WMD control regime for Iraq based on the relevant resolutions of the UN Security Council and on the long-term monitoring plans approved by it in 1991. The Forum calls on Iraq to comply with the relevant UN Security Council resolutions, and strongly urges the council's Permanent Members to give priority to non-proliferation issues in their dealings with all states of the region.

48. The Tokyo Forum urges all states in the region to take unilateral steps to create confidence and reassurance. We call on all states in the region to: join the NPT; ratify the Comprehensive Nuclear-Test-Ban Treaty; accept International Atomic Energy Agency safeguards on all nuclear materials under their jurisdiction, including those contained in the recent Additional Protocol; sign and ratify the Chemical Weapons Convention; and take further measures to clarify beyond doubt their compliance with the NPT. We call on Israel to shut down its unsafeguarded nuclear reactor at Dimona or immediately subject it to international safeguards. All states in the region should suspend missile flight tests and restrain missile programs. Negotiations should be

initiated towards a regional agreement to limit missile proliferation, that could usefully draw upon the provisions of the 1987 US-Soviet INF Treaty.

49. The Tokyo Forum believes that the multilateral Arab-Israeli negotiation process would be advanced by the rejuvenation of the Arms Control and Regional Security (ACRS) process. It strongly recommends serious work to develop a zone free of weapons of mass destruction (WMDFZ) in the Middle East. Such a zone would only be possible in parallel with the successful conclusion of the Arab-Israeli peace process and substantial changes in the policies of Iran and Iraq. We urge both states to join the Arab-Israeli peace process including the ACRS process.

50. Within this WMDFZ, possession of nuclear, chemical or biological weapons would be prohibited. This zone would need much tighter and more intrusive verification arrangements than the improved IAEA safeguards regime, including challenge inspections. Monitoring would require external support by international organisations, individual states or combinations of the two. The Permanent Members of the Security Council would need to play special roles within the instrument creating the zone, including providing guarantees to underpin it and assistance in its implementation.

#### Northeast Asia

51. The most immediate and worrisome WMD and missile proliferation threat in Northeast Asia is posed by North Korea. Success in stopping and reversing these destabilising WMD and missile programs, combined with global non-proliferation efforts, will help prevent the emergence of other possible proliferation pressures in the region. In Northeast Asia, as in other regions of concern, proliferation risks will be minimised to the extent that the security concerns of all actors are allayed. The North Korean proliferation problems are linked with the troubles of that country's ailing totalitarian regime. The state has suffered from the regime and from the international isolation it has embraced. Famine and poverty have become widespread and the economy has come close to breakdown. The bellicose behaviour of the North Korean leadership seems part of an attempt to cling to power as long as possible. How long the regime will survive, how it eventually will relinquish power, and whether it might seek war as a solution, still remain open questions.

52. The North Korean nuclear program raised international concern in the early 1990s

when it became known that the country had embarked on a nuclear program based on a reactor type suited to a nuclear weapons program---a reactor that produced a relatively high percentage of weapons-grade plutonium. The US-North Korean Agreed Framework of October 1994 provided for this type to be replaced with light water reactors, and for an end to all dubious activities. Although the implementation of this agreement has been progressing, doubts have persisted over the North Korean leadership's readiness to faithfully pursue the agreement. The May 1999 visit by US representatives to an underground site suspected of being intended for a nuclear weapon program produced no evidence to support such allegations. This was a positive development, but it is too early for a considered judgement.

53. In August 1998 North Korea proved its ability to launch long-range missiles. This was an extraordinary development for a country with generally low levels of technology and industrialisation and a stricken economy. It is suspected that missile technology and foreign experts have played a role in the North Korean program. This program has not only given North Korea dramatically improved offensive capacities, but has helped fuel arms races elsewhere. The Pakistani Ghauri missile and the Iranian Shehab missile appear virtually identical to a North Korean prototype.

54. The Tokyo Forum calls on the international community to do its utmost to achieve early realisation of the goal of a denuclearized Korean Peninsula. It urges North Korea to stop all nuclear weapon and missile related activities, and to bring about the full implementation of the 1994 US-North Korean Agreed Framework. The financial and technical implications of the Agreed Framework are extremely complicated and need continuous support from many states, including Japan, South Korea, the United States and the European Union. This support is likely to dry up if North Korea continues to flight test nuclear-capable missiles and make other threatening gestures. The Tokyo Forum calls on the international community to press North Korea to sign and ratify the CTBT as soon as possible; to implement its NPT/IAEA fullscope safeguards agreement; and to accept the new Additional Protocol to that agreement. Strict, verifiable implementation of these safeguards is the only way to resolve the continuing uncertainties over the North Korea nuclear program and prevent a new crisis.

55. In the context of Northeast Asia, the Tokyo Forum underscores the need for the strict implementation of export controls in accordance with the MTCR guidelines, and calls for more rigorous controls on nuclear weapons technology and materials. The

Forum stresses the necessity for the international community to closely cooperate in keeping nuclear weapons materials and missile technology, as well as precursors for other weapons of mass destruction, away from North Korea.

56. The Forum also sees an urgent need for measures to prevent North Korea from continuing to be a source of missile or nuclear weapons proliferation to other regions. Given the threat that such proliferation could pose to international peace and security, these measures might range from bilateral or multilateral talks involving the North Korean authorities, through international economic sanctions to more forceful actions under Chapter 7 of the UN Charter. Such sanctions might be applied both to North Korea and states buying its missiles and related items. These measures will not be necessary, however, if North Korea takes meaningful steps to reassure its neighbours and conforms fully to relevant international non-proliferation norms. The Tokyo Forum strongly recommends that all states strive to engage North Korea in a constructive dialogue on these matters.

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### III. STOPPING AND REVERSING NUCLEAR PROLIFERATION

#### PROLIFERATION CHALLENGES IN THE 21ST CENTURY

1. To stop and reverse the global spread of nuclear weapons, the international community needs to recognise the magnitude of proliferation dangers and take corrective action based on a comprehensive strategy. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) provides the basis for concerted action, but neither the nuclear-weapon states (NWS) nor the non-nuclear-weapon states (NNWS) are doing enough to reverse the unraveling of its regime. The Treaty must be reaffirmed

and revitalised.

2. A comprehensive strategy would also utilise regional and other global non-proliferation instruments and arrangements, including nuclear-weapon-free zones (NWFZ) and effective but fair export controls. Tightened controls on the world's vast quantity of nuclear weapons-grade fissile materials, together with extensive transparency and monitoring, are essential to stop nuclear weapons spreading further. Ballistic missiles compound the dangers of nuclear proliferation, so any comprehensive non-proliferation strategy must also seek to limit their spread.

3. At the turn of the 21st century, the momentum towards a universal and effective global nuclear non-proliferation regime generated by the close of the Cold War is in danger of being lost. The new nuclear proliferation challenges come from many directions. Poorly-secured materials, technology or weapons may leak across borders. States claiming to adhere to the NPT or regional agreements may maintain clandestine programs. Terrorists may acquire nuclear technology and materials. Components for nuclear weapons may become cheaper and simpler to get. The perception of the conventional military superiority of technologically advanced states may lead some other states to see greater value in weapons of mass destruction. And proliferation in one state or region may trigger it in others. What then can be done to address these challenges?

#### STRENGTHENING THE NPT

4. The NPT is the lynchpin of global nuclear non-proliferation. It rests on a core partnership between nuclear-weapon states and non-nuclear-weapon states and their solemn pact to eschew and eliminate nuclear weapons. This partnership must be reaffirmed if the Treaty is to survive and deal effectively with new proliferation threats. The NPT was aimed at preventing nuclear proliferation beyond the five nuclear-weapon states, defined as states which exploded nuclear devices before January 1, 1967. As a consequence, to recognise India and Pakistan as nuclear-weapon states after their May 1998 nuclear tests would set a dangerous precedent of legitimising nuclear proliferation. Alternately, to simply ignore their actions and capabilities might increase the likelihood of arms races and nuclear crises in the region, and leave open the possibility of nuclear-weapon technologies being transferred from that region to aspiring proliferators. Thus NPT parties face crucial questions of how to secure Indian and

Pakistani cooperation with global non-proliferation efforts without condoning or rewarding nuclear proliferation.

5. The way out of this dilemma is not to bow to proliferation but to fulfil the basic bargain of the NPT by strengthening non-proliferation measures and by reducing progressively and eliminating nuclear weapons. An immediate step towards the former is to expedite acceptance and implementation of the International Atomic Energy Agency Additional Protocol to NPT safeguards agreements, making it a new non-proliferation standard. The latter requires reducing the numbers and salience of nuclear weapons, and making weapon inventories and national stocks of fissile material transparent. The discriminatory basis of the NPT regime need not constitute a moral and practical flaw in the Treaty provided that the nuclear-weapon states and the non-nuclear-weapon states keep their parts of the bargain. If they do not, however, then the regime will certainly continue to unravel, and those parties that maintain good faith will be less and less able to strengthen or even preserve it.

6. The package of non-proliferation, disarmament and peaceful nuclear energy provisions in the Treaty has led to tensions---exposed frequently at NPT review conferences---over which of its objectives should take precedence. The 1995 indefinite extension of the Treaty, achieved in the context of decision documents on Strengthening the Review Process and Principles and Objectives for Nuclear Non-Proliferation and Disarmament, as well as a Resolution on the Middle East, included a revised review process. It authorised a Preparatory Committee (PrepCom) to discuss substantive matters in the period leading up to the Review Conference in 2000. The implementation of this strengthened process has been impeded by the parties' long-standing tensions and a lack of consensus on its modalities. Some states argue that because PrepCom sessions are not meetings of the parties, but subordinate bodies of Review Conferences, they cannot act as functional substitutes for a standing executive body or other permanent organ. The NPT contains no provisions for permanent institutions or executive bodies, other than the now mandatory requirement to hold a conference every five years to review the Treaty's operation. Moreover, the Treaty has no mechanism to authorise action against non-compliance.

7. The Tokyo Forum is convinced that steps must be taken to increase the ability of NPT parties to prevent, and react effectively to, cases of proliferation. It calls for the creation of a permanent secretariat and consultative commission for the Treaty. This would be a

guardianship organisation, charged with serving the objectives of all Treaty parties in pursuing non-proliferation and disarmament. Consideration of options for such an executive body should begin urgently. In addition, the Forum stresses the importance of the 2000 NPT Review Conference for the preservation and strengthening of the Treaty regime, and the need for all participants to adopt constructive approaches and focus on their common interest in strengthening it.

#### STRENGTHENING OTHER MULTILATERAL NON-PROLIFERATION INSTRUMENTS

8. To further reinforce the effectiveness of the NPT, other multilateral instruments in the non-proliferation regime must be strengthened. These include regional elements, notably nuclear-weapon-free zones, and security assurances for non-nuclear-weapon states.

##### Strengthening the CWC and BWC

9. The verification arrangements of the Chemical Weapons Convention have been eroded by implementation decisions, making it more difficult to detect non-compliance. In addition, at a time when biological weapons capabilities are growing and new scientific advances suggest increased availability of biological weapons in the future, negotiations on a verification protocol to the Biological Weapons Convention are still problematic. Moreover, the international community has found no successful way to deal with proven cases of material breaches or other non-compliance in the context of the 1925 Geneva Protocol, the Chemical Weapons Convention and the Biological Weapons Convention. Unless the international community adopts strengthening verification measures for these accords and effective measures to deal with non-compliance, chemical and biological threats could become a significant concern for international security.

##### Strengthening Regional Instruments

10. The geographical coverage and non-proliferation significance of nuclear-weapon-free zones have become more salient as nuclear dangers have grown. The key commitment of NWFZ treaties is that states parties will not acquire nuclear weapons nor allow them to be stationed on their territories. They require nuclear-weapon states to make an

unconditional commitment, known as a negative security assurance, that they will not threaten or use nuclear weapons against NWFZ states parties. The unconditional negative security assurances and the commitments by NWFZ states parties go well beyond those in the global non-proliferation agreements.

11. These regional compacts are now setting more far-reaching non-proliferation and disarmament goals than the global regimes. Part of their special value is that they demonstrate the commitments of many states---particularly in the developing world---to disarmament and non-proliferation. The regional nuclear-weapon-free zones can build high levels of confidence among various neighbouring states. At the same time, regional nuclear-weapon-free zones are not substitutes for effective global regimes; each complements the other.

12. Treaties to create nuclear-weapon-free zones were signed in Latin America in 1967, the South Pacific in 1985, Southeast Asia in 1995 and Africa in 1996. All ban nuclear weapons within a specified territory, task the International Atomic Energy Agency with verification responsibilities, and establish permanent treaty organs. The 1995 Treaty of Bangkok has a system for dealing with allegations of non-compliance which involves requests for clarification, requests for a fact-finding mission and procedures for remedial action. The 1996 Treaty of Pelindaba contains compliance provisions, mechanisms for the destruction of existing nuclear devices, commitments on conditions for exports to non-nuclear-weapon states, physical protection requirements, and prohibition of attacks on peaceful nuclear installations in the zone.

13. Another agreement aimed at keeping nuclear weapons out of specific territory is the Joint Declaration on the Denuclearisation of the Korean Peninsula signed in 1991 by the Democratic People's Republic of Korea (DPRK) and the Republic of Korea (ROK). This was followed in 1992 by an Agreement on the Formation and Operation of the North-South Joint Nuclear Control Committee. The 1994 Agreed Framework between the United States and the DPRK reiterated the goal of a denuclearised Korean Peninsula.

14. Work is well advanced on creating a nuclear-weapon-free zone in Central Asia, where five states have agreed on a draft treaty and are now discussing it with the five nuclear-weapon states. The creation of such a zone is becoming increasingly important to global non-proliferation goals. Aspirations have also existed for many years to create



zones in the Middle East, Central Europe and South Asia. Proposals have been made to formalise links between Southern Hemisphere zones. This would highlight that almost all states in that hemisphere were within such zones and that more than 100 states were potentially in receipt of unconditional negative security assurances from the nuclear-weapon states.

15. The Tokyo Forum urges all parties concerned to redouble their efforts to achieve the goal of a denuclearised Korean Peninsula as soon as possible. Major efforts also should be made to bring fully into force the Treaties of Bangkok and Pelindaba, and their protocols, as well as establishing their regional institutions. In addition, the Tokyo Forum strongly supports the rapid conclusion and early entry into force of a treaty to create a Central Asian nuclear-weapon-free zone. Efforts should be made to promote the creation of new nuclear-weapon-free zones and to link those that exist.

#### Strengthening Security Assurances

16. Assurances that nuclear weapons will not be used against a non-nuclear-weapon state give many such states a strong security incentive to maintain and increase their support for the global non-proliferation regime. The five nuclear-weapon states, however, have not agreed on a common formula to codify their unilateral negative security assurances, without which the assurances cannot be brought together in a multilateral legal form. At contention are the differing conditions which the nuclear-weapon states attach to the implementation of their negative security assurances; whether such assurances should only be given to NNWS parties of the NPT or be of universal application; and whether they should be negotiated in an NPT forum or the Conference on Disarmament. The Tokyo Forum calls on the five NWSs to actively seek agreement on a common formula for negative security assurances to NNWS parties to the NPT, and explore the possibility of negotiating a legally-binding agreement.

17. The Forum also notes that positive security assurances---including guarantees of assistance to states threatened or attacked by nuclear weapons---can be a further incentive for non-nuclear-weapon states to support non-proliferation.

18. In January 1992, the President of the United Nations Security Council declared on behalf of the members of the Security Council that the proliferation of all weapons of

mass destruction constituted a threat to the maintenance of international peace and security. The Tokyo Forum urges the international community to seek to reconfirm this statement as a Security Council resolution. If proliferation were to be defined thus, sanctions against a proliferating state could flow more easily through the Security Council. The Tokyo Forum also calls on Permanent Members of the UN Security Council to announce that they would refrain from exercising their vetoes against efforts to assist or defend UN member states which are subject to the use or the threat of use of weapons of mass destruction. The Tokyo Forum considers that all current and prospective Permanent Members of the UN Security Council should have exemplary non-proliferation credentials.

#### TIGHTENING CONTROLS ON FISSILE MATERIAL

19. One of the most pressing nuclear proliferation problems facing the world lies in the sheer amount of stockpiled fissile material for nuclear weapons, and the problems of keeping it secure and disposing of it safely and irreversibly. The problem is most acute in Russia and some other parts of the former Soviet Union. About 3,000 tonnes of plutonium and highly enriched uranium (HEU) exist in the world, of which less than one percent is under safeguards of the International Atomic Energy Agency (IAEA). Two-thirds of the world's plutonium and highly enriched uranium was produced specifically for military purposes, and two-thirds of this---about 1,300 tonnes---is now considered surplus to military requirements. The United States and Russia have the largest stockpiles of fissile materials, with hundreds of tonnes each. France, the United Kingdom and, reportedly, China each has roughly tens of tonnes, and India, Pakistan and Israel hundreds of kilograms each. But the size of national stockpiles is not the only measure of the danger they pose.

#### Declaring an End to Production

20. France, Russia, the United Kingdom and the United States have formally announced that they are no longer producing fissile material for weapons purposes. China has also indicated unofficially that it has stopped producing fissile material for weapons purposes. A public statement from China confirming its private assurances would greatly aid progress on controlling fissile material. India and Pakistan have active production programs; it is likely that their stocks of weapon-grade material are increasing. It is not clear whether Israel is continuing to produce fissile material for

weapons purposes. India, Pakistan and Israel should also declare, as soon as possible and before conclusion of the Fissile Material Cut-off Treaty, national moratoria on the production of fissile material for weapons purposes.

#### Expediting Negotiation of a Fissile Material Cut-off Treaty

21. A Fissile Material Cut-off Treaty (FMCT) is a precondition for success in nuclear non-proliferation, as well as a building block for nuclear disarmament. It would help to curb nuclear proliferation and facilitate efforts to detect and monitor clandestine production and acquisition. The Tokyo Forum calls on the Conference on Disarmament (CD) to act on the 1995 Shannon Mandate for the negotiation of a FMCT. The Conference must overcome the political stalemate that delayed the establishment of a negotiating ad hoc committee until August 1998 and has frustrated its re-establishment in 1999. The treaty needs to be concluded as quickly as possible. However, the issue of fissile material stockpiles is important. The Tokyo Forum recommends that the issue of fissile material stocks be discussed in parallel with, but outside, the formal FMCT negotiations in order to speed the process. Verification measures under an FMCT should augment and not undermine the NPT/IAEA safeguards system including its Additional Protocol.

#### Increasing Transparency

22. While the non-nuclear-weapon states are legally obliged under the NPT to place their fissile materials under the safeguards system of the International Atomic Energy Agency, there is no treaty to control fissile materials in the nuclear-weapon states or the non-NPT countries. Some of the nuclear-weapon states, however, have taken steps to assist accounting and control. In the nuclear-weapon states and non-NPT states, military inventories of fissile material are subject to national controls but not to any external checks. Nor are the responsible bodies always fully accountable to national legislatures.

23. Countries with nuclear weapon programs have long kept secret the details about their fissile materials, but since the end of the Cold War some have unilaterally accepted partial transparency. The United States has begun a process of publishing its inventories of plutonium and highly enriched uranium. In 1993, it launched the "Openness Initiative" to reveal information on fissile material produced and used for

military purposes. Details on plutonium were published in June 1994 and February 1996, with details on highly enriched uranium to follow. In 1998 the United Kingdom announced the size of its military stockpile of fissile material and committed itself to publishing the results of a more wide-ranging audit.

24. The Tokyo Forum urges all states with unsafeguarded fissile materials---the nuclear-weapon states and relevant non-NPT states---to voluntarily increase the transparency of their fissile material stockpiles. Those that have not already done so should begin a process of internally auditing their stocks. The results from the internal audits should be published annually. This transparency measure would have significant confidence-building effects, and could help expedite FMCT negotiations. Transparency measures on fissile material, including any at a regional level, should be linked and coordinated with the International Atomic Energy Agency and structured to ensure full transparency on nuclear material accounting.

#### Preventing Nuclear Terrorism

25. Poorly-secured fissile material is attractive not just to states seeking nuclear weapons, but also to a new type of potential proliferator: nuclear terrorists. There is now a real possibility that sub-state forces with hostile aims---political, fanatical or criminal---may acquire the materials and technology needed for crude nuclear weapons. An act of nuclear terrorism would be a catastrophe, and no country is safe; indeed, the strongest states might be the most likely targets. Governments may seek to exchange information and enhance their detection and response capabilities, but terrorists will always have the advantage of being difficult to identify and deter. The Tokyo Forum calls for regional and global cooperative efforts to prevent weapons of mass destruction from falling into the hands of extremist, fanatical or criminal groups. Efforts to fight nuclear terrorism could be backed by new legal norms, including an international treaty on nuclear terrorism, advocated by Russia and now being negotiated in the United Nations. To be useful, this instrument must add materially to existing legal means. Any measure that strengthens the international norms and existing legal means is worthy of support.

#### Improving Material Protection and Control

26. There is a pressing need to improve international standards for physical protection

aimed at preventing theft or clandestine diversion of fissile materials. The materials must be adequately contained, in facilities and in transit. This requires trained and armed personnel with formal policing powers, perimeter fencing and monitoring, special storage facilities, containers and vehicles. The Convention on the Physical Protection of Nuclear Materials, in force since 1987, must be accepted and fully implemented by all relevant states. Urgent consideration should be given to widening the scope of the convention, now concerned mainly with materials in transit. The 1994 Convention on Nuclear Safety, for safe carriage by sea of irradiated fuel, plutonium and high-level radioactive waste, and the 1997 Joint Convention on the Safety of Spent Fuel Management and Radioactive Waste, can also help stop the theft or diversion of nuclear materials for use in weapons.

#### Strengthening Controls and Threat-Reduction Programs in Russia

27. Ever since the demise of the Soviet Union there has been great concern over the physical security of the large amount of fissile material on its territory. The material accounting procedures in the USSR were not particularly rigorous, so the precise size of the problem is not known. Its scale is clearly vast. Economic difficulties in Russia are compounding concerns that fissile material, including that from dismantled warheads, may be removed from storage and transferred illicitly. While important initiatives have been undertaken to prevent this, the sheer amount of material necessitates far greater efforts. Very little has been disposed of, either through storage as waste or burning as fuel. Meanwhile, salaries for guards go unpaid while agents of proliferators may be looking for fissile material, small amounts of which have huge importance in an embryonic weapons program. The Tokyo Forum calls urgently for greater international cooperation to combat nuclear smuggling, with mutually-supporting roles for police forces, intelligence and customs agencies, and the International Atomic Energy Agency.

28. Greater international cooperation is required for Russia and other CIS members to improve nuclear material protection, control and accounting. Since 1994 many countries, including the United States, Japan and the European Union, have provided financial contributions and expertise to this end. The United States, under the Nunn-Lugar or Cooperative Threat Reduction (CTR) program, has provided about US\$1.8 billion for 18 projects. Other G7 members have contributed considerably smaller amounts. Assistance needs to be maintained and intensified in, for example, destruction of nuclear weapons, provision of reinforced containers, storage facilities and transport for fissile materials,

and research on mixed oxide fuel recycling. The International Science and Technology Center needs support to continue funding civilian projects for former Soviet scientists. The international community needs to expand threat-reduction programs in Russia as a matter of urgency. The United States recently announced US\$4.5 billion for the Expanded Threat Reduction Initiative, to help tackle proliferation threats including those arising from the loosening of controls on plutonium due to the Russian financial crisis. The Tokyo Forum urges the other G7 countries to provide additional resources for threat-reduction programs and calls on other members of the international community to follow the lead of the United States.

29. The Tokyo Forum is deeply concerned that the pace of establishing control over, and disposing of, highly enriched uranium and plutonium in Russia and other parts of the former Soviet Union is too slow and the risk of leakage too high. Greater efforts need to be made, and by more states, to ensure the physical control and urgent disposal of plutonium and highly enriched uranium in the former Soviet Union. Disposal programs should be subject to tighter time schedules, with dates for completion. Excess highly enriched uranium should be diluted to low-enriched uranium for its introduction to civil power production as soon as possible. The financial cost of these tasks will be high. Private as well as government sources of funding should be sought, to ensure that the greatest possible resources are deployed to address the problem in the shortest possible time.

#### Extending Fissile Material Verification and Safeguards

30. The technical barriers to increasing non-proliferation monitoring and controls over all civil and military nuclear material, including developing a register, are not insurmountable. The civil nuclear industries of the non-nuclear-weapon states have long been subject to international inspections by the International Atomic Energy Agency, and the scope of the latter is being extended. It is reasonable to expect that extensive records have been kept of the production of fissile material---for military and civilian use---in other states also. International verification is feasible if governments, especially in the nuclear-weapon states, are prepared to declare their stocks.

31. The verification of a Fissile Material Cut-off Treaty would be difficult without the establishment of a reasonable defined data baseline of existing fissile material stocks in the nuclear-weapon states. The negotiations and conclusion of a Fissile Material Cut-off

Treaty can be expected to enhance transparency and availability of data. This would be an important step towards the goal of universal application of safeguards.

32. The Tokyo Forum calls on all NPT parties that have not yet done so to give the International Atomic Energy Agency increased powers to implement safeguards, by bringing into force the Additional Protocol to their existing safeguards agreements. The Forum also notes that continuing improvements to safeguards will be needed to keep the system as effective as possible in dealing with deliberate violations. Extra resources would of course be needed for expanded safeguards inspection activities, but cost increases could be minimised if political impediments were removed to long-sought changes to the methods and procedures of IAEA safeguard inspections.

33. The International Atomic Energy Agency, the United States and Russia launched a trilateral initiative in 1996 to explore the technical, legal and financial issues in bringing surplus fissile material stocks under IAEA verification. Russia and the United States have announced that they will submit their declared excess materials to verification "as soon as practicable" under their voluntary offer safeguards agreements with the Agency. The United Kingdom has also declared it has "excess" military material that will be placed under Euratom safeguards. The Tokyo Forum urges expansion and acceleration of these initiatives and encourages other NWSs to do the same. All states with nuclear weapons programs should agree to IAEA safeguards over excess military fissile materials, including material removed from warheads dismantled under arms reduction treaties, and their early and irreversible disposal.

34. The Tokyo Forum calls on all those nuclear-weapon states that have not already done so to place all civilian stocks of fissile materials under IAEA safeguards pursuant to their voluntary offer agreements. Non-NPT states should place part of their stockpiles under IAEA safeguards at agreed annual rates, and negotiate voluntary offer agreements with the Agency. All states with civil plutonium and highly enriched uranium should make annual declarations on their holdings.

35. The Tokyo Forum urges states, whether or not they belong to the NPT, to make unilateral commitments to place under IAEA safeguards facilities previously used to produce fissile materials for nuclear explosive devices, and to decommission and dismantle facilities they have used previously for that sole purpose.

## STRENGTHENING NUCLEAR EXPORT CONTROLS AND IMPROVING THEIR TRANSPARENCY

36. The national export controls coordinated under the Nuclear Suppliers' Group (NSG) and the Missile Technology Control Regime (MTCR) help retard the proliferation of nuclear weapons and their delivery vehicles. But the effectiveness and transparency of these controls can and should be improved.

37. While participants in export control arrangements firmly argue that their controls do not impede legitimate trade, the counter-claims that the regimes are exclusive, discriminatory, and lacking in transparency, persist. Differences between states over export control regimes could be a major obstacle to strengthening restraints on proliferation. Participants in export control arrangements face the challenge of responding constructively to the critics of the regimes, while maintaining the effectiveness of their controls. The Tokyo Forum calls for greater transparency in nuclear-related export controls within a framework of dialogue and cooperation between members and non-members of the regimes, in the light of the agreement to this end in the Principles and Objectives decision document associated with the 1995 permanent extension of the NPT.

38. Some existing or potential suppliers of sensitive items are not members of export control regimes. The Tokyo Forum calls for expansion of the export control regimes to include current non-member suppliers, without jeopardising the effectiveness of export controls. Some efforts to this end are already underway. The admission of Russia to the NSG and MTCR was a positive step. It is now especially important to encourage China to pursue its declared policy of actively considering joining the MTCR. New members would have to adhere to the strict export control standards of the regimes for their membership to have positive results for non-proliferation.

39. Another way to address the problem of non-member suppliers is to encourage them to adopt export controls as close as possible to the strictness and effectiveness of those required for members of the regimes. This approach can be pursued in parallel with efforts to expand membership. Stronger outreach and transparency efforts by member states, including bilateral consultations with and technical assistance to non-member countries, would greatly help concerned non-members establish effective export control systems.



40. There is an urgent need to strengthen the conditions for the supply of sensitive nuclear materials and technologies. The Tokyo Forum calls on all supplier countries to stipulate that an IAEA Additional Protocol safeguards agreement between the recipient country and the IAEA is a new condition for the export of nuclear-related items. Participants in the NSG, however, would need to be aware that the conclusion of an Additional Protocol agreement by a destination country would not automatically mean that all exports of items on the control lists could then automatically flow freely to that country. It would still be the responsibility of each NSG member state to determine whether a country of destination had dispelled proliferation concerns.

41. The Tokyo Forum calls on those states participating only in the Zangger Committee to join the Nuclear Suppliers' Group in order to make their nuclear-related export controls more effective. The Forum also calls for strengthening of the MTCR by tightening national export licensing procedures.

42. The Tokyo Forum reiterates the need for the strict implementation of MTCR export guidelines, and calls on Russia to implement more rigorous controls on missile and nuclear weapons technology and materials. In this regard, the Forum stresses the necessity for the international community to closely cooperate with Russia in denying nuclear weapons materials and missile technology, as well as precursors for other weapons of mass destruction, to state or non-state proliferators.

#### CURBING MISSILE PROLIFERATION

43. A comprehensive response to nuclear proliferation must also address concerns about the spread of ballistic missiles. While there are treaties prohibiting chemical and biological weapons, and treaties to stop the proliferation and testing of nuclear weapons, there is no multilateral treaty specifically regulating missiles. Following flight tests of long-range missiles by India and Pakistan in April 1999, the UN Secretary-General stated that international agreements on norms against the development of ballistic missiles for military purposes would substantially improve prospects for progress on disarmament and arms control treaties.

44. Past US-Soviet/Russian efforts and agreements on nuclear arms control such as the Strategic Arms Limitation Talks (SALT), INF and START controlled, reduced and

eliminated ballistic missiles. Thus, for the declared nuclear-weapon states, ballistic missiles have been closely associated with the carriage of nuclear weapons. For other states with nuclear weapons programs or suspected nuclear ambitions, efforts to acquire ballistic missiles will automatically raise suspicion of parallel efforts to acquire nuclear or other weapons of mass destruction. The Tokyo Forum believes that development, acquisition, flight-testing, production and deployment of ballistic missiles can constitute a threat to regional peace and security.

45. The Tokyo Forum urges the international community to seek realistic ways to prevent acquisition and deployment of nuclear-capable ballistic missiles. A special conference of states concerned at transfers of missile technology outside the MTCR should be convened to deal with the growing problem of missile proliferation. One possible approach that merits serious consideration is the negotiation of a global agreement, or regional agreements, that would draw upon the provisions of the 1987 US-Soviet INF Treaty. Multilateralisation of the INF Treaty would have the added specific benefit of helping reduce threat perceptions in southern Asia without discriminating against specific countries. Another approach is to work in bilateral or regional frameworks, particularly in the Middle East, South Asia and Northeast Asia. Proper consideration would need to be given to the security concerns of the countries involved. Enhanced security dialogues would help create the conditions under which regional measures against missile proliferation could be envisaged.

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#### IV. ACHIEVING NUCLEAR DISARMAMENT

1. The use of nuclear weapons has disastrous and long-lasting consequences. No other cities must be put through the agony of recovery from their devastating effects endured

by Hiroshima and Nagasaki. The abolition of these weapons of mass destruction is a long-cherished goal of the international community. Since the release of the Canberra Commission report in 1996, prospects for abolition have been weakened by many developments. The international community has reached a crossroads at which it must choose between the assured dangers of proliferation and challenges of disarmament. There can be no standing still.

2. Progress towards nuclear disarmament is inextricably tied to success in non-proliferation efforts. Without movement towards nuclear disarmament, the norm of non-proliferation is weakened. Without success in non-proliferation, the goal of zero nuclear weapons is unlikely to be achieved. The central compact in the NPT between nuclear-weapon states and non-nuclear-weapon states must be strengthened. The alternative is further proliferation and the continued reevaluation of nuclear weapons in the 21st century.

3. The nuclear-weapon states have a solemn treaty obligation to succeed in progressively reducing and eliminating their nuclear arsenals. At the same time the non-nuclear-weapon states must also become stronger stakeholders in the NPT. They can demonstrate their strengthened commitment to the Treaty by taking steps to accelerate the entry into force of the Comprehensive Nuclear-Test-Ban Treaty, by moving promptly to conclude the Fissile Material Cut-off Treaty, and by implementing enhanced IAEA safeguards. In this way, the Tokyo Forum calls on all states parties to rededicate themselves to the NPT's fundamental bargain.

4. A core question in the nuclear disarmament debate is whether nuclear deterrence or the abolition of nuclear weapons offers more national, regional, and global security. States possessing nuclear weapons continue to claim that they enhance their national security. But their actions may also have led rivals to acquire weapons of mass destruction, leading to diminished security for both these states and their non-nuclear neighbours. National, regional and global security have not been enhanced by the possession of nuclear weapons.

5. Some advocates of retaining nuclear weapons claim that these weapons enhance security by deterring nuclear attack, the use of chemical and biological weapons, and large-scale conventional aggression. Until they are abolished, the Tokyo Forum believes that the only function of nuclear weapons is to deter the use of other nuclear weapons.

This core function is provisional, however, and must be accompanied by efforts to "pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament" as unanimously affirmed by the International Court of Justice.

#### Revitalising US-Russian Nuclear Arms Reductions

6. The Tokyo Forum notes with dismay that since 1993, there have been no formal US-Russian nuclear arms reduction negotiations, and that less formal discussions on these matters have been limited and episodic. It calls on the United States and Russia to initiate a new round of regular, comprehensive talks on international security, arms control, and disarmament. These discussions should include strategic and all other types of nuclear arms, missile defences, and other steps that should be taken to reduce nuclear dangers, such as those discussed below.

7. Creative ways must now be found to revitalise bilateral strategic arms reductions. The Strategic Arms Reduction Treaty I, ratified by both countries, contains monitoring arrangements that could be applied to deeper reductions. START II, signed in January 1993 more than six years ago, is still not in force. Formal US-Russian negotiations on a follow-on START III agreement have yet to begin, although the outlines of an ambitious set of negotiating objectives have been sketched, treaty ratification and implementation have become too weighed down by conditions, complications, and political partisanship. Even if the Duma consents to ratify START II, Russian implementation might be conditional on the US Senate's reaffirmation of the Anti-Ballistic Missile Treaty, which is by no means assured.

8. The more time that passes without ratification of START II, the less relevant this treaty becomes. Over the next 10 to 15 years, deployed warheads on Russian strategic nuclear forces are widely estimated to fall, not just below START II levels but perhaps to half of projected START III levels. Russian nuclear forces produced in large numbers in the 1980s face block obsolescence, and Russia does not have the funds to keep this large force in the field. Waiting for ratification and entry-into-force of treaties requiring reductions well short of those caused by aging, is an inappropriate response to increased nuclear dangers.

9. The United States and Russia might now usefully consider combining START II and START III, and making START III's reductions more ambitious. While awaiting formal

ratification of these treaties, the Tokyo Forum urges the leaders of the United States and Russia to begin immediate reductions by dismantling deployed nuclear forces through parallel steps. It proposes that both countries pledge to use this process to reduce down to 1,000 deployed warheads on strategic nuclear delivery vehicles. The formal treaty process can reaffirm such pledges. Treaties that retard much-needed progress in reducing nuclear dangers are part of the problem, not part of the solution. The procedure the Forum proposes would remove existing treaty ratification barriers to deeper cuts.

### Ending Hair-trigger Alert

10. Much of the doctrinal support for nuclear weapons is outdated and needlessly worsens nuclear dangers. Despite the end of the Cold War, it is striking that the targeting doctrines and alert status of US and Russian nuclear forces have changed so little. Both countries keep hundreds if not thousands of nuclear weapons on high states of launch readiness, and maintain massive nuclear attack options against a wide range of targets. These targeting requirements and this alert status defy satisfactory explanation, even under the doctrines of nuclear deterrence and extended deterrence, and are of great concern to the international community.

11. The need for a review of alert status is especially pressing, not only because of the sheer number of weapons involved, but also because of the likelihood that, due to domestic difficulties, command and control procedures in Russia will come under even greater strains in the coming years. Given the interconnectedness of US and Russian alert levels, cooperative approaches to adopting safer nuclear postures are needed. The Tokyo Forum calls on the United States to renew its offer to help Russia with early warning systems, and calls on Russia to accept this assistance. It also calls on both countries to work closely together to reduce dramatically the alert levels of their nuclear forces.

12. Zero nuclear weapons at immediate readiness for use is an essential step towards the goal of their complete elimination. Some progress to this end has been made in the past decade. The United States has taken all bombers off alert, and the United Kingdom and France each maintains only one ballistic missile-carrying submarine at sea, at launch readiness measured in days. China is believed to maintain its nuclear forces at a somewhat lower level. But much more can be done.

13. The United States and Russia have signed START II which would eliminate land-based missiles with multiple warheads. The Tokyo Forum calls on the leaders of both countries to consider and implement ways to stand down these forces as soon as possible while awaiting this Treaty's entry into force. As such a stand-down based on START II would fall disproportionately on Russia, the Tokyo Forum calls on the two countries to complement it by reducing alert levels for sea-based forces, a measure that would fall disproportionately on the United States. Verification arrangements for these stand-downs should be discussed and implemented.

14. To eliminate the terrifying consequences of accidental nuclear launches caused by Year 2000 (Y2K) computer problems, the Forum calls urgently for the removal of all nuclear weapons from alert for the period in which there are any potential risks from this source to the reliability of command, control and warning systems.

#### No First Use

15. Pledges of No First Use of nuclear weapons can be useful if they reduce the salience of such weapons, and do not lower the threshold for the use of other weapons of mass destruction. Negotiating such pledges is complicated by the alliance relationships of the United States and by Russia's military difficulties, especially as long as the North Atlantic Treaty Organization and Russia keep First Use options in their military doctrines. Moreover, in the past some pledges of No First Use were not credible. Without changes in doctrine, reinforced by greater transparency and verifiability to affirm reduced launch readiness, pledges alone will continue to lack credibility. The North Atlantic Treaty Organization has just put in place a mechanism to review its First Use options, and in-depth discussion and further efforts will be needed to bring to fruition an effective NATO No First Use commitment. The Tokyo Forum commends such efforts.

#### Other Nuclear Weapons

16. The United Kingdom and France do not maintain stockpiles of non-deployed nuclear weapons, and information on Chinese stockpiles of non-deployed nuclear weapons is not available. They exist in the United States and Russia, however, in large numbers. Washington explains this vast, parallel arsenal as a "hedge" against a resurgent and adversarial Russia; Moscow explains its enormous holdings of tactical nuclear weapons

as an insurance policy for conventional force weaknesses and against a resurgent NATO. This maintenance of huge arsenals complementing deployed forces is a relic of the Cold War. The resulting numbers of nuclear weapons defy coherent, rational explanation. Even if US-Russian relations were to plummet to the depths of a new Cold War, how could the two countries expect to use these many thousands of warheads? The Tokyo Forum calls on the United States and Russia to begin discussions as soon as possible to progressively reduce and eliminate in verifiable ways their mutual "hedge" arsenals of non-deployed weapons.

17. The long-neglected issue of tactical nuclear weapons has begun to receive more attention. At the May 1999 NPT PrepCom, a number of states spoke out about the compelling need to address tactical nuclear weapons disarmament. This move rightly suggests that tactical nuclear weapons are a matter of increased concern. They have been revalued in Russian military doctrine, as reflected in a number of recent activities, including the decisions taken at the Russian Security Council meeting of April 29, 1999 and the Russian military exercise known as West 99. China's declaration in July 1999 on its acquisition of a neutron bomb capability is also noted. The unilateral and parallel reductions announced by Russia and the United States in October 1991 and confirmed in January 1992 should be implemented in a transparent and irreversible manner. Further information on Chinese tactical nuclear weapons would be welcomed. More generally, verifiable reductions and elimination should now be extended to tactical nuclear weapons as soon as possible.

18. The terrorism and proliferation risks associated with tactical nuclear weapons are high. They are relatively vulnerable to theft and older models have less stringent precautions against unauthorised use. More than half the current global nuclear arms stockpile may consist of tactical nuclear weapons. The process of reducing these stockpiles has begun with the substantial, but unverified, reductions of US and Russian tactical weapons. France has also reduced its holdings of tactical nuclear weapons, and the United Kingdom has decided to eliminate them. The Tokyo Forum believes that urgent steps should be taken to ensure that the reduction and abolition of tactical nuclear weapons can and should proceed in parallel with that of strategic weapons.

#### Multilateralising Nuclear Disarmament

19. Phased, irreversible reductions in US and Russian strategic nuclear forces to 1,000

deployed warheads will take a decade, perhaps longer. The elimination of non-deployed nuclear arsenals will lengthen this process. While the United States and Russia should accelerate their bilateral reductions, what responsibilities should fall to other states? The Tokyo Forum calls on the NNWS parties to the Treaty on the Non-Proliferation of Nuclear Weapons to continue to respect their obligations not to acquire nuclear weapons and to take initiatives to shore up the non-proliferation regime. The three other nuclear-weapon states recognised by the NPT also have important obligations to "pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament." As a first step, the Tokyo Forum calls on China, France and the United Kingdom not to increase their nuclear arsenals while the United States and Russia are reducing theirs. Israel, India and Pakistan are not recognised as nuclear-weapon states under the NPT, but they, too, have important obligations to the international community not to make the phased reduction and elimination of nuclear weapons even harder by building up their nuclear capabilities.

20. The United Kingdom and France have moved to cut the numbers and reduce the alert status of their nuclear forces. Transparency measures by both countries have provided reassurance that announced reductions to their deployed forces have taken place. According to published sources, these two states have the lowest number of nuclear weapons of the nuclear-weapon states. China is the least transparent of the nuclear-weapon states, and most information on the status of its nuclear forces comes from Western sources. The Tokyo Forum calls on China, as well as the United States, Russia, the United Kingdom and France, to make transparent their nuclear weapon policies and doctrines and the size of their arsenals.

21. Many important disarmament studies in recent years have advocated a phased reduction of nuclear arsenals that moves from a bilateral to a multilateral process at a point when 1,000 deployed warheads each remain in the US and Russian arsenals. Just as it will take a great deal of work and resources to build up the nuclear arsenals, so it will take similar efforts, and in particular a change in approach to the role of nuclear weapons, to achieve their final elimination. A high level of political cooperation among the five recognised nuclear-weapon states will clearly be essential for deep nuclear arms reductions of all kinds. One way to proceed could be for the five to negotiate a treaty based on the principle of simultaneously halving, or otherwise proportionately reducing, their numbers of weapons in each step. This principle would be fair in that the process would not fundamentally alter the relative capability of each party, while all five would



retain a residual arsenal until the last simultaneous step to zero. Another way would be to agree on a minimum number of warheads below which a nuclear force would be regarded as technically non-viable, and reduce down to this level before all states moved to zero. A process of verifiable, phased reductions by all nuclear-armed states to one step short of zero is a goal on which advocates of abolition and deterrence might find common ground and from which all states would reap shared security gains.

#### Revitalising Disarmament Efforts

22. The Tokyo Forum calls on all states that have not yet done so to sign and ratify the Comprehensive Nuclear-Test-Ban Treaty as a matter of urgency. States whose ratifications are needed for its entry into force, such as the United States, Russia, China, India, Pakistan, Israel, and North Korea, have a special obligation to do so quickly. The moratorium on nuclear testing cannot be presumed to hold until entry into force is secured. New testing by one state could lead to cascading tests by other states, greatly increasing nuclear dangers. All states must respect a moratorium on nuclear testing. Pending entry into force of the treaty, the Tokyo Forum calls on all states to fully fund and implement its monitoring arrangements.

23. The Tokyo Forum notes concerns over whether subcritical experiments undermine the objectives and purposes of the CTBT. Means should be sought to alleviate these concerns. One possible interim measure might be the introduction of practical monitoring and transparency mechanisms to confirm whether subcritical experiments are consistent with the treaty's objectives and purposes. This might be achieved through mutual monitoring among states conducting such tests.

24. A Fissile Material Cut-off Treaty has been on the nuclear negotiating agenda since the 1950s. Some have questioned the utility of this treaty, believing it to be insufficient for disarmament and immaterial for non-proliferation. The Tokyo Forum does not share this scepticism. Progress in nuclear negotiations has always been achieved in a step-by-step process, and the FMCT is an essential step in dealing with the dangers posed by fissile materials, as well as one of the basic building blocks for a fissile-material led disarmament process. Other, follow-up steps will also be needed to facilitate the progressive reduction and elimination of fissile material for weapons purposes. Therefore, the Tokyo Forum strongly urges the prompt conclusion of the Fissile Material Cut-off Treaty, as mandated by the 1995 NPT Review and Extension

Conference.

25. There could also be roles for the international community in the development of transparency measures for nuclear arsenals and fissile material removed from warheads. One measure that has been proposed in this context is a verifiable nuclear arms register. An experts group might be mandated to decide what should be contained in the register, such as the number and types of nuclear weapons, whether on delivery vehicles or in inventories. Tactical nuclear weapons and warheads held in reserve might also be included. The register would establish a baseline against which further reductions could be counted. As with the UN Conventional Arms Register, the contributing states might usefully declare annual changes. The Tokyo Forum calls on the UN General Assembly to empower the Secretary-General to undertake a feasibility study of such a measure.

26. The Tokyo Forum also believes it is essential to develop a verifiable register of all nuclear material produced for both civil and military purposes. We urge that all weapons grade plutonium and uranium from dismantled nuclear warheads be placed under IAEA safeguards. Effective long-term monitoring of fissile materials is feasible only if states possessing nuclear weapon capabilities are prepared to declare their stocks. Effective controls also require that the International Atomic Energy Agency be empowered to carry out thorough inspections to detect systematic and clandestine violations.

27. With the deterioration of US-Russia and US-China relations, new strains in the NPT, and the ineffectiveness of the Conference on Disarmament since the conclusion of the CTBT, it is essential for all states to work harder to revitalise non-proliferation and disarmament efforts. The Tokyo Forum notes with appreciation recent efforts by the New Agenda Coalition to provide new impetus to multilateral fora that are mired in competing theologies of nuclear deterrence and time-bound frameworks for nuclear disarmament. The Tokyo Forum also notes with appreciation the efforts of non-governmental organisations to promote non-proliferation and disarmament. Creative coalitions between "middle powers" and non-governmental organisations might help provide leadership that is currently lacking elsewhere.

28. Non-proliferation and disarmament efforts could benefit greatly from revitalised multilateral bodies, notably the Conference on Disarmament (CD). The Conference on

Disarmament should suspend its operations unless it can revise its procedures, update its work program, and carry out purposeful work. It adheres to an agenda that has long been outdated but cannot be changed for lack of a consensus to do so. The consensus rule, even on minor procedural matters, is now causing perpetual deadlock. Consensus among CD members should not be necessary to begin or, indeed, conclude a multilateral convention. If a country does not like a treaty, it does not have to sign it. The structure of the CD's groupings of states, based on outdated Cold War alignments, also needs to be changed to better reflect the contemporary world.

29. The Tokyo Forum notes the importance some have placed on the immediate negotiation of a convention pledging the elimination of nuclear weapons. The utility of such a convention would depend on whether the pledges it contained to carry out nuclear disarmament would accelerate movement in this direction. The NPT contains a pledge of nuclear disarmament, but progress to fulfil it has been uneven and, in recent years, unsatisfactory. At a time of increasing nuclear dangers, the Tokyo Forum believes that actions are far more important than words and pledges. Thus the Forum would place primary emphasis at this time on concrete steps to progressively reduce and eliminate nuclear dangers.

#### Missile Defences

30. Prospective developments of missile defences have important implications for nuclear non-proliferation and disarmament. The prospect of missile defences in the United States is complicating a number of international relationships and arms control efforts. China and Russia have reacted negatively to prospective missile defences. The United Kingdom and France view with concern defences that devalue their nuclear deterrent forces. Indeed, while proliferation may increase the perceived need for missile defences, and the absence of defences may also lend impetus to proliferation, missile defences could further increase the risk of proliferation.

31. The Tokyo Forum believes that any future missile defences should be sensitive to these complications. At the same time, no country with the capacity to use weapons of mass destruction can be given a veto over another state's inherent right of self-defence. Moreover, states that have contributed to missile proliferation have diminished standing to argue against missile defences. There may be times when missile defences can play useful roles in countering coercion and strengthening alliance cohesion. At the

same time, the development and possible deployment of missile defences are best pursued in concert with strategies to progressively reduce the salience of nuclear weapons.

32. The Tokyo Forum is fully aware that unilateral measures cannot reduce the full range of nuclear dangers. A unilateral approach to missile defences in the United States could convey a "Fortress America" approach, weakening alliance ties. Missile defences should not be seen as an alternative to the norm of nuclear non-proliferation and disarmament. Therefore, cooperative threat reduction efforts should always be pursued vigorously. Successful cooperative threat reduction efforts can progressively reduce the impetus to develop and deploy offensive missiles and missile defences of all kinds. Tighter export controls and restraint in missile flight testing and missile deployments could diminish the perceived need for national missile defences.

33. The dismantling of the North Korean missile programs and cessation of its missile exports would have salutary effects. Furthermore, insofar as prospective missile defences are intended to address accidental or unauthorised launches, reduced alert rates and increased assurance over the command and control of Russian nuclear forces are not only important in their own right, but would also decrease the perceived need for national missile defences in the United States.

34. If cooperative threat-reduction efforts do not succeed, and if weapons of mass destruction carried by ballistic missiles continue to threaten states, missile defences can remain an option. The deployment of missile defences, if it occurs in these circumstances, should proceed in a highly cautious fashion, along with other initiatives to reduce nuclear dangers. Nations would be wise to leave open the possibility that defensive deployments could be scaled back, or even eliminated, if the sources of concern were reduced or removed.

#### Verification

35. An effective nuclear arms reduction process will require cradle-to-grave monitoring and transparency for all nuclear weapons. While the United States and Russia have made significant progress in reducing nuclear arsenals, they have hardly started down the necessary path of transparency needed for irreversible reductions. The Tokyo Forum calls on all states possessing nuclear weapon capabilities to be more open to monitoring

arrangements, transparency and confidence-building measures. States will not agree to deep reductions in their nuclear forces if they deem their security at risk from other states' undetected violations of nuclear arms constraints. This would be even more true in the final phase of an arrangement for the elimination of nuclear weapons.

36. The highly secret nature of many aspects of nuclear weapons programs makes it very difficult to verify declarations of the size and destruction of arsenals. An effective verification system must take into account this secrecy as well as the uncertainties about total amounts of nuclear materials produced for weapons purposes. Taken together, security concerns, secrecy, and uncertainties mean that the precision of verification of nuclear reductions and disarmament is a matter of the utmost seriousness.

37. A verification system with a single or narrow focus is not enough. A comprehensive verification system is required to provide early warning of breakouts or to detect cheating. The most effective verification system would be one that: combined a variety of techniques; coordinated in a synergistic way the contributions of international institutions, national technical means, and transparency and confidence-building measures; and extended to warheads, delivery systems and fissile materials.

38. While the development of detection and surveillance techniques is improving monitoring systems, political factors threaten to weaken stringent verification, as is now evident in relation to the United Nations Special Commission on Iraq or the Organization of the Prohibition of Chemical Weapons (OPCW). Some implementation decisions by the United States and other OPCW states parties have weakened the implementation provisions of the Chemical Weapons Convention, and this is a matter of concern for future global disarmament agreements. Strengthened verification of the Chemical Weapons Convention, and of the Biological Weapons Convention, is essential for global efforts to eliminate all weapons of mass destruction. To detect cheating, and so permit the progressive reduction and elimination of nuclear dangers, monitoring assets must be harnessed in tandem with political will. Both must be applied in a coherent way, involving coordination between governments and international institutions.

39. Bilateral nuclear arms reduction or limitation treaties between the United States and Russia, and their verification, hold valuable lessons for future verification of

nuclear disarmament. They have shown that credible verification arrangements covering large numbers of deployed nuclear weapons are feasible, but require considerable political and technical efforts and resources. These arrangements, however, have focused on delivery systems rather than nuclear warheads.

40. The verification and monitoring arrangements for deployed nuclear weapons must be extended to controls on nuclear warheads. Nuclear weapons are discrete items of the highest military and political sensitivity, and it would seem natural to expect governments to keep a close account of their warhead inventories. There should thus be no technical obstacles to governments declaring the location and status of all their nuclear warheads. Nor should there be any insurmountable technical barrier to verifying such declarations. The only fundamental problems are political.

41. Provision for inspections is vital to the verification of any arms control or disarmament agreement. Compliance with a disarmament treaty may stem from the political will that motivated its signing. But trust alone is not enough. Any major disarmament agreement requires solid and credible verification arrangements. The US-Russian nuclear weapons treaties have been verified in a system of bilateral arrangements making heavy use of on-site inspections. Inspection provisions are crucial to the credibility of the CWC, and are of central concern in negotiations to strengthen the BWC with a verification protocol. Governments must learn to tolerate inspections, including surprise or short-notice inspections, for multilateral disarmament to have a future.

42. The continued improvement of detection and surveillance techniques makes it possible to raise the quality and capabilities of verification and monitoring systems to levels unimaginable in the past. With modern technology, such possible signs of a weapons program as suspicious construction projects, bank transactions, import and export patterns, transport and production are more transparent than ever. Air, soil and water sampling has been refined and can yield important information. Satellite photography---government and commercial---is making it harder to hide nuclear weapons programs. Computer-based data-handling can improve the analysis of declarations and other data obtained in the verification process. All these techniques should be employed to verify nuclear disarmament.

43. National technical means are indispensable supporting tools for verification of

nuclear reductions and disarmament. The nature of national technical means is such, however, that their usefulness can be limited, especially in a multilateral context. To maximise the chances of detecting cheating, monitoring assets must be applied in a way that coordinates the efforts of governments and multilateral institutions. A synergistic approach is needed involving: the work of international institutions, such as the International Atomic Energy Agency and Comprehensive Test-Ban-Treaty Organization; national technical means; and transparency and confidence-building measures by states. The relevant international institutions should be shaped to increase the scope for a synergistic approach to verification.

44. If non-compliance with nuclear arms treaties is to be deterred, states must know not only that cheaters will be caught but that, when this happens, they will face serious consequences. The international community must be united and unequivocal in its intended response to would-be violators based on a broad consensus as to means and ends, including recourse to Chapter VII of the UN Charter. A strengthened and revitalised United Nations with a reformed and authoritative Security Council is essential to building and maintaining the support of the international community for the effective enforcement of compliance. The Tokyo Forum calls on all states seeking to promote nuclear non-proliferation and disarmament to actively support the development of such arrangements.

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## V. KEY RECOMMENDATIONS

A decade after the end of the Cold War, at the threshold of the 21st century, the fabric of international security is unraveling and nuclear dangers are growing at a disturbing rate. Relations among major powers are deteriorating. The United Nations is in political and financial crisis. The global regimes to stop the proliferation of nuclear weapons and

other weapons of mass destruction are under siege. Acts of terror are taking an increasingly worrisome turn, with the possible advent of sub-state groups armed with weapons of mass destruction. Nuclear tests by India and Pakistan have shown that not all countries share the view that the usefulness of nuclear weapons is declining. Years of relentless effort have not eliminated the clandestine weapons of mass destruction programs of the most determined proliferators. The US-Russia nuclear disarmament process is stalled, with adverse consequences for the global disarmament agenda. The situation in Asia is particularly fluid, portending negative changes for disarmament and non-proliferation in coming years.

Unless concerted action is taken, and taken soon, to reverse these dangerous trends, non-proliferation and disarmament treaties could become hollow instruments. A renewed sense of commitment to both non-proliferation and disarmament is urgently needed. We, the members of the Tokyo Forum, have released this report to draw attention to growing dangers and to propose remedial actions, both immediate and for the longer term.

The Forum commends the initiative of the Japanese Government in calling it into being and sustaining its work. We express the hope and expectation that the Japanese Government will continue to play a positive role in nuclear non-proliferation and disarmament.

1. Stop and reverse the unraveling of the Nuclear Non-Proliferation Treaty regime by reaffirming the treaty's central bargain. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) demands both disarmament and non-proliferation. The nuclear-weapon states must demonstrate tangible progress in nuclear disarmament, while the non-nuclear-weapon states must rally behind the Treaty and take stronger steps of their own, such as adopting improved International Atomic Energy Agency safeguards. To support the NPT's core bargain, a permanent secretariat and consultative commission should be created to deal with questions of compliance and to consider strengthening measures for the Treaty.

2. Eliminate nuclear weapons through phased reductions. The world faces a choice between the assured dangers of proliferation or the challenges of disarmament. The better choice is the progressive reduction and complete elimination of nuclear weapons. No other cities must be put through the devastation wrought by nuclear weapons and



the agony of recovering from their effects, endured by Hiroshima and Nagasaki. Nuclear-weapon states must reaffirm the goal of elimination and take sustained, concrete steps towards this end.

3. Bring the nuclear test ban into force. The Comprehensive Nuclear-Test-Ban Treaty must be ratified urgently by those key states still holding out---the United States, Russia, China, India, Pakistan, North Korea and Israel. All states must respect a moratorium on nuclear testing and pay their fair share of the Treaty's verification costs.

4. Revitalise START and expand the scope of nuclear reductions. The Tokyo Forum calls on the United States and Russia to initiate new comprehensive talks on nuclear arms reduction and security issues, to combine the Strategic Arms Reduction Treaties II and III processes, and to further extend reductions to 1,000 deployed strategic warheads. If these treaties remain stalled, we call on both countries to pursue parallel and verifiable reductions to that level. Verifiable reductions and elimination should be extended to non-deployed and non-strategic nuclear weapons. In addition, the Tokyo Forum calls on China to join the United Kingdom and France in reducing and, in the first instance, not increasing nuclear weapon inventories.

5. Adopt nuclear transparency measures. Irreversible reductions in nuclear forces require great transparency. The Tokyo Forum welcomes the transparency measures undertaken so far by the nuclear-weapon states and calls on them to take steps to increase transparency further. Recent transparency measures by the United Kingdom and France have shed considerable light on their nuclear weapons numbers and stocks. These could be further developed. The United States has put in place many transparency measures concerning its doctrines, deployments and technical developments. More information on reserve stocks would have a positive impact on steps towards nuclear disarmament. Russia has declared some aspects of its nuclear weapons program. Russia could increase the degree of transparency concerning doctrine, numbers of tactical nuclear weapons and stocks of fissile material. China has put in place few transparency measures. The implementation of further transparency measures on the numbers and types of nuclear weapons and on the amounts of fissile material should be encouraged in view of the favourable regional and global impact.

6. Zero nuclear weapons on hair-trigger alert. The Tokyo Forum calls for all states with nuclear weapons to endorse and implement the goal of zero nuclear weapons on

hair-trigger alert. To this end, we call on the United States and Russia to immediately stand down nuclear forces slated for reduction in START II. To eliminate the risk of the millennium computer bug leading to an accidental launch, all nuclear weapons in all states should be removed from alert for the period of concern.

7. Control fissile material, especially in Russia. We call on the United States to continue and to increase cooperative threat-reduction efforts in the former Soviet Union. The world community, especially the G8 states and the European Union, must substantially expand cooperative threat-reduction efforts. We call for the prompt conclusion of a Fissile Material Cut-off Treaty. We further call on China, India, Pakistan and Israel to declare moratoria on producing fissile material for nuclear weapons. Nuclear-weapon states should put all excess military stocks of fissile materials and civil fissile materials under International Atomic Energy Agency safeguards.

8. Terrorism and weapons of mass destruction. The Tokyo Forum calls for regional and global cooperative efforts to prevent weapons of mass destruction from falling into the hands of extremist, fanatical or criminal groups.

9. Strengthen measures against missile proliferation. The guidelines of the Missile Technology Control Regime need to be strengthened. We call on all states, particularly North Korea, to respect these guidelines, and for expanded participation in the MTCR. The international community should explore realistic ways to control and reverse missile proliferation, including global or regional agreements drawing upon the provisions of the 1987 US-Soviet Treaty on Intermediate and Shorter-Range Nuclear Forces. A special conference of concerned states should be convened to deal with the growing problem of missile proliferation.

10. Exercise caution on missile defence deployments. The Tokyo Forum recognises the uncertainties and complications missile defence deployments could produce. Recognising the security concerns posed by ballistic missiles, we call on all states contemplating the deployment of advanced missile defences to proceed with caution, in concert with other initiatives to reduce the salience of nuclear weapons.

11. Stop and reverse proliferation in South Asia. In the near term, the Tokyo Forum calls on India and Pakistan to: maintain moratoria on nuclear testing; sign and ratify the Comprehensive Nuclear-Test-Ban Treaty; support prompt negotiation of a Fissile

Material Cut-off Treaty; adopt and properly implement nuclear risk-reduction measures; suspend missile flight tests; confirm pledges to restrain nuclear and missile-related exports; cease provocative actions; and take steps to resolve the Kashmir dispute. In the long term, we urge India and Pakistan to accede to the Treaty on the Non-Proliferation of Nuclear Weapons as non-nuclear-weapo states.

12. Eliminate weapons of mass destruction in the Middle East. The Tokyo Forum recognises the linkage between the core objectives of a Middle East that is peaceful and one free of weapons of mass destruction (WMD). We call for: a revitalised Arab-Israeli peace process; resumption of an effective WMD control regime for Iraq under UN Security Council auspices; restraint on missile and flight test programs; effective and verifiable implementation of the Chemical Weapons Convention and Biological Weapons Convention by all states in the region; implementation of strengthened International Atomic Energy Agency safeguards; and Israel's accession to the Treaty on the Non-Proliferation of Nuclear Weapons as a non-nuclear-weapon state.

13. Eliminate nuclear and missile dangers on the Korean Peninsula. The Tokyo Forum urges all parties to redouble their efforts to achieve the goal of a denuclearised Korean Peninsula as soon as possible. We call for coordinated global efforts to maintain North Korea's freeze on its graphite-moderated nuclear reactors and related facilities. All nuclear weapon and missile-related activities in North Korea must cease, including production and sale of WMD-capable missile technology. We call for the full and effective implementation of the 1994 Agreed Framework, North Korea's full compliance with an International Atomic Energy Agency safeguards agreement, and its adherence to the agency's strengthened safeguards system.

14. No vetoes in support of proliferation. The Tokyo Forum calls on the UN Security Council to pass a resolution declaring that the proliferation of weapons of mass destruction constitutes a threat to international peace and security. Permanent Members of the Security Council have a special responsibility to prevent proliferation. We call on them to refrain from exercising their vetoes against efforts to assist or defend UN member states that have become victim to the use or the threat of use of weapons of mass destruction. All current and prospective Permanent Members of the UN Security Council should have exemplary non-proliferation credentials.

15. Revitalise the Conference on Disarmament. The Tokyo Forum calls on the

Conference on Disarmament to revise its procedures, update its work program and carry out purposeful work, or suspend its operations. The consensus rule is causing perpetual deadlock. Consensus among members of the Conference on Disarmament should not be necessary to begin or conclude negotiations on a multilateral convention.

16. Strengthen verification for disarmament. The Tokyo Forum calls for widespread adoption of effective verification measures. The scope of verification of nuclear disarmament should be expanded to non-deployed nuclear weapons and the dismantling of nuclear weapons. An effective verification protocol should be agreed for the Biological Weapons Convention, and implementation decisions weakening the verification regime of the Chemical Weapons Convention should be stopped and reversed.

17. Create effective non-compliance mechanisms for nuclear non-proliferation and disarmament. The Tokyo Forum calls on all states seeking nuclear non-proliferation and disarmament to actively support the development of arrangements through which states in non-compliance with arms control treaties will know not only that they will be caught, but also that they will face serious consequences. The international community must be united and unequivocal in its intended response to would-be violators based on a broad consensus, including possible recourse to Chapter VII of the UN Charter. A revitalised United Nations with a reformed and authoritative Security Council is essential to building and maintaining the support of the international community for the effective enforcement of compliance.

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## GLOSSARY

ABM Anti-Ballistic Missile Treaty

BWC Biological Weapons Convention

CD Conference on Disarmament

CTBT Comprehensive Nuclear-Test-Ban Treaty

CTBTO Comprehensive Test-Ban-Treaty Organization

CTR Cooperative Threat Reduction  
CWC Chemical Weapons Convention  
DPRK Democratic People's Republic of Korea  
FMCT Fissile Material Cut-off Treaty  
HEU highly enriched uranium  
IAEA International Atomic Energy Agency  
INF Treaty on Intermediate- and Shorter-Range Nuclear Forces  
LEU low-enriched uranium  
MTCR Missile Technology Control Regime  
NATO North Atlantic Treaty Organization  
NNWS non-nuclear-weapon state(s)  
NPT Treaty on the Non-Proliferation of Nuclear Weapons  
NSG Nuclear Suppliers' Group  
NWFZ nuclear-weapon-free zone  
NWS nuclear-weapon state(s)  
OPCW Organization of the Prohibition of Chemical Weapons  
P5 five Permanent Members of the United Nations Security Council  
PrepCom Preparatory Committee (for NPT review conference)  
ROK Republic of Korea  
START Strategic Arms Reduction Treaty  
TMD theatre missile defence  
UN United Nations  
UNSCOM United Nations Special Commission on Iraq  
UNSCR United Nations Security Council Resolution  
USSR Union of Soviet Socialist Republics  
WMD weapons of mass destruction

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Profiles of the Members

Nishat AHMAD

Lieutenant General (Ret.) Ahmad is the former President of the Institute of Regional

Studies, Islamabad. He served as Additional Secretary in the Ministry of Foreign Affairs, Government of Pakistan. He worked at Henry L. Stimson Center, Washington D.C., as a visiting fellow. He is a member of the Melbourne Group, a group organised by Monash University, Australia, which works on peace and security issues in the Asia-Pacific region. Lieutenant General Ahmad was Commandant of the National Defence. He was Director General (plans and operations) in Joint Staff Headquarters of Pakistan armed forces. He has represented Pakistan in a number of delegations to China, Egypt, France, Germany, India, Indonesia, Malaysia, UK and USA.

Yasushi AKASHI (Co-Chair)

Mr Akashi is the former President of the Hiroshima Peace Institute, Japan. Prior to that position, he was the Under-Secretary-General for Humanitarian Affairs of the UN from March 1996 through the end of 1997. He joined the UN and served as, among others, the UN Under-Secretary-General for Disarmament Affairs, the Special Representative of the Secretary-General for Cambodia, and the Special Representative of the Secretary-General for the former Yugoslavia. Mr Akashi is the author of numerous books and articles, with focus on the United Nations and international affairs. After graduating from the University of Tokyo, he obtained his Master's from the University of Virginia and Ph.D. from Ritsumeikan University.

Marcos Castrioto DE AZAMBUJA

Ambassador de Azambuja is Ambassador of Brazil to France. He was the head of the Brazilian Permanent Delegation for Disarmament and Human Rights and Ambassador to Argentina. He is a career diplomat and has served as, prior to the above-mentioned posts, the Director of the Department of International Organizations, the Under-Secretary-General for Multilateral Affairs, and the Secretary-General for External Relations. Ambassador de Azambuja studied at the Faculdade Nacional de Direito, Universidade do Brasil. He also finished his diplomatic studies at the diplomatic academy Instituto Rio Branco.

Sergei Yevgenevich BLAGOVOLIN

Professor Blagovolin is the Deputy Director of the Institute of World Economy and International Relations Institute (IMEMO), Moscow. He is also the President of the Institute for National Security and Strategic Studies, the Chairman of the Council of Directors of TV-Capital and a member of the Russian-Japanese Committee 21st Century. Professor Blagovolin has conducted research on various issues, ranging from national

and international politics to the problems of national security. Professor Blagovolin served as, among others, a member of the State Council Committee on Military Reform and a member of the Academy of Military Science. He is a member of the Presidential Council of Russia. He earned his B.A. and Ph.D. from Moscow State University.

#### Emilio Jorge CARDENAS

Ambassador Cardenas is presently the Executive Director of HSBC Argentine Holdings S.A. He is also the Secretary General of the International Bar Association. From 1991 to 1996 he was Argentina's Permanent Representative to the United Nations. As such, he was a member of the United Nations Security Council from 1994 to 1995. Since October 1998 he has been a member of the International Advisory Group of the High Commissioner for Refugees of the United Nations. Since February 1999 he has been a member of the United Nations Joint Staff Pension Funds Investments Committee. He has been a law professor at the University of Buenos Aires, the Catholic University of Argentina, and the University of Illinois (USA). He earned his law degree from the University of Buenos Aires Law School, and has a Master in Comparative Law degree from the University of Michigan Law School.

#### Therese DELPECH

Dr Delpech is the Director of Strategic Affairs at the Atomic Energy Commission (CEA), Paris. She is also a Senior Research Fellow at the Center for International Studies (CERI-Fondation Nationale des Sciences Politiques). This year she is chairing the UN Advisory Board for Disarmament Matters. Dr Delpech has been an advisor to French Prime Minister Alain Juppe for politico-military affairs. Most of her career has been at the service of the CEA of France, where she functions as the Deputy Director in the International Affairs Division and an advisor to the High Commissioner. Dr Delpech has also been a consultant to the Policy Planning Staff of the Ministry of Foreign Affairs. She has been a member of the PPNN Core Group since 1992.

#### Rolf EKEUS

Ambassador Ekeus is Ambassador of Sweden to the United States. He has long been recognised as the key figure on non-proliferation and disarmament matters. His service has included such positions as the Executive Chairman of the UN Special Commission for Iraq (UNSCOM), Ambassador and Permanent Representative of Sweden to the Conference on Disarmament, the Chairman of the Committee on Chemical Weapons, and the Chief Delegate to a number of Disarmament Review Conferences (including the

Biological Weapons Convention and Nuclear Proliferation Treaty). Ambassador Ekeus was a member of the Canberra Commission on the Elimination of Nuclear Weapons. He is a member of the UN Secretary-General's Advisory Board on Disarmament and a member of the PPNN Core Group. He has published several articles on non-proliferation, disarmament and arms control of weapons of mass destruction, foreign policy, and European security.

#### Robert Louis GALLUCCI

Dr Gallucci is the Dean of the School of Foreign Service, Georgetown University, USA. Prior to his current position, he served mostly as Ambassador, dealing with the issues of North Korea and Bosnia. After working for the Arms Control and Disarmament Agency and the Department of State, he was appointed the Deputy Executive Chairman of the UNSCOM. Dr Gallucci also served as the Senior Coordinator of the Office of the Deputy Secretary, responsible for non-proliferation and nuclear safety initiatives in the former Soviet Union. He was also the Assistant Secretary of State for Political-Military Affairs. He earned his B.A. degree from the State University of New York at Stony Brook, and an M.A. and Ph.D. in Politics from Brandeis University.

#### HAN Sung-Joo

Professor Han is a Professor of Political Science and International Relations and the Director of the Ilmin International Relations Institute at Korea University. Prior to his current tenure at the university, Professor Han served as the Minister of Foreign Affairs of the Republic of Korea. He was also the UN Special Representative of the Secretary-General for Cyprus. He is currently a member of the UN Inquiry Panel on the 1994 Rwanda genocide. Professor Han was elected the co-chairman of the Council for Security in Asia-Pacific (CSCAP) for the 1998-2000 term. Since the late 1970s he has served as an advisor to the Korean government in foreign affairs, defence, and national unification. Professor Han is a graduate of Seoul National University, and received his Ph.D. in Political Science from the University of California at Berkeley.

#### Ryukichi IMAI

Ambassador Imai is a Distinguished Fellow of the Institute for International Policy Studies, Tokyo. In addition, he is a Professor of Kyorin University, the Counsellor of the Atomic Energy Commission, Japan, and the Senior Advisor of the Japan Atomic Industrial Forum. He is the former Ambassador of Japan to Kuwait, Mexico, and the Conference on Disarmament. Ambassador Imai was a member of the Canberra



Commission on the Elimination of Nuclear Weapons. He is a prominent scholar on nuclear energy, non-proliferation and disarmament, and is the author of various books and articles particularly on these issues. He earned his Ph.D. in Nuclear Engineering from the University of Tokyo.

#### Joachim KRAUSE

Dr Krause is Deputy Director of the Research Institute of the German Society for Foreign Affairs (DGAP), Berlin, and teaches political science at Bonn University. Prior to that position, he was a researcher, and then became the Director of Studies at the Stiftung Wissenschaft und Politik, Research Institute for International Affairs, in Ebenhausen near Munich. He was a member of the German delegation to the Conference on Disarmament during 1988-1989, and a consultant to the UNSCOM in 1991. Dr Krause's research focus is on European security, foreign policy, non-proliferation and disarmament; he has published many books and articles on these issues. He finished his Ph.D. at the Free University of Berlin, and his Habilitation at Bonn University.

#### Michael KREPON

Mr Krepon is the President of the Henry L. Stimson Center, Washington D.C. He was a Senior Associate of the Carnegie Endowment for International Peace. Mr Krepon also worked at the US Arms Control and Disarmament Agency where he directed defence program and policy reviews. He is the author and co-editor of several books, and has written over 300 articles, especially on confidence-building measures and the arms control issue. He obtained a B.A. from the Franklin & Marshall College, and an M.A. in Middle Eastern Studies from the Johns Hopkins School of Advanced International Studies.

#### Pierre LELLOUCHE

Mr Lellouche is a member of the Council at the International Institute of Strategic Studies (IISS), London. He was elected a member of the National Assembly in 1993 and 1997, where he sits as Secretary of the Defence Committee. He was Diplomatic Advisor to Mr Jacques Chirac from 1989 to 1995. Prior to entering politics, he was Deputy Director at the Institut Francais des Relations Internationales (IFRI) and a professor in geopolitics and strategic affairs. During the same period, he was a columnist for Le Point, Newsweek and the International Herald Tribune. Mr Lellouche is a graduate of the University of Paris, where he earned his Master's in Public Law Advanced Studies,

and graduated from the Institut d' Etudes Politiques de Paris. He also obtained an LLM and doctoral degree (SJD) from the Harvard Law School. He is the author of numerous articles and books. Latest books include *Le Nouveau Monde: De l'ordre de Yalta au desordre des Nations* and *La Republique Immobile*.

#### Patricia M. LEWIS

Dr Lewis is the Director of the United Nations Institute for Disarmament Research (UNIDIR), Geneva. She is the former Director of the Verification Technology Information Centre (VERTIC), London. She was a consultant to the UK Foreign and Commonwealth Office on the verification of conventional force reductions in Europe during the 1988-1990 CFE treaty negotiations. She was also appointed the British governmental expert to the UN study on the Role of the UN in Verification between 1989-1990. She headed the VERTIC consultant team to produce a draft verification protocol for the Amendment Conference of the 1963 PTBT in New York in 1990. In 1983-1986, Dr Lewis was a lecturer at the University of Auckland, working also at the Australian National University, and in 1989 she was a visiting lecturer at Imperial College London. Dr Lewis received her B.Sc in Physics from the University of Manchester and her Ph.D. in nuclear physics from the University of Birmingham.

#### Margaret MASON

Ambassador Mason is the Director of Council Development for the Canadian Council for International Peace and Security (CCIPS), an independent policy research institute in Ottawa, Canada. From 1989 through 1994 she was Canadian Ambassador for Disarmament and Arms Control Affairs, with responsibility, inter alia, for heading the Canadian delegation to such international meetings as the First Committee of the UN General Assembly, the 1990 NPT Review Conference, the 1991 Partial Test Ban Treaty Amending Conference, and the 1991 Biological and Toxin Weapons Review Conference. Ambassador Mason has also been a Member of the UN Secretary-General's Advisory Board on Disarmament Matters and the Board of Trustees of UNIDIR. A Member of the Council for Security Cooperation in the Asia Pacific (CSCAP) since its inception, she is particularly active in the Expert Working Group on Nuclear Transparency.

#### Nobuo MATSUNAGA (Co-Chair)

Ambassador Matsunaga is the Vice-Chairman of the Japan Institute of International Affairs (JIJA), Tokyo, and is an Advisor to the Minister for Foreign Affairs. He is the former President and Director of the JIIA. Ambassador Matsunaga joined the Ministry

of Foreign Affairs in 1946; the positions he held within the Ministry include: Director of the Personnel Division, Director-General of the Treaties Bureau, Deputy Minister for Foreign Affairs, Ambassador to Mexico, Vice-Minister for Foreign Affairs, and Ambassador to the USA. He was awarded the Grand Cordon of the Order of the Rising Sun in 1996 and Commandeur, Ordre National de la Legion D'Honneur in 1999. He graduated from the Faculty of Law, University of Tokyo.

Joseph S. NYE, Jr.

Dr Nye is the Dean of the John F. Kennedy School of Government, Harvard University, Boston. He has taught one of the largest core curricula in the Harvard Faculty for more than a decade. Dr Nye also served in government agencies as the Deputy Under-Secretary of State for Security Assistance, Science and Technology, in the Department of States, as the Chairman of the National Security Council Group on Nonproliferation of Nuclear Weapons, as the Chairman of the National Intelligence Council, and as the Assistant Secretary of Defense for International Security Affairs. He has published a number of books and articles on non-proliferation and arms control and disarmament issues. Dr Nye received a B.A. from Princeton University and a Ph.D. in Political Science from Harvard University.

Robert O'NEILL

Professor O'Neill is Chichele Professor of the History of War, All Souls College, the University of Oxford. He is also the Chairman of the International Institute of Strategic Studies, and the Chairman of the Imperial War Museum, London. He was the UK Chairman of the Nuclear History Programme and a member of the International Peace and Security Committee of the Social Science Research Council, New York. Professor O'Neill was also part of the Canberra Commission on the Elimination of Nuclear Weapons. He is a graduate of the Royal Military College of Australia, and obtained his Bachelor of Engineering from the University of Melbourne. Professor O'Neill was awarded a Doctorate of Philosophy for his thesis published in 1966.

Abdel Monem SAID ALY

Dr Said Aly is the Director of Al-Ahram Center for Political and Strategic Studies, Cairo. He has worked at the Al-Ahram Center since 1975, and is a senior researcher as well as the head of the international relations research unit. He was a research fellow at the Brookings Institute, Washington D.C. Dr Said Aly also served as a political adviser in the Amiri Diwan of the State of Qatar. He has written various books and articles, both in

English and Arabic, on Arab relations with the regional and global orders, European integration, the Arab-Israeli conflict, the Middle East regional security, and Egypt's political system, national security and arms control policies. He obtained his B.A. from Cairo University, and an M.A. and Ph.D. in Political Science from Northern Illinois University, USA.

John SIMPSON

Professor Simpson is Professor of International Relations and the Director of the Mountbatten Centre for International Studies in the Department of Politics at the University of Southampton, United Kingdom, and the Programme Director of the Programme for Promoting Nuclear Non-Proliferation. He has been a member of the UN Secretary-General's Advisory Board for Disarmament Matters and the Trustee of UNIDIR. Professor Simpson is one of the most distinguished scholars on nuclear non-proliferation, and is the author of various books and articles on nuclear non-proliferation, arms control, defence procurement and security policy, and international relations. He obtained a B.Sc (Econ) and M.Sc (Econ) from London University and a Ph.D. from the University of Southampton.

Hennadiy UDOVENKO

Ambassador Udoenko is a member of the Ukrainian Parliament. He is a former Minister of Foreign Affairs, and was the head of the 52nd Session of the UN General Assembly. Ambassador Udoenko is a career diplomat, who was long engaged in the domestic service as well as the UN, and served, prior to the above-mentioned posts, as the Permanent Representative of Ukraine to the United Nations and Ambassador to Poland. He has published dozens of articles on international affairs and Ukrainian foreign policy. He earned an M.A. in International Relations from Kyiv Shevchenko University.

ZAKARIA Haji Ahmad

Professor Zakaria is the Dean of the Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia (National University of Malaysia). He was the Deputy Director-General at the Institute of Strategic and International Studies (ISIS), Malaysia. Professor Zakaria has published books and articles on, among others, security and foreign policy in the Asia-Pacific region, including Southeast Asia. He obtained his B.A. from the University of Singapore, an M.A. in Political Science from McMaster University (Canada), and a Ph.D. in Political Science from the Massachusetts

Institute of Technology.