ELIMINATING NUCLEAR THREATS

A PRACTICAL AGENDA FOR GLOBAL POLICYMAKERS

SYNOPSIS

GARETH EVANS and YORIKO KAWAGUCHI CO-CHAIRS



INTERNATIONAL COMMISSION ON Nuclear Non-proliferation and Disarmament

© 2009 International Commission on Nuclear Non-proliferation and Disarmament.

All rights reserved.

This publication may be reproduced in full or in part if accompanied with the following citation:

International Commission on Nuclear Non-proliferation and Disarmament Report, 'Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers', Canberra/Tokyo. First published November 2009. Reprinted December 2009.

For electronic copies of this report, please visit www.icnnd.org

ISBN: 978-1-921612-15-2

Printing: Paragon, Canberra Design: ZOO, Canberra

ELIMINATING NUCLEAR THREATS

A PRACTICAL AGENDA FOR GLOBAL POLICYMAKERS

SYNOPSIS:

A COMPREHENSIVE ACTION AGENDA



This Synopsis is a highly abbreviated and selective distillation of the very much more detailed analysis and argument in the Commission's Report. The references given are to sections and paragraphs in that full report, which is available online at www.icnnd.org.

SYNOPSIS: A COMPREHENSIVE ACTION AGENDA

A. WHY THIS REPORT, AND WHY NOW

- Nuclear weapons are the most inhumane weapons ever conceived, inherently indiscriminate in those they kill and maim, and with an impact deadly for decades. They are the only weapons ever invented that have the capacity to wholly destroy life on this planet, and the arsenals we now possess are able to do so many times over. The problem of nuclear weapons is at least equal to that of climate change in terms of gravity and much more immediate in its potential impact.
- So long as any state has nuclear weapons, others will want them. So long as any such weapons remain, it defies credibility that they will not one day be used, by accident, miscalculation or design. And any such use would be catastrophic. It is sheer luck that the world has escaped such catastrophe until now.
- Maintaining the status quo is not an option. The threats and risks associated with the failure to persuade existing nuclear-armed states to disarm, to prevent new states acquiring nuclear weapons, to stop any terrorist actor gaining access to such weapons, and to properly manage a rapid expansion in civil nuclear energy, defy complacency. They must be tackled with much more conviction and effectiveness than the world has managed so far.
- There have been many major international commission, panel, research institute and think tank reports addressing these issues. What makes this report distinctive is, hopefully, its timeliness; comprehensiveness; global consultative reach; attention to pragmatic realities as well as ambitious ideals; intended accessibility to non-specialist policymakers; and strong action orientation, reflected in the short, medium and longer term action agendas that bind together its specific policy proposals.
- With new U.S. and Russian leadership seriously committed to disarmament action, there is a new opportunity the first since the immediate post-World War II and post-Cold War years to halt, and reverse, the nuclear weapons tide once and for all. This report describes, not just rhetorically but in the detail that global policymakers need, how that opportunity can and should be seized. [Section 1]

B. NUCLEAR THREATS AND RISKS

- Existing Nuclear-Armed States. Twenty years after the end of the Cold War there are at least 23,000 nuclear warheads still in existence, with a combined blast capacity equivalent to 150,000 Hiroshima bombs. The U.S. and Russia together have over 22,000, and France, the UK, China, India, Pakistan and Israel around 1,000 between them. Nearly half of all warheads are still operationally deployed, and the U.S. and Russia each have over 2,000 weapons on dangerously high alert, ready to be launched immediately within a decision window of just 4-8 minutes for each president in the event of perceived attack. The command and control systems of the Cold War years were repeatedly strained by mistakes and false alarms. With more nuclear-armed states now, and more system vulnerabilities, the near miracle of no nuclear exchange cannot continue in perpetuity. [Section 2]
- New Nuclear-Armed States. The Nuclear Non-Proliferation Treaty (NPT) system has been under severe strain in recent years, with the International Atomic Energy Agency (IAEA) struggling with verification, compliance and enforcement failures, and backward steps occurring in the world's most volatile regions. India and Pakistan joined the undeclared Israel as fully-fledged nuclear-armed states in 1998; North Korea is now likely to have some half-dozen nuclear explosive devices; and Iran probably now has weapon-making capability, with real potential for generating a regional proliferation surge should it choose to cross the weaponization red-line. [Section 3]
- *Nuclear Terrorism.* Terrorist groups exist with the intent, and capacity, to create massive nuclear destruction. With manageable technology long in the public domain, and black market sourcing, a Hiroshima-sized nuclear device could possibly be detonated from a truck or small boat inside any major city. A "dirty bomb", combining conventional explosives with radioactive materials like medical isotopes, would be a much easier option: while not generating anything like the casualties of a fission or fusion bomb, it would have a psychological impact at least equal to 9/11. [Section 4]
- *Peaceful Uses of Nuclear Energy.* The likely rapid expansion of civil nuclear energy in the decades ahead, not least in response to climate-change concerns, will present some additional proliferation and security risks. Particularly if accompanied by the construction of new national facilities for enrichment at the front end of the fuel cycle and reprocessing at the back end, it could mean a great deal more fissile material becoming potentially available for destructive purposes. [Section 5]

C. MEETING THE CHALLENGE OF NUCLEAR DISARMAMENT

BASIC THEMES

- *Delegitimizing nuclear weapons*. The critical need is to finally transform perceptions of the role and utility of nuclear weapons, from occupying a central place in strategic thinking to being seen as quite marginal, and ultimately wholly unnecessary. There are good answers to all the familiar deterrence and other justifications for retaining nuclear weapons.
- It is neither defensible nor sustainable for some states to argue that nuclear weapons are an indispensable, legitimate and open-ended guarantor of their own and allies' security, but that others have no right to acquire them to protect their own perceived security needs.
- "Extended deterrence" does not have to mean extended *nuclear* deterrence. [Section 6]
- A phased approach. Achieving a nuclear weapon free world will be a long, complex and formidably difficult process, most realistically pursued as a two-phase process, with minimization the immediate goal and elimination the ultimate one. [Section 7]
- Short term (to 2012) and medium term (to 2025) efforts should focus on achieving as soon as possible, and no later than 2025, a "minimization point" characterised by very low numbers of warheads (less than 10 per cent of present arsenals), agreed "no first use" doctrine, and force deployments and alert status reflecting that doctrine. [Sections 17, 18]
- Analysis and debate should commence now on the conditions necessary to move from the minimization point to elimination, even if a target date for getting to zero cannot at this stage be credibly specified. [Section 19]

- *Action Consensus*. The 2010 NPT Review Conference should agree on a 20-point statement, "A New International Consensus for Action on Nuclear Disarmament", updating and extending the "Thirteen Practical Steps" agreed in 2000. [16.6-11; Box 16-1]
- *Numbers*. No later than 2025 U.S. and Russian arsenals should be reduced to a total of 500 nuclear warheads each, with at least no increases, and desirably significant reductions, in the arsenals now totalling some 1,000 warheads of the other nuclear-armed states. A global maximum of 2,000 warheads would represent a more than 90 per cent reduction in present arsenals. [18.1-3]

- All nuclear-armed states should now explicitly commit *not to increase* the number of their nuclear weapons. [17.15-16]
- *Doctrine*. Pending the ultimate elimination of nuclear weapons, every nuclear-armed state should make as soon as possible, and no later than 2025, an unequivocal "no first use" (NFU) declaration. [17.28]
- If not prepared to go so far now, each such state and in particular the U.S. in its Nuclear Posture Review should at the very least accept the principle that the "sole purpose" of possessing nuclear weapons is to deter others from using such weapons against that state or its allies.
- Allied states affected by such declarations should be given firm assurances that they will not be exposed to other unacceptable risks, including from biological and chemical weapons. [17.28-32]
- New and unequivocal negative security assurances (NSAs) should be given by all nuclear-armed states, supported by binding Security Council resolution, that they will not use nuclear weapons against NPT-compliant non-nuclear weapon states. [17.33-39]
- Force Deployment and Alert Status. Changes should be made as soon as possible to ensure that, while remaining demonstrably survivable to a disarming first strike, nuclear forces are not instantly useable. Stability should be maximized by deployments and launch alert status being transparent. [7.12-15; 17.40-50]
- The decision-making fuse for the launch of any nuclear weapons must be lengthened, and weapons taken off launch-on-warning alert as soon as possible. [17.43]
- Parallel Security Issues. Missile defence should be revisited, with a view to allowing the further development of theatre ballistic missile defence systems, including potential joint operations in areas of mutual concern, but setting severe limits on strategic ballistic missile defences. [2.30-34; 18.28-30]
- Conventional arms imbalances, both quantitative and qualitative, between the nuclear-armed states, and in particular the relative scale of U.S. capability, need to be seriously addressed if this issue is not to become a significant impediment to future bilateral and multilateral nuclear disarmament negotiations. [18.34-36]
- Continuing strong efforts should be made to develop more effective ways of defending against potential *biological* attacks including building a workable verification regime, and to promote universal adherence to

the Biological and Toxin Weapons Convention and the Chemical Weapons Convention. [17.29; 18.32-33]

- Ongoing attempts to prevent an arms race in *outer space* (PAROS) should be strongly supported. [18.31]
- *Testing.* All states that have not already done so should sign and ratify the Comprehensive Nuclear-Test-Ban Treaty (CTBT) unconditionally and without delay. U.S. ratification is a critically needed circuit-breaker: it would have an immediate impact on other hold-out states, and add major new momentum to both disarmament and non-proliferation efforts.
- Pending the CTBT's entry into force, all states should continue to refrain from nuclear testing. [Section 11]
- Availability of Fissile Material. All nuclear-armed states should declare or maintain a moratorium on the production of fissile material for weapon purposes pending the negotiation and entry into force as soon as possible of a Fissile Material Cut-off Treaty (FMCT).
- On the question of pre-existing stocks, a phased approach should be adopted, with the first priority a cap on production; then an effort to ensure that all fissile material other than in weapons becomes subject to irreversible, verified non-explosive use commitments; and with fissile material released through dismantlement being brought under these commitments as weapon reductions are agreed.
- As an interim step, all nuclear-armed states should voluntarily declare their fissile material stocks and the amount they regard as excess to their weapons needs, place such excess material under IAEA safeguards as soon as practicable, and convert it as soon as possible to forms that cannot be used for nuclear weapons. [Section 12]

D. MEETING THE CHALLENGE OF NON-PROLIFERATION

BASIC THEMES

- NPT Safeguards and Verification. All states should accept the application of the IAEA Additional Protocol. To encourage universal take-up, acceptance of it should be a condition of all nuclear exports. [9.7]
- The Additional Protocol and its annexes should be updated and strengthened to make clear the IAEA's right to investigate possible weaponization activity, and by adding specific reference to dual-use items, reporting on export denials, shorter notice periods and the right to interview specific individuals. [9.8-9]
- NPT Compliance and Enforcement. In determining compliance, the IAEA should confine itself essentially to technical criteria, applying them with consistency and credibility, and leaving the political consequences for the Security Council to determine. [9.15]
- The UN Security Council should severely discourage withdrawal from the NPT by making it clear that this will be regarded as prima facie a threat to international peace and security, with all the punitive consequences that may follow from that under Chapter VII of the UN Charter. [9.20]
- A state withdrawing from the NPT should not be free to use for non-peaceful purposes nuclear materials, equipment and technology acquired while party to the NPT. Any such material provided before withdrawal should so far as possible be returned, with this being enforced by the Security Council. [9.21-22]
- *Strengthening the IAEA*. The IAEA should make full use of the authority already available to it, including special inspections, and states should be prepared to strengthen its authority as deficiencies are identified. [9.24]
- The IAEA should be given a one-off injection of funds to refurbish the Safeguards Analytical Laboratory; a significant increase in its regular budget support, without a "zero real growth" constraint; and sufficient security of future funding to enable effective medium to long term planning. [9.25-27]
- Non-NPT Treaties and Mechanisms. The Nuclear Suppliers Group (NSG) should develop a criteria-based approach to cooperation agreements with states outside the NPT, taking into account factors such as ratification of the CTBT, willingness to end unsafeguarded fissile material production, and states' record in securing nuclear facilities and materials and controlling nuclear-related exports. [10.3-9]

- The Proliferation Security Initiative (PSI) should be reconstituted within the UN system as a neutral organization to assess intelligence, coordinate and fund activities, and make both generic and specific recommendations or decisions concerning the interdiction of suspected materials being carried to or from countries of proliferation concern. [10.10-12]
- Extending Obligations to Non-NPT States. Recognising the reality that the three nuclear-armed states now outside the NPT India, Pakistan and Israel are not likely to become members any time soon, every effort should be made to achieve their participation in parallel instruments and arrangements which apply equivalent non-proliferation and disarmament obligations. [10.13-16]
- Provided they satisfy strong objective criteria demonstrating commitment to disarmament and non-proliferation, and sign up to specific future commitments in this respect, these states should have access to nuclear materials and technology for civilian purposes on the same basis as an NPT member. [10.17]
- These states should participate in multilateral disarmament negotiations on the same basis as the nuclear-weapon state members of the NPT, and not be expected to accept different treatment because of their non-membership of that treaty. [10.18]
- *Priorities for the* **2010** *NPT Review Conference*. The primary focus should be on reaching agreement on:
 - a new 20-point statement, "A New International Consensus for Action on Nuclear Disarmament", updating and extending the "Thirteen Practical Steps" agreed in 2000;
 - measures to strengthen NPT safeguards and verification, compliance and enforcement, and the IAEA (as above);
 - forward movement on the Middle East Weapons of Mass Destruction Free Zone, with the UN Secretary-General convening an early conference of all relevant states to address creative and fresh ways to implement the 1995 resolution;
 - strengthened implementation of nuclear security measures (see Meeting Terrorism Challenge below); and
 - further support for peaceful uses of nuclear energy. [Section 16]

E. MEETING THE CHALLENGE OF NUCLEAR TERRORISM

BASIC THEMES

- Effectively countering terrorism of any kind involves a complex mix of nationally and internationally coordinated protection and policing strategies (most immediately important in dealing with the threat of nuclear terrorism), and also political, peacebuilding and psychological strategies (necessary to address the underlying causes of terrorist behaviour).
- At the 2010 Nuclear Security Summit, and in related policy deliberations, the main need is to focus on the effective implementation of existing agreed measures rather than the development of new ones. [Section 13; Box 13-1]

- All states should agree to take effective measures to strengthen the security of nuclear materials and facilities, including by adopting and implementing the 2005 amendment to the Convention on the Physical Protection of Nuclear Material, accelerating delivery of the Cooperative Threat Reduction and associated programs worldwide, and making a greater commitment to international capacity building and information sharing. [13.5-16]
- On the control of material useable for "dirty bombs", further efforts need to be made to cooperatively implement the Code of Conduct on the Safety and Security of Radioactive Sources, with assistance to states in updating legislation and licensing practice and promoting awareness among users. [13.17-21]
- Strong support should be given to the emerging science of nuclear forensics, designed to identify the sources of materials found in illicit trafficking or used in nuclear explosions. [13.22-25]

F. MEETING THE CHALLENGE OF CIVIL NUCLEAR ENERGY

BASIC THEMES

- The use of nuclear energy for peaceful purposes should continue to be strongly supported as one of the three fundamental pillars of the NPT, along with disarmament and non-proliferation. Increased resources should be provided, including through the IAEA's Technical Cooperation Programme, to assist developing states in taking full advantage of peaceful nuclear energy for human development.
- Proliferation resistance should be endorsed by governments and industry as an essential objective in the design and operation of nuclear facilities, and promoted through both institutional and technical measures neither is sufficient without the other. [Section 14]

- *Nuclear Energy Management*. Support should be given to the initiative launched at the 2008 Hokkaido Toyako G8 Summit for international cooperation on nuclear energy infrastructure, designed to raise awareness worldwide of the importance of the three Ss safeguards, security and safety and assist countries concerned in developing the relevant measures. [14.4-6]
- New technologies for spent fuel treatment should be developed to avoid current forms of reprocessing altogether. [12.26]
- The increasing use of plutonium recycle, and the prospective introduction of fast neutron reactors, must be pursued in ways which enhance non-proliferation objectives and avoid adding to proliferation and terrorism risks. [14.9-15]
- International measures such as spent fuel take-back arrangements by fuel suppliers, are desirable to avoid increasing spent fuel accumulations in a large number of states. [14.13]
- Multilateralizing the Nuclear Fuel Cycle in particular through fuel banks and multilateral management of enrichment, reprocessing and spent fuel storage facilities should be strongly supported. Such arrangements would play an invaluable role in building global confidence in the peaceful uses of nuclear energy, and provide an important foundation for a world free of nuclear weapons, for which a necessary requirement will be multilateral verification and control of all sensitive fuel cycle activities. [Section 15]

G. MOBILIZING AND SUSTAINING POLITICAL WILL

BASIC THEMES

- The will to do something difficult, sensitive or expensive will rarely be a given in international or domestic politics. It usually has to be painfully and laboriously constructed, case by case, context by context, with four main elements needing to come together:
 - leadership: without which inertia will always prevail top down (from the major nuclear-armed states, particularly the U.S. and Russia), from peer groups (like-minded states worldwide) and bottom up (from civil society);
 - knowledge: both specialist and general, of the nature, magnitude and urgency of the nuclear problem: requiring better education and training in schools and universities, and stronger advocacy directed to policymakers, and those in the media and elsewhere who most influence them;
 - *strategy*: having a confident sense that there is a productive way forward: not just general objectives, but realistic action plans with detailed paths mapped and target benchmarks set; and
 - process: having the institutional and organisational means at hand "campaign treaties", or other research and advocacy structures to
 advance the relevant strategy in practice. [Section 20]

- *Nuclear Weapons Convention*. Work should commence now, supported by interested governments, on further refining and developing the concepts in the model convention now in circulation, making its provisions as workable and realistic as possible, with the objective of having a fullyworked through draft available to inform and guide multilateral disarmament negotiations as they gain momentum. [20.38-44]
- *Report Card.* To help sustain political will over time, a regular "report card" should be published in which a distinguished international panel, with appropriately professional and broad based research support, would evaluate the performance of both nuclear-armed and non-nuclear-armed states against the action agendas identified in this report. [20.49-50]
- *Monitoring and Advocacy Centre*. Consideration should be given to the establishment of a "Global Centre on Nuclear Non-proliferation and Disarmament" to act as a focal point and clearing house for the work being done on nuclear non-proliferation and disarmament issues by many different institutions and organizations in many different countries, to provide research and advocacy support both for like-minded governments and for civil society organisations, and to prepare the "report card" described above. [20.51-54]

THE COMPREHENSIVE ACTION AGENDA

THE SHORT TERM ACTION AGENDA TO 2012: ACHIEVING INITIAL BENCHMARKS

On Disarmament

- Early agreement on a Strategic Arms Reduction Treaty (START) follow-on treaty, with the U.S. and Russia agreeing to deep reductions in deployed strategic weapons, addressing the issue of strategic missile defence and commencing negotiations on further deep cuts in all classes of weapons.
- Early movement on nuclear doctrine, with all nuclear-armed states declaring at least that the sole purpose of retaining the nuclear weapons they have is to deter others from using such weapons against them or their allies (while giving firm assurances to such allies that they will not be exposed to unacceptable risk from other sources, including in particular chemical and biological weapons).
- All nuclear-armed states to give strong negative security assurances to complying non-nuclear weapon states parties to the NPT, supported by binding Security Council resolution, that they will not use nuclear weapons against them.
- Early action on nuclear force postures, with particular attention to the negotiated removal to the extent possible of weapons from "launch-onwarning" status.
- Early commitment by all nuclear-armed states to not increasing their nuclear arsenals.
- Prepare the ground for a multilateral disarmament process by all nucleararmed states conducting relevant studies; engaging in strategic dialogues with the U.S., Russia and each other; and commencing a joint dialogue within the framework of the Conference on Disarmament work program.

On Non-Proliferation

 A positive outcome for the May 2010 NPT Review Conference, with member states reaching agreement on measures to strengthen the NPT regime, including improved safeguards, verification, compliance and enforcement; measures to strengthen the effectiveness of the IAEA; "A New International Consensus for Action on Nuclear Disarmament" statement on disarmament issues; and measures to advance the implementation of the Middle East and other existing and proposed Nuclear Weapon Free Zones.

- Satisfactory negotiated resolution of the North Korea and Iran nuclear program problems.
- Movement toward strengthening non-proliferation regimes outside the NPT, and applying equivalent disciplines to NPT non-members.

On Both Disarmament and Non-Proliferation

- Bring into force the Comprehensive Nuclear-Test-Ban Treaty.
- Conclude negotiations on an Fissile Material Cut-off Treaty.

On Nuclear Security

 Bring into force the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material, accelerate implementation of the cooperative threat reduction and associated programs designed to secure dangerous nuclear weapons, materials and technology worldwide, and achieve greater commitment to international capacity building and information sharing.

On Peaceful Uses of Nuclear Energy

- Movement toward greater multilateralization of the nuclear fuel cycle, and government-industry cooperation on proliferation-resistant technologies and other measures designed to reduce any risks associated with the expansion of civil nuclear energy.
- Promotion of international cooperation on nuclear energy infrastructure to raise awareness worldwide of the importance of the three Ss – safeguards, security and safety – and assist countries concerned in developing relevant measures.

[Section 17]

THE MEDIUM TERM ACTION AGENDA TO 2025: GETTING TO THE MINIMIZATION POINT

- Progressive achievement of interim disarmament objectives, culminating by 2025 in a "minimization point" characterized by:
 - low numbers: a world with no more than 2,000 nuclear warheads (less than 10 per cent of today's arsenals);
 - agreed doctrine: every nuclear-armed state committed to no first use;
 - credible force postures: verifiable deployments and alert status reflecting that doctrine.
- Progressive resolution of parallel security issues likely to impact on nuclear disarmament negotiations:
 - missile delivery systems and strategic missile defence;
 - space based weapons systems;
 - biological weapons;
 - conventional arms imbalances.
- Development and building of support for a comprehensive Nuclear Weapons Convention to legally underpin the ultimate transition to a nuclear weapon free world.
- Complete implementation (to extent already not achieved by 2012) of short-term objectives crucial for both disarmament and non-proliferation:
 - Comprehensive Nuclear-Test-Ban Treaty in force;
 - Fissile Material Cut-off Treaty negotiated and in force, and a further agreement negotiated to put all fissile material not in weapons under international safeguards;
 - Measures to strengthen the NPT regime and the IAEA agreed and in force;
 - Nuclear security measures in force, and cooperative threat reduction and associated programs fully implemented;
 - Progressive implementation of measures to reduce the proliferation risks associated with the expansion of civil nuclear energy.

[Section 18]

THE LONGER TERM ACTION AGENDA BEYOND 2025: GETTING TO ZERO

- Create political conditions, regionally and globally, sufficiently cooperative and stable for the prospect of major war or aggression to be so remote that nuclear weapons are seen as having no remaining deterrent utility.
- Create the military conditions in which conventional arms imbalances, missile defence systems or any other national or intergovernmental-organisation capability is not seen as so inherently destabilizing as to justify the retention of a nuclear deterrent capability.
- Create verification conditions that will ensure confidence that any violation of the prohibition of nuclear weapons would be readily detected.
- Create the international legal regime and enforcement conditions that will ensure that any state breaching its prohibition obligations not to retain, acquire or develop nuclear weapons will be effectively penalized.
- Create fuel cycle management conditions that will ensure complete confidence that no state has the capacity to misuse uranium enrichment or plutonium reprocessing for weapons development purposes.
- Create personnel oversight conditions to ensure confidence that individuals' know-how in the design and building of nuclear weapons will not be misapplied in violation of prohibition obligations.

[Section 19]

THE INTERNATIONAL COMMISSION ON NUCLEAR NON-PROLIFERATION AND DISARMAMENT

Origins and Mandate. The International Commission on Nuclear Non-proliferation and Disarmament was initially proposed by Australian Prime Minister Kevin Rudd following his visit in June 2008 to the Hiroshima peace memorial, and agreed in July 2008 by Prime Minister Rudd and then Japanese Prime Minister Yasuo Fukuda. The Commission was launched in New York in September 2008 by Prime Minister Rudd and then Prime Minister Taro Aso as a joint initiative of the Australian and Japanese Governments. The activities of the Commission have been embraced and supported by the present Japanese Prime Minister Yukio Hatoyama.

The Commission's stated aim was to reinvigorate, at a high political level, global debate on nuclear non-proliferation and disarmament, in the context both of the forthcoming 2010 NPT Review Conference, and beyond. It was designed to build upon, and take further in a sharply practical and action-oriented way, the work of distinguished earlier commissions and panels, notably the 1996 Canberra Commission, the 1999 Tokyo Forum, the 2004 UN High-level Panel, the 2006 Blix Commission, and the 2008 Zedillo Commission on the future of the IAEA.

Although initiated by two governments, and primarily funded by the government of Australia, the Commission is a completely independent body, with its members appointed in their personal capacity rather than as representatives of their respective countries.

Commissioners and Advisory Board. The Australian and Japanese prime ministers jointly invited to head the Commission as its Co-chairs former Foreign Ministers Gareth Evans and Yoriko Kawaguchi. They were joined as Commissioners by thirteen eminent and outstanding individuals from around the world, including former heads of state and ministers, military strategists and disarmament experts, all uniquely placed to bring fresh and imaginative vision to the undertaking: Turki Al Faisal (Saudi Arabia), Alexei Arbatov (Russia), Gro Harlem Brundtland (Norway), Frene Noshir Ginwala (South Africa), François Heisbourg (France), Jehangir Karamat (Pakistan), Brajesh Mishra (India), Klaus Naumann (Germany), William Perry (United States), Wang Yingfan (China), Shirley Williams (United Kingdom), Wiryono Sastrohandoyo (Indonesia, replacing the late Ali Alatas) and Ernesto Zedillo (Mexico).

The Commission has been greatly assisted in its work by an Advisory Board of 27 distinguished experts from around the globe whose members were consulted individually and, in many cases, participated in one or more Commission meetings: Nobuyasu Abe (Japan), Shlomo Ben-Ami (Israel), Hans Blix (Sweden), Lakhdar Brahimi (Algeria), John Carlson (Australia), Nabil Fahmy (Egypt), Louise Fréchette (Canada), Lawrence Freedman (UK), Roberto García Moritán (Argentina), Han Sung-Joo (South Korea), Prasad Kariyawasam (Sri Lanka), Henry Kissinger (United States), Shunsuke Kondo (Japan), Anne Lauvergeon (France), Martine Letts (Australia), Patricia Lewis (Ireland), Andrea Margelletti (Italy), Sam Nunn (United States), Robert O'Neill (Australia), George Perkovich

(U.S.), V.R. Raghavan (India), George Robertson (United Kingdom), Michel Rocard (France), Adam Daniel Rotfeld (Poland), Yukio Satoh (Japan), George Shultz (U.S.), and Hans van den Broek (Netherlands).

Research Support and Administration. The Commission appointed nine Associated Research Centres to lead the effort in their respective countries or regions: the Carnegie Endowment for International Peace (Washington DC and Moscow), Centre for International Governance and Innovation (Waterloo, Canada), Delhi Policy Group (New Delhi), Facultad Latinoamericana de Ciencias Sociales (San Jose, Costa Rica), Fondation pour la Recherche Stratégique (Paris), Japan Institute of International Affairs (Tokyo), King's College (London), Lowy Institute for International Policy (Sydney) and Tsinghua University (Beijing). From these Research Centres and other consultants worldwide over 50 pieces of new research were commissioned, most available on www.icnnd.org. Research Coordinator for the Commission was former Australian ambassador Ken Berry.

The work of the Commission was supported by a small Secretariat operating from the Australian Department of Foreign Affairs and Trade in Canberra, headed by Commission Secretary Ian Biggs and a parallel unit in the Japanese Ministry of Foreign Affairs in Tokyo, headed by Toshio Sano.

Consultations. Four major Regional Meetings were held, attended by a total of 89 regional participants – from government, universities and research institutes, and where appropriate the nuclear energy sector – from 25 countries: in Latin America (Santiago, 2-3 May 2009), North East Asia (Beijing, 22-23 May 2009), the Middle East (Cairo, 29-30 September 2009) and South Asia (New Delhi, 3-4 October 2009). A day-long round-table with representatives of the world's nuclear power industry from six continents was held in association with the Commission's meeting in Moscow on 22 June 2009. Regular dialogue with civil society was sustained through the Commission's two NGO Advisers, Akira Kawasaki of Peace Boat and Tilman Ruff of the International Campaign to Abolish Nuclear Weapons, and meetings in Washington DC and Hiroshima, including with atomic bomb victims (hibakusha). The Co-chairs and other Commissioners also had many individual consultations and briefings in key capitals, and with, inter alia, the UN in New York and Geneva, and the IAEA and Comprehensive Nuclear-Test-Ban Treaty Organization in Vienna.

Commission Meetings and Report. The Commission's first meeting in Sydney (19-21 October 2008) considered its mandate, work plan, and general approach, focusing on the value that it could add to previous and current work by others. Its second and third meetings in Washington DC (13-15 February 2009), and Moscow (19-21 June 2009) agreed on a detailed structure for its report and systematically discussed all relevant policy issues. Drafts of different sections of the report were then commissioned from a range of experts, including from among the Commissioners, Advisory Board and Secretariat members. A draft prepared by the Co-chairs themselves on the basis of those inputs was reviewed in detail, and a final text unanimously agreed, by the fourth Commission meeting in Hiroshima on 17-20 October 2009. The Commission will continue in existence until at least mid-2010, to enable follow-up advocacy on its report, and a review, after the 2010 NPT Review Conference, of the state of play and appropriate next steps.

A fuller account of how the Commission worked, and those who assisted it, may be found in Annex C of the full report, and at www.icnnd.org

MEMBERS OF THE COMMISSION

Gareth Evans (Australia) (Co-chair)

Professor Evans was Australia's Resources and Energy Minister (1984–87) and Foreign Minister (1988–96). He initiated the Canberra Commission (1996) and was a member of the UN High-level Panel (2004), Blix Commission (2006) and Zedillo Commission on the IAEA (2008). He was President (2000–09) and is now President Emeritus of the International Crisis Group, and is currently the Chancellor of the Australian National University and an Honorary Professorial Fellow at the University of Melbourne.

Yoriko Kawaguchi (Japan) (Co-chair)

Ms Kawaguchi has been a Member of the House of Councillors for the Liberal Democratic Party since 2005. She was Special Adviser to the Prime Minister, responsible for foreign affairs (2004-05), Minister for Foreign Affairs (2002-04) and Minister for the Environment (2000-02). Previously she was a Managing Director of Suntory Ltd, a senior official at the Ministry of International Trade and Industry, Minister at the Embassy of Japan to the United States, and an economist at the World Bank.

Turki Al Faisal (Saudi Arabia)

HRH Prince Turki was Director General of Intelligence from 1977 to 2001, and Ambassador to the United Kingdom and Ireland from 2002 to 2005, and to the United States from 2005 to 2007. He is currently Chairman of the Board of the King Faisal Center for Research and Islamic studies in Riyadh.

Alexei Arbatov (Russia)

Dr Arbatov was a member of the Russian Duma and Deputy Chairman of the Duma Defence Committee from 1994 to 2003. He is currently a Scholarin-Residence and Chair of the Non-proliferation Program at the Carnegie Moscow Center.

Gro Harlem Brundtland (Norway)

Dr Brundtland was Prime Minister of Norway for ten years between 1981 and 1996. She chaired the World Commission on Environment and Development (1987) and was Director General of the World Health Organization from 1998 to 2003. She is currently the UN Secretary-General's Special Envoy on Climate Change.

Frene Noshir Ginwala (South Africa)

Dr Ginwala was Speaker of South Africa's National Assembly from 1994 to 2004. She was Chancellor of the University of KwaZulu-Natal from 2004 until June 2009.

François Heisbourg (France)

Mr Heisbourg is Chairman of the International Institute for Strategic Studies and the Geneva Centre for Security Policy, and Special Adviser at the Fondation pour la Recherche Stratégique, and was a member of the French Presidential Commission that produced the 2008 Defence and National Security White Paper.

Jehangir Karamat (Pakistan)

General Karamat was Chairman of the Joint Chiefs of Staff and Chief of Army Staff between 1996 and 1998 and Pakistan's Ambassador to the United States from 2004 to 2006. He is currently Director of the Spearhead Research Institute.

Brajesh Mishra (India)

Mr Mishra was India's Ambassador in Geneva, Jakarta and then New York from 1973 to 1981, and National Security Adviser and Principal Secretary to former Indian Prime Minister A.B. Vajpayee from 1998 to 2004.

Klaus Naumann (Germany)

General Naumann was Chairman of the NATO Military Committee from 1996 to 1999 and Chief of the Defence Staff in Germany from 1991 to 1996. He was a Member of the Panel on UN Peace Operations (2000) and the International Commission on Intervention and State Sovereignty (2001).

William Perry (United States)

Dr Perry was the U.S. Secretary of Defense from 1994 to 1997. He is currently a Professor at Stanford University in the School of Engineering and the Institute for International Studies.

Wang Yingfan (China)

Ambassador Wang was China's Permanent Representative to the United Nations from 2000 to 2003, and Vice-Chairman of the Foreign Affairs Committee of the Chinese National People's Congress from 2003 to 2008.

Shirley Williams (United Kingdom)

Baroness Williams was Leader of the Liberal Democrat Party in the House of Lords from 2001 to 2004. She is currently Professor Emeritus of the Kennedy School of Government at Harvard University and an adviser to Prime Minister Gordon Brown on nuclear proliferation issues.

Wiryono Sastrohandoyo (Indonesia)

Ambassador Wiryono was Director General of Political Affairs in Indonesia's Department of Foreign Affairs from 1990-1993. He has served as Indonesia's Ambassador to Australia, France and Austria, as Permanent Representative to the UN in Vienna and on the Board of Governors for the IAEA.

Ernesto Zedillo (Mexico)

Dr Zedillo was President of Mexico from 1994 to 2000. He is currently Director of the Yale Center for the Study of Globalization, and Professor at Yale University in international economics and politics.

ELIMINATING NUCLEAR THREATS

Eliminating nuclear threats is a matter of necessity, not choice. The world's 23,000 nuclear weapons – many still deployed on high alert – can destroy life on this planet many times over. That the horror of Hiroshima and Nagasaki has not so far been repeated owes far more to luck than to good policy management.

Even with the U.S. and Russia showing welcome new leadership, the policy challenges are immense. Every state with nuclear weapons has to be persuaded to give them up. States without nuclear weapons have to neither want nor be able to acquire them. Terrorists must be stopped from getting anywhere near them. And rapidly expanding peaceful nuclear energy use must be security risk-free.

This report, the work of an independent commission of global experts sponsored by Australia and Japan, seeks to guide global policymakers through this maze. It comprehensively maps both opportunities and obstacles, and shapes its many recommendations into a clearly defined set of short, medium and longer term action agendas.

The tone throughout is analytical, measured and hard-headedly realistic. But the ultimate ideal is never lost sight of: so long as any nuclear weapons remain, the world can never be safe.

COMMISSIONERS

Gareth Evans (Australia) (Co-chair)

Turki Al Faisal (Saudi Arabia) Alexei Arbatov (Russia) Gro Harlem Brundtland (Norway) Frene Noshir Ginwala (South Africa)

Jehangir Karamat (Pakistan)

François Heisbourg (France)

Brajesh Mishra (India)

Yoriko Kawaguchi (Japan) (Co-chair)

Klaus Naumann (Germany)
William Perry (United States)

Wang Yingfan (China)

Shirley Williams (United Kingdom)

Wiryono Sastrohandoyo (Indonesia)

Ernesto Zedillo (Mexico)

WWW.ICNND.ORG

ISBN 978-1-921612-15-2