

# Arms Control Revisited: Non-proliferation and Denuclearization



REPORT
OF THE WARSAW REFLECTION GROUP
NOVEMBER 20–21, 2008

### **COVER DESIGN**

Alicja Sikorska

### **TYPESET**

Dorota Dołęgowska

© Copyright by Polski Instytut Spraw Międzynarodowych Warszawa 2009

ISBN 978-83-89607-62-1

### **PUBLISHER**

The Polish Institute of International Affairs 00-950 Warsaw, Poland 1a, Warecka Street phone (+48) 22 556 80 00, fax (+48) 22 556 80 99 e-mail: pism@pism.pl www.pism.pl

Edition: 1000 copies. Sent to press in February 2009 Printed by Poligrafia Bracia Szymańscy, ul. Marszałkowska 60, 00-545 Warszawa

### **CONTENTS**

Preface	5
Findings and Recommendations	9
Objectives	9
Disarmament	9
Promoting the peaceful use of nuclear technology	10
Preventing the illegal or malicious application of nuclear technology	10
Arms Control Revisited: Non-proliferation and Denuclearization.	
Report of the Warsaw Reflection Group	11
The challenges facing arms control	11
Managing a fragmented agenda	13
Immediate priorities	13
Medium-term challenges	15
Reducing the number of nuclear weapons	15
Nuclear arms reductions by the United States and Russia	15
Progressive inclusion of other states with nuclear weapons	17
Stimulating safe, secure and proliferation resistant international	
cooperation in peaceful nuclear technologies	19
Preventing the malicious application of sensitive technologies, materials and know-how	22
	22 24
Denuclearization in the framework of cooperative security	24
*	
* *	
Appendices	
How to Advance the Disarmament Agenda?	
Discussion Paper by Adam Daniel Rotfeld	26

Report of the UN Secretary-General's Advisory Board	
on Disarmament Matters (excerpts)	30
Vision of the World Free of Nuclear Weapons ("Hoover Plan") by James E. Goodby, Hoover Institution, Stanford University	40
Speech at the 45 <sup>th</sup> Munich Security Conference by Dr. Henry Kissinger, Former U.S. Secretary of State	46
Start Worrying and Learn to Ditch the Bomb by Douglas Hurd, Malcolm Rifkind, David Owen and George Robertson	51
For a Nuclear Weapon Free World by Massimo D'Alema, Gianfranco Fini, Giorgio La Malfa, Arturo Parisi, Francesco Calogero	54
Toward a Nuclear-free World: a German View by Helmut Schmidt, Richard von Weizsäcker, Egon Bahr and Hans-Dietrich Genscher	57
Multilateral Enrichment Sanctionary Project (MESP) Germany's Proposal to Independent Fuel Supply Security for Consumer Countries and to Minimize Proliferation Concerns	61
International Commission On Nuclear Non-Proliferation and Disarmament (Excerpts)	65
*	
* *	
Agenda of the International Conference on Arms Control	
Revisited: Non-proliferation and Denuclearization	68
ist of Participants.	72
?	Vision of the World Free of Nuclear Weapons ("Hoover Plan") by James E. Goodby, Hoover Institution, Stanford University

### **Preface**

This Report seeks to make a specific contribution to the international debate about the urgent need to revitalize arms control, to enhance nuclear non-proliferation, and to get the denuclearization process off the ground. It reflects the deliberations of the participants of the Warsaw Reflection Group on Arms Control Revisited: Non-Proliferation and Denuclearization (Warsaw, November 20–21, 2008).

Four prominent US politicians—former secretaries of State George Shultz and Henry Kissinger, former secretary of defense William Perry, and former chairman of the Senate Armed Services Committee Sam Nunn—provided an important impulse for this debate. Their joint article, published in *The Wall Street Journal* (January 4, 2007 and developed a year later—January 16, 2008), revived a vision of a world free of nuclear weapons and identified practical measures to be urgently adopted to that end. The publication of that article had a leavening effect. It was a new beginning. The gist of the recommendations of two Democrats and two Republicans for systematically reducing and eventually eliminating the danger from nuclear weapons was presented by Henry Kissinger at the 45<sup>th</sup> Munich Security Policy Conference (February 7–8, 2009). The United Nations Secretary-General's Advisory Board on Disarmament Matters (ABDM) has for years focused on these issues.

The new administration of US President Barack Obama gave the idea of creating a world free of nuclear weapons a practical political agenda dimension. Numerous initiatives have been put forward by many former politicians, eminent intellectuals, experts, and independent research centers in Europe, the USA and other parts of the world. In 2008 the governments of Australia and Japan appointed an International Commission on Nuclear Non-proliferation and Disarmament, co-chaired by Gareth Evans, former Foreign Minister of Australia, and Yoriko Kawaguchi, former Foreign Minister of Japan (the "Evans–Kawaguchi Commission"). In January 2009 over 130 leaders endorsed in Paris the *Global Zero* initiative to eliminate nuclear weapons worldwide. The President of France, Nicolas Sarkozy, wrote a letter with this aim to the UN. Former British politicians Douglas Hurt, Rifkind, David Owen and George Robertson had earlier made their point: "It won't be easy, but a world free of nuclear weapons is possible" (*Times*, June 30, 2008). In their joint article five eminent persons from Italy— Massimo

D'Alema, Gianfranco Fini, Giorgio La Malfa, Arturo Parisi, Francesco Calogero—stated, "Our joint signatures (...) are evidence of the fact that in both main political camps, and in the scientific community, there is a shared common opinion on the importance of this issue and this aim." ("For a nuclear weapon free world," *Corriere della Sera*, July 24, 2008). Helmut Schmidt, Richard von Weizsäcker, Egon Bahr and Hans-Dietrich Genscher, presenting a German view on this subject, wrote, "We unreservedly support the call by Messrs. Kissinger, Schultz, Perry and Nunn for a turnaround on nuclear policy, and not only in their country." (*International Herald Tribune*, January 9, 2009).

The main texts I have referred to are attached to this Warsaw Report.

The organizers of the November 2008 conference in Warsaw intended not so much to revive those and other—old and new—initiatives and proposals, as to look for answers to a number of important current questions. The key objective was to understand the nature of the significant obstacles that—despite verbal endorsement of the program—have impeded the implementation of an effective non-proliferation system and the launching of denuclearization. The debate was aimed at interpreting correctly certain qualitatively new elements: what determines the essence of a new security environment (New Actors—New Risks); what new technologies and related problems are there (New Weapons—New Threats); and what measures are needed to prevent proliferation and start the process of nuclear disarmament (New Initiatives—New Instruments).

The Warsaw meeting was an informal event. The participants included prominent scientists and security analysts from the major powers: Professors James E. Goodby (Stanford University), Steven E. Miller (Harvard University) and George Perkovich (Carnegie Endowment for International Peace) from the USA; Professor Sergey Rogov (Director of the United States of America and Canada Institute, Russian Academy of Sciences) and Dr. Vladimir Yermakov (Strategic Capabilities Policy Desk, MFA) from Russia; Professor Thérèse Delpech (Director of Strategic Affairs at the French Atomic Energy Commission) and Dr. Bernard Sitt (Center for International Security and Arms Control Studies) from France; and Hu Xiaodi (former Chinese Ambassador for Disarmament Affairs, MFA) from China. The German proposals on nuclear arms control and non-proliferation were presented by Ambassador Peter Gottwald, Commissioner of the Federal Government for Arms Control and Disarmament, and Professor Erwin Häckel of the German Society for Foreign Affairs Research Institute

(DGAP). The perspective of the states that possess nuclear weapons but do not have nuclear power status under the Nuclear Non-Proliferation Treaty was presented by Pakistan's Air Commodore Khalid Banuri (Strategic Plans Division, Joint Staff Headquarters) and Israel's security analyst Jeremy Issacharoff, member of the UN Secretary-General's ABDM. Some other members of the United Nations ABDM contributed to the debate, as well: Dr. Mahmoud Karem (Egypt), Ambassador Ho-Jin Lee (Republic of Korea), and Ambassador Carlo Trezza (Italy). Ambassador Sergio Duarte, UN High Representative for Disarmament, also participated actively in the work of the conference.

The NATO Weapons of Mass Destruction Centre was represented by its newly appointed head, Ambassador Jacek Bylica. Information about the Evans–Kawaguchi Commission was presented at the meeting by Ms. Valerie Grey of the Australian Permanent Mission to the Conference on Disarmament in Geneva. Ambassador Leslie Gumbi, Permanent Representative of South Africa to the UN and other international organizations in Vienna, spoke about the nuclear policy of the Republic of South Africa.

The conference was also attended by the important actors in the process of denuclearizing Ukraine—Borys Tarasyuk, former Minister of Foreign Affairs and Chairman of the Committee on European Integration of the Ukrainian Parliament, and Belarus—Professor Stanislau Shushkevich, former Head of the first independent Belarussian State.

A significant contribution to the Warsaw debate was made by conference co-organizers from SIPRI, the Stockholm International Peace Research Institute: Dr. Bates Gill, SIPRI Director; Dr. Zdzisław Lachowski, Senior Fellow of the SIPRI Euro-Atlantic Security Programme; and Dr. Ian Anthony, Leader of the SIPRI Non-Proliferation and Export Control Programme, who also drew up this Report. The Report is not a consensus document, although consultations were held with all the participants of the Warsaw meeting, and it takes into account a majority of the comments offered.

Several significant documents are appended to the Report. Most of them were made available to the conference participants. Their publication provides an insight into the context in which the Warsaw Report was developed. We consider published materials a modest contribution to the efforts undertaken by various institutions and organizations to find ways to break the stalemate in effective

prevention of proliferation and in the taking of decisions that will initiate nuclear disarmament.

The time is ripe for a new comprehensive conceptual approach to the non-proliferation and denuclearization issues. The Stockholm International Peace Research Institute has proved, by its research activities and its highly respected publications, that it is one of the best non-partisan professional independent centers capable of assisting the United Nations in preparing, elaborating and developing the decisions that have to be taken by the UN General Assembly. SIPRI could serve both as a meeting point of professionals and a research centre for preparing, on the UN's request, a Feasibility Study on Non-proliferation and Denuclearization. The Stockholm International Peace Research Institute was, in fact, established more than 40 years ago "as a fount of knowledge, independent of the two superpowers, whose research data would be neither influenced by outside pressure nor bound by secrecy requirements, as was the practice of most research institutes at the time" (Rolf Ekéus, in: SIPRI at 40, 1966–2006, Stockholm, 2006, p. 6). Its very existence was meant as a contribution to international peace and disarmament.

This report and the attached materials can be seen as the modest contribution to the process towards the revival of arms control and nuclear disarmament under UN auspices.

I would like to express my gratitude to all those without whom this publication would not have been possible. In particular, I would like to thank Dr. Sławomir Dębski and Dr. Bates Gill—the two directors of the research institutes whose staff contributed immensely to the organization of the meeting. I would like to mention especially Dr. Ian Anthony of SIPRI and Mr. Łukasz Kulesa of the Polish Institute of International Affairs (PIIA), whose input deserves special appreciation.

February 2009

Adam Daniel Rotfeld

### Findings and Recommendations

### **Objectives**

Denuclearization and non-proliferation require:

- to take urgent, practical steps aimed at realizing a longer term vision for the complete elimination of nuclear weapons;
- to create condition and elaborate positions for positive decisions at the 2010 Review Conference of the Non-Proliferation Treaty (NPT).

### Disarmament

The following recommendations are offered under the three pillars on which NPT rests: disarmament, facilitating the peaceful use of nuclear technologies and abstention from nuclear weapons by non-nuclear weapon states:

- Translate current national moratoriums on nuclear weapon testing into signature and ratification of the Comprehensive Test Ban Treaty.
- Begin the negotiation of a Treaty to ban future production of fissile material for use in nuclear explosive devices. Include the discussion of appropriate verification measures as part of the process of negotiation.
- The United States and Russia should move quickly to ensure that the unnecessary nuclear legacy of the Cold War will be eliminated by maintaining continuity in bilateral nuclear arms control.
- The United States and Russia should begin to develop an inclusive mandate for a follow-on phase of negotiations to accomplish radical reductions in numbers of nuclear weapons. All nuclear weapons should be part of this mandate.
- The NATO Allies should initiate a new, open-minded assessment of the role of nuclear weapons in European security, including an evaluation of the current arrangements for basing US nuclear weapons in Europe.
- One of the existing nuclear weapon states, and ideally the United States, should
  invite states that currently possess nuclear weapons to discuss the feasibility of
  using zero deployed nuclear weapons as the basis for a future nondiscriminatory multilateral nuclear disarmament agreement.

### Promoting the peaceful use of nuclear technology

- Help the IAEA Director General to build confidence among states that they can
  rely on a multilateral framework to meet their energy needs without resigning
  from any of their sovereign rights, including the right to acquire sensitive
  nuclear technologies.
- To that end, an inclusive and non-discriminatory legal instrument should be
  established to create a global framework with agreed criteria to be applied by
  states when authorizing international transfers of sensitive nuclear technology.
  As a group that has already adopted common export control legislation that is
  binding in all 27 Member States, the European Union would be an appropriate
  sponsor that could propose negotiations on such a legal instrument.
- Use existing forums, such as the World Nuclear Association and the World
  Association of Nuclear Operators, to carry out a broad and inclusive dialogue
  on the future regulation of the international nuclear industry to ensure
  proliferation resistance, security of supply, a balance between rights and
  responsibilities and market neutrality.

### Preventing the illegal or malicious application of nuclear technology

- Conduct an assessment of the Global Partnership against the spread of weapons and materials of mass destruction within the G8 with a view to taking new decisions at the 2010 G8 summit on an extended and adapted Global Partnership.
- Promote and explore a new and wider commitment to deliver a sustainable international programme to reduce risks posed by insecure materials, equipment or knowledge based on a partnership approach. Link this commitment to the obligations defined in operational paragraphs of UN Security Council Resolution 1540.
- Promote full participation in key recent multilateral instruments that can help reduce the risks of nuclear terrorism, including the amended Convention on Physical Protection of Nuclear Materials and the International Convention for the Suppression of Acts of Nuclear Terrorism.

# Arms Control Revisited: Non-proliferation and Denuclearization Report of the Warsaw Reflection Group

### The challenges facing arms control

The political context and framing of the issues has a direct impact on the success or failure of efforts to strengthen security. Evidence for this assertion can be found in the progress made at the end of the Cold War to reduce the massive military capacities that had been built over preceding decades. During five years between 1987 and 1991 major accomplishments were recorded in arms control. Achievements included the INF Treaty, with its path-breaking intrusive verification provisions; the CFE Treaty and the START I agreement on strategic nuclear weapons. These breakthroughs were achieved in a period when the states across the Euro-Atlantic community had a shared commitment to work towards a common and cooperative security system in and for Europe. The same positive atmosphere facilitated other major arms control accomplishments, including the Chemical Weapons Convention that was signed in 1993.

The momentum behind the effort to develop a common and cooperative security system in Europe in which arms control and disarmament was one important component has been lost in the past decade. A widespread belief that countries pursue their own narrow national agenda and pay little attention to the views of others has reduced trust in the effectiveness of bilateral and multilateral dialogue. Developing a security system in and for Europe suitable for the 21st century requires, as a starting point, an honest and open discussion and a joint assessment of the legitimate security interests of all the actors in the Euro-Atlantic area.

Subsequently a widespread belief that countries have "re-nationalized" their security policies, pursuing their own agenda exclusively, has lowered trust in the efficacy of bilateral and multilateral dialogue. The evidence from increasing military expenditure in several world regions suggests that a growing number of countries have concluded that they must invest in new military capabilities since collective action cannot be relied on to help preserve national security.

The evidence from increasing military expenditure in several world regions suggests that many countries have concluded that new military capabilities rather than collective action can best preserve national security. However, at the

beginning of 2009 there is a hope and an expectation that the political context for nuclear arms control has changed in a positive direction.

In the United States the newly inaugurated President campaigned on a platform that included making the goal of eliminating all nuclear weapons a central element in his nuclear policy. This programme shared features with other proposals by government representatives in Europe, by senior and experienced former government officials in both North America and Europe as well as recommendations by a range of expert non-governmental groups.

The recent proposals recommend an incremental approach based on urgent, practical steps in order to realize a longer term vision for the complete elimination of nuclear weapons.

In the same spirit of practical but urgent progress towards an agreed goal of zero nuclear weapons, and based on a discussion among around 40 experts that took place in Warsaw, Poland on 20–21 November 2008, the following recommendations are offered. These recommendations and the report that follows this summary are prepared on the authority of the organizers of the meeting, and a consensus was not sought from the participants.

Participants at the Warsaw meeting highlighted the fact that, at least in the area of controlling nuclear weapons, little can be done without joint leadership by the United States and Russia. However, their discussions on substantive reductions in nuclear weapon stockpiles cannot be detached from the wider need to ease international tensions and devise an inclusive process that involves declared and undeclared nuclear weapon states, provides sufficient security guarantees for the states that disarm, and produces a common approach to non-compliance, verification and the balance between deterrence and defence.

In examining how arms control could play a more central role in strengthening national, international and global security the objectives should be realistic. Arms control should not be expected to deliver solutions on its own to problems that have proved intractable by other means. However, incremental but measurable steps can create a record of success and build a momentum that can be the platform for further measures in future.

### Managing a fragmented agenda

Any new arms control agreements should first and foremost contribute to managing current, pressing security problems. However, the approach to each individual problem should always be consistent with the broader objective of helping to establish a longer term system for cooperative security. There are a number of existing processes and bodies in which it is necessary to re-establish a basis for trust over time. However, securing the legal foundation for arms control needs urgent attention because some critical dates are rapidly approaching.

### Immediate priorities

The United States and Russia need to conclude a binding agreement to prevent a vacuum after the START-I treaty expires in December 2009—and the consequent loss of nuclear stockpile verification and transparency. A straightforward solution would be to sustain the START-I counting rules and verification procedures through a new treaty, but incorporate the warhead ceiling already agreed in the 2002 Strategic Offensive Reduction Treaty (SORT or the Moscow Treaty) as part of the new agreement.

The US and Russia should make it clear that this is an interim measure pending the negotiation of a new agreement that includes deeper cuts in warhead numbers. However, this interim step would ensure continuity in verification and transparency while that new and more radical agreement is being discussed and agreed.

A common point of departure for participants in Warsaw was the need to create a positive atmosphere at the 2010 Review Conference for the 1968 Treaty against the proliferation of nuclear weapons (NPT). While a multitude of specific, technical proposals are likely to be put forward at that meeting by parties to the NPT, the main objective at the Review Conference should be political rather than technical. The most important priority is to unlock the entrenched and ideological positions into which countries have regrettably fallen into in the NPT context.

At the final preparatory meeting in advance of the 2010 conference to review the NPT a satisfactory balance must be achieved between the elements across the 3 pillars of the treaty: elimination of existing nuclear weapons, facilitating peaceful use of nuclear technology and preventing countries from applying nuclear technology to create new nuclear weapons.

For good reasons states have recently paid a great deal of attention to strengthening non-proliferation measures. Without diminishing the effort to prevent proliferation, equivalent attention must now be given to taking steps to realize the other objectives of disarmament and effective peaceful cooperation.

Almost all of the countries with nuclear weapon capabilities currently follow a national moratorium on nuclear testing. Renewed efforts to translate these national political commitments into a legal obligation by bringing into force the Comprehensive Test Ban Treaty would be an early and tangible signal that nuclear weapon states have capped their national weapon development programmes.

Most countries that already possess nuclear weapons have ended the production of fissile material for weapon use, while the production of fissile material for weapon use by the non-nuclear weapon states that are parties to the NPT is illegal. A legal ban on any production of fissile material for use in nuclear weapons is another important next step in nuclear arms control.

Led by the IAEA, there has been renewed interest in discussing how to develop greater international participation in peaceful uses of nuclear technology. However, this discussion has not yet become truly inclusive, either in terms of the participation of states or in terms of incorporation of all relevant stakeholders. This is a serious barrier to successful internationalisation of industry.

Civil nuclear power generation may come to play a more significant part in energy strategies and the industry should be encouraged to help satisfy demand in an energy-hungry, climate-conscious world at a competitive price. The nuclear industry, which has traditionally been organized nationally and often in public ownership, is gradually moving towards concentration and new international partnerships, often between private companies. If the benefits of cooperative business approaches are to be realized while reducing the motive and scope for military break-outs a broader and more inclusive dialogue is needed between government and industry to supplement specific proposals focused on individual multilateral nuclear facilities.

Another pressing problem is the issue of how best to respond to international concerns about aspects of the Iranian nuclear programme. Is the current approach likely to produce the desired outcome or is a rebalancing and readjustment needed? The growing feeling that there is no peaceful solution to the challenges posed by the most sensitive aspects of the Iranian programme has helped to feed

the concern that a more direct, coercive approach may be under active consideration. However, seeking a new type and quality of engagement with Iran was under active consideration during the recent Presidential election campaign in the United States. There is an urgent need to consider the options (both the nature and timing) of new forms of engagement with Iran, as well as the likely impact of different types of engagement on Iranian nuclear programmes.

The concern about mass impact terrorism has also expanded the range of items of concern to include things that are not weapons or even dual-use items as traditionally defined. Issues as diverse as chemical waste control, combating infectious disease and nuclear fuel cycle management—previously peripheral to central military/security concerns—are seen as part of a more diffuse threat. There has been a corresponding priority to consider any instruments that can help to reduce the most dangerous risks in the face of evidence that the threat from mass impact terrorism is not diminishing.

### Medium-term challenges

### Reducing the number of nuclear weapons

There is a general impression that the nuclear-weapon states are unwilling to fulfil their obligations. It is clear that there have been significant reductions in the overall number of nuclear weapons as well as significant changes in the way that nuclear forces are organized and deployed in comparison with the situation of the Cold War. However, alongside these reductions, nuclear forces have also been modernized. This causes a concern among many non-nuclear weapon states that the idea of moving to zero has for all practical purposes been abandoned.

It is an unshakeable conviction in many states that any presumption of the indefinite possession of nuclear weapons is incompatible with the integrity and sustainability of the nuclear non-proliferation regime and with the broader goal of international peace and security. Therefore, continuous and irreversible progress in nuclear disarmament and other related nuclear arms control measures remains fundamental to the promotion of nuclear non-proliferation.

Nuclear arms reductions by the United States and Russia

The number of nuclear weapons in the world will continue to decrease over the next decade as the main possessors (Russia and the United States) progressively

eliminate the overhanging capabilities remaining from the Cold War at a faster pace than they deploy replacement systems.

In Warsaw it was underlined that the United States and Russia should lead a process by which nuclear weapon states removed nuclear weapons from their war plans and take prudent steps to reduce the numbers of deployed weapons to zero. To achieve that outcome, the United States and Russia will have to reach an understanding of the role of nuclear weapons in national security. However, the statements of the recent past suggest diverging rather than converging views on this matter. The United States is progressively de-emphasizing the role of nuclear weapons as an element in its "new triad" that puts greater store in the deterrent power of advanced conventional weapons combined with strategic defences and greater resilience if attacked. Russia on the other hand appears to rely on nuclear deterrence to an increasing degree.

The US and Russia need to find the basis for a legal agreement to regulate arms reductions in a manner that is verifiable by the two parties, transparent to the international community and irreversible. Given the lack of symmetry in current positions, the future agreement should be based on a mandate that is inclusive in its scope—indicating that the parties begin their talks with an open mind in regard to the final outcome of negotiations.

A limit on the numbers of strategic delivery vehicles with appropriate warhead ceilings would clearly be one component of the mandate. However, other options (including consideration of consolidation, careful accounting and ultimately elimination of short range nuclear forces in deployment as well as indefinite suspension of missile defence programmes) should remain under active consideration. Moreover, other issues that are relevant to the overall objective of strengthening strategic stability within the framework of common and cooperative security will also need to be part of a future agreement alongside steps taken in relation to number and configuration of nuclear weapon stockpiles.

The degree of transparency over NATO's policies and force posture in regard to nuclear weapons based in Europe has expanded progressively since the end of the Cold War. In its public documents NATO has described how nuclear forces in Europe were reduced, including the complete elimination of a significant number of nuclear capable delivery systems. The same is not true for Russia and little is known about the size or configuration of Russian short-range nuclear forces.

The possibility of transforming NATO's statement that there is no intention, no plan and no reason to deploy nuclear weapons on the territory of new members into a legal obligation might be a reassuring and welcome development for Russia. For NATO such a legal commitment might be explored together with Russia in the context of wider discussions over the current status and future plans regarding short range nuclear forces.

The legality of current arrangements has been raised at past Review Conferences and it would not be surprising if the issue was raised again in 2010. NATO has defended itself against accusations that present policies are incompatible with the NPT by pointing out that since the arrangements predate the Treaty, countries accepted their legality at the time they joined it.

This legalistic approach does not explain the contribution that nuclear weapons make to European security, and does nothing to unlock the entrenched and ideological positions that countries have regrettably fallen into in the NPT context. A new evaluation of the current role and future prospects for nuclear weapons in Europe and the sharing arrangements for them should be undertaken prior to the 2010 NPT Review Conference. This would underline that states with nuclear weapons have no ideological attachment to them and no intention to retain them for longer than necessary.

As part of the discussion of a new Strategic Concept for NATO in 2009 the usefulness of the current nuclear weapon sharing arrangements should be evaluated with an open mind. This approach would be fully consistent with public diplomacy to inform and educate the public about the major reductions to weapon stockpiles and adjustments to nuclear policy that have already been accomplished by NATO in the past 15 years. This process would underscore that whether or not to retain current arrangements is a political judgment that takes into account strategic realities, and that NATO countries are open to further changes under the right conditions.

### Progressive inclusion of other states with nuclear weapons

There is concern that the progressive reduction of the political "footprint" of nuclear weapons that began after the Cold War may have ended. On the contrary, the perception that possession of nuclear weapons delivers status and power may be growing.

This concern has been compounded by the de facto recognition of India's nuclear weapons. More and more countries are establishing strategic partnerships with India—in itself a good thing. However, the approach is focused on how to engage states that do not relinquish nuclear arsenals into international processes rather than how states can strengthen their partnerships while moving towards the goal of zero deployed nuclear weapons.

Serious consideration needs to be given to the idea of agreeing on an absence of deployed warheads as the definition for "zero nuclear weapons." Reaching this state of absence of deployed warheads could later create a non-discriminatory basis for multilateral agreement that also accommodates the latent military capacity that will probably be inherent in future civilian nuclear fuel cycles.

In addition to verifying that agreed reductions have been carried out as required in treaties, a main future task of verification would become assurance against breakout by states using the technology that is latent in civil nuclear systems. While progress on implementing the Additional Protocol has been steady, it nevertheless falls far short of making this the new verification standard of the NPT. Moreover, the nuclear weapon research, development and production complexes of the nuclear weapon states have remained outside past verification systems. Therefore, whether a verification system could effectively monitor the capacities that would together constitute a latent nuclear weapon programme remains largely unexplored and untested.

While there is a clear need for the United States and Russia to exercise joint leadership in bringing about further nuclear arms reductions, a parallel process of wider participation and eventual multilateral engagement is needed to consider the implications of reaching an absence of deployed warheads, including (but not restricted to) technical aspects. In the first instance, this wider discussion would need to include the five countries that meet the definition of a nuclear weapon state contained in the NPT. However, the step-by-step inclusion of India, Israel and Pakistan would be necessary, and the process of overcoming the lack of clarity surrounding Israel's nuclear capabilities should begin now as this will at some point become a barrier to inclusive discussion among countries that possess nuclear weapons.

The investigation of nuclear arms control verification has been stimulated by an initiative taken by one nuclear weapon state—the United Kingdom. However, British efforts to bring other nuclear weapon states into a discussion of how to verify future nuclear arms reductions have not yet succeeded. The new US administration could give active consideration to supporting British initiatives in seeking innovative approaches to arms control verification. Furthermore, the United States would be the member of the P5 that could most easily initiate a dialogue on the potential for using zero deployed nuclear weapons as the principle to underpin future arms reductions by inviting a selected group of countries to talks on this subject.

# Stimulating safe, secure and proliferation resistant international cooperation in peaceful nuclear technologies

A growing number of states are investigating the future role of civil nuclear as part of a sustainable energy strategy. As states increase their scientific and industrial capacity the challenge of ensuring that materials and technologies are safe, secure and proliferation resistant is also likely to grow. In future there are likely to be more countries that participate in the parts of the nuclear fuel cycle that are the most sensitive from the perspective of weapon proliferation. For example, although Europe, the United States and Russia will dominate the global supply of enrichment services, current plans suggest that there will be smaller commercial enrichment capacities in Brazil, China, Iran and Japan. Other potential entrants into the commercial enrichment services market are studying future options.

Interest in multilateral nuclear approaches has grown sharply since 2003, when Iran announced plans to develop a complete and autonomous nuclear fuel cycle, and described the significant progress that had already been made to construct facilities for uranium enrichment and spent fuel reprocessing. This national programme had been underway for almost 20 years without external oversight of the kind that the international community would normally expect the International Atomic Energy Agency (IAEA) to provide.

In a relatively small number of cases states have behaved in an irresponsible way by disregarding their obligations or by acting in ways that are in direct contradiction to the commitments that they entered into freely and (apparently) in good faith. The risk that non-compliance with the NPT will go undetected or the fear that current measures to address compliance failures will not succeed increases the probability that states may turn to coercive means. In several recent episodes force has been used under a broad interpretation of the right of

self-defence in cases where nuclear or other weapon programmes are suspected to be ongoing, the most recent being the attack on a facility in Syria.

The need to strengthen compliance is recognized, but strategies should focus on the small number of irresponsible states of concern rather than penalizing responsible members of the international community. Actions in the name of non-proliferation should not foster a cartelization of civilian industries that could increase in economic importance in the future—for example, by excluding respectable countries in good standing in the NPT from participating in nuclear fuel production or nuclear fuel reprocessing.

The IAEA has promoted a new examination of transparent and predictable multilateral approaches to controlling nuclear fuel cycles in order to build confidence in the peaceful use of nuclear technology. The options laid out by IAEA experts included providing assured access to services that do not involve multilateral ownership and/or control of facilities; the conversion of existing facilities from national to multinational ownership and/or control and creating multilateral consortia to construct new facilities.

A number of specific proposals have been put forward under each of these three categories by different states and by non-governmental bodies. These approaches focus on nuclear facilities. However, there needs to be a much broader set of parallel discussions about the implications of expanding the nuclear industry and the dual-use industry that supports it.

A successful strategy needs to avoid approaches that appear to change or take away what are seen by states as their legal rights, and emphasize choices based on a balance of economic, environmental and security self-interest. Narrowly conceived proposals targeted on one or a small group of 'countries of concern' are less likely to succeed in the absence of a broad and inclusive discussion because, taken in isolation, nuclear programmes come to be seen as an intimate part of national identity and sovereignty. In such conditions there is no package that would be acceptable to countries like Iran or North Korea because of the high domestic cost of conceding what have come to be seen as critical matters of national security.

An inclusive discussion of solutions rather than marketing of national proposals or proposals developed in small groups to create this mindset. Based on past experience, potential partners are most likely to change course if they are persuaded that there is fruitful international cooperation underway and that they can genuinely have a place in it.

Engagement with the private sector is a precondition for success in internationalisation of peaceful nuclear cooperation because many of the relevant assets are privately owned and controlled. In the past key companies in the civilian nuclear energy sector have tended to have a narrow specialisation and a predominantly national focus. However, the market is pushing the nuclear industry in the direction of greater internationalisation, diversification and consolidation. New  $\rm CO_2$ -free energy conglomerates may form and position themselves to compete for work globally, hoping to eat into the market share of energy suppliers offering coal, oil and gas.

There are advantages in already engaging with industry to discuss how to take advantage of tendencies towards international cooperation (a process that is second nature for many private actors, who work across borders more efficiently than governments). Industry already understands the need to act within a common framework of regulation enforced nationally in sectors that have internationalised their operations extensively. In the nuclear sector responsible companies could help to spread safety and security standards across borders by using their internal partnerships .

This cooperation cannot be taken for granted since the nuclear industry has worked to de-couple energy and proliferation issues in their 'public diplomacy' (and it is true that clandestine programmes to develop specific technologies, equipment and materials are a greater proliferation risk than the civilian nuclear fuel cycle). It is nevertheless an open question whether the putative 'nuclear renaissance' could survive the effect of nuclear proliferation failures on public opinion. In current financial conditions it is even more likely that industry would quickly see the need for partnership with government to create the conditions for a sustainable nuclear industry.

International efforts will also have to address the question of how to enforce any emerging set of international regulations effectively. The IAEA is likely to have a critical role in developing instruments that regulators will need to provide assurances on safety, security and non-proliferation. This would require continued work to strengthen the political, legal and technical basis for nuclear safeguards and to set a new international standard for effective safeguards.

While international bodies help set standards, regulations are implemented by national authorities. Recent experience underlines that an intensification of cooperation and information exchange between governments, industry and international bodies (notably the IAEA) is critical to effective national enforcement. Cooperation offers the best prospect of detecting and interdicting illicit nuclear networks that represent a major proliferation threat. Enhancing the understanding of how illicit networks operate in many countries of the world can also help enforcement authorities to prosecute members of the illicit network successfully.

## Preventing the malicious application of sensitive technologies, materials and know-how

The previous sections have emphasized the need to bring the level of effort devoted to reducing nuclear arsenals and strengthening peaceful cooperation to the same level as that which has been achieved in non-proliferation. However, this is not to suggest that the non-proliferation effort should be diminished. On the contrary, there is a need to continue strengthening non-proliferation instruments as well as adapting them to changing political, technological and strategic conditions. This process of adaptation is already being considered in one important area, namely the practical measures that are jointly implemented on the territory of one state by a coalition of parties that may include states, international organizations, local and regional government, non-governmental organizations (NGOs) and the private sector.

During the 1990s the emergency programme established in response to the rapid collapse of communism evolved into a number of important projects that helped to implement commitments contained in arms control agreements—notably the first bilateral Russian—US strategic arms reduction treaty, START—I, and the Chemical Weapons Convention (CWC). At their meeting in Kananaskis, Canada in June 2002 the Heads of State and Government of the G8 countries announced a Global Partnership Against the Spread of Weapons and Materials of Mass Destruction to provide assistance to states that lack the means to implement shared disarmament, non-proliferation and counter-terrorism objectives.

This Global Partnership was an effort to modify international nonproliferation and disarmament assistance (INDA) in light of newly identified threats, notably from mass impact terrorism. The Kananaskis decision recognised that the scope of the Global Partnership should be wider than the military programmes of states. However, there is much that still needs to be done to translate that political decision into a programme of specific projects, to develop the capacity to implement the programme and then sustain the commitment needed to ensure implementation.

This is a formidable challenge given the diffuse nature of many of the possible security threats now being discussed. When arms control mainly aimed to create a stable set of self-restraining measures applied by states to the military equipment used by their own armed forces or other organs of state power it was possible to isolate a set of items that should be the subject of controls. It is a quite different challenge to develop a system to deny malicious non-state actors access to the materials, equipment and instruments that they need in order to carry out mass impact terrorist attacks. These items include a range of hazardous materials that are unlikely to have been considered weapons in the past and that fall outside existing arms control instruments.

United Nations Security Council Resolution 1540 of 2004 was an important preliminary step because it identified elements that would need to be part of the legal framework that would allow INDA to play its full role in the future. These elements include ensuring safe and secure custody of sensitive materials, technologies and equipment; strengthening national export controls and border security, and applying the criminal law to non-state actors who provide support of any kind to illegal weapon programmes or mass impact terrorism. However, the information compiled by the United Nations special committee responsible for facilitating the implementation of UNSC Resolution 1540 has underlined that many gaps remain in national legislation related to these elements.

The International Convention for the Suppression of Acts of Nuclear Terrorism (Nuclear Terrorism Convention) and an amendment to the 1987 Convention on the Physical Protection of Nuclear Material (CPPNM) both provided a basis for the enactment of national legislation that could give expression to elements outlined in UNSC Resolution 1540. The CPPNM (the only legally binding international instrument in the area of physical protection of nuclear material) establishes measures related to the prevention, detection and punishment of offences related to nuclear material. However, as of June 2008 only around 20 countries had ratified the amended CPPNM while as of December 2008 there were only 47 State parties

to the nuclear terrorism convention (and of the countries that possess nuclear weapons only Russia and India have signed and ratified).

A number of recent initiatives have been undertaken among groups of states that come together on a voluntary basis to take actions that are consistent with the objectives of UNSC Resolution 1540. The Global Initiative to Combat Nuclear Terrorism and the Proliferation Security Initiative are two such efforts. These efforts, which are of an operational character, can give important support to relevant multilateral legal instruments and can help to provide states with a full range of tools to address the underlying problems of inadequate nuclear security and the danger of proliferation.

If the necessary legal and political framework is to be built then states will need to be proactive in advertising and promoting the benefits of collective action around the world. However, they will need to do more than that. The capacities and infrastructure to deliver a sustainable programme of technical cooperation will have to be created in order to help states that want to translate the new standards and principles into effective national mechanisms.

In the year 2010, during the Canadian Presidency of the G8. It would be appropriate to review the programme launched in Kananaskis, Canada in 2002 and explore a new and wider commitment to deliver a sustainable programme to reduce the security risks posed by insecure materials, equipment or knowledge based on international partnership and cooperation.

### Denuclearization in the framework of cooperative security

The final objective of arms control is not to reach agreement on treaties or conventions, but to contribute to the development of an international common and cooperative security system. In the present circumstances there is a need for states to reflect on their wider objectives and to make an honest appraisal of a number of their underlying assumptions.

First, if arms control is to play its proper role it is necessary to establish whether or not nuclear proliferation is really seen as the key foreign policy challenge facing the international community. There should be an open dialogue on whether non-proliferation is a central objective or whether in reality it is a secondary interest behind other concerns and threats. Establishing whether non-proliferation really is a common endeavour or whether attitudes to proliferation

are in reality a sub-set of political and strategic relationships would help delimit a common approach to e.g. nuclear programmes of concern in North Korea and Iran or approaches to cooperation with the very few countries that remain outside the NPT.

Second, there is still a need for an open discussion on the credibility of the nuclear non-proliferation regime and the NPT, which is at its core, in light of recent programmes of concern and the discovery of illegal programmes. While the initial assumption was that countries would join the Treaty in good faith, do states still believe that? It was assumed that countries would take seriously the national implementation of measures to prevent the misuse of sensitive nuclear activities for military ends. Have countries really accepted their responsibilities?

Third, there is a need to discuss the balance between non-proliferation and counter-proliferation and how the two paradigms interact with one another. Are these mutually reinforcing elements in a coherent approach or are they in reality separate issues? Can counter-proliferation efforts and approaches engaging sub-sets of countries succeed in a globalizing world (what is the evidence so far from the efforts undertaken in the last decade)?

# How to Advance the Disarmament Agenda? Discussion Paper by Adam Daniel Rotfeld

The need to revitalize the disarmament and non-proliferation agenda through a more focused efforts has to be seen in a broader context—within a new security environment and that will be discussed at the first session of our Conference.

In the period of cold war, arms control was aimed at the reduction of the probability of outbreak of war. In their pioneering study Thomas C. Schelling and Morton H. Halperin (*Strategy and Arms Control*, N.Y., 1961) laid out their widely respected principles for arms control during the cold war. Their intention was to bring arms control and defense policy into alignment. Thus they were focused on three aspects: how to reduce (a) the probability of war; (b) the damage from any war that nonetheless occurred; and (c) the cost of preparing for war.

The new type of arms control should be focused on question: how to eliminate completely a possibility of war and especially the nuclear war. In other words: axiology matters!

In her speech delivered a year ago the 25<sup>th</sup> June 2007 then the British Foreign Secretary, Margaret Beckett was right by saying: "Weak action on disarmament, weak consensus on proliferation are in none of our interest. And any solution must be dual one that sees movement on both proliferation and disarmament—a revitalization, in other words, of the grand bargain struck of 1968, when the Non-Proliferation Treaty was established."

There is no need to bring here the arguments why today the NPT regime is under particular pressure and why it is an urgent need to revitalize the disarmament agenda.

The determination of the UN Secretary General to strengthen the UN institutional foundation and management mechanism deserves the highest appreciation. However, the stalemate, the lack of progress and, in fact, paralysis of the disarmament and non-proliferation process does not lie mainly in the lack of institutions or their weakness. The problem is much deeper, more complex and rather of political, social and economic than institutional or managerial nature. In short: the institutions should follow the problems and not other way around. Therefore the primary need is not only do define the mandate and reorganize the UN Department for Disarmament Affairs, but to initiate the search for an answer to

some fundamental questions. One of them is: Why the arrangements like Wassenaar Arrangement, PSI, MTCR, Zangger Committee (all of them outside the UN system) are more efficient than the UN Conference on Disarmament, UN DC and other UN bodies?

This phenomenon is not a by-effect of the poor management and cannot be resolved by an institutional reform. To much greater extend it reflects a differentiation and diversity of the world after the end of the cold war.

Many people believe that there is a chance for a new opening.

It is true: in last decade arms control lost its priority but still has significance in search for a new security system. In the U.S. policy, for example, since many years so called "rogue states" (i.e. North Korea and Iran) and their WMD programmes are considered as the highest priority. Alyson Bailes rightly noted some years ago that the U.S. administration has tried to handle this problem in three different ways: by military intervention (Iraq); by paying them to stop (Libya); and economic incentives (North Korea). What kind of approach in case of Iran would be most efficient—is still an open question.

Arms control and disarmament has to be seen in the context of the new nature of military conflicts. Since the end of the cold war most of them are internal—within the states and not between them. And the increasing prominence of non-state actors in conflict has led to new challenges for conflict responses.

The new focus should be and already is more and more oriented on non-state actors and both on conflicts *within* and *between* the states. The main question is how to prevent proliferation, control and end the conflicts. New effort has to be taken to control types of conventional weapons that may be especially attractive to terrorists (i.e. MANPADS—Man-Portable Air Defense Systems). The UN Arms Trade Treaty could be seen as an example how to put under control arms transfer both to non-state as well as state customers. There is an urgent need to elaborate more effective new forms of collaboration between the state authorities and private industry.

The complex and dynamic nuclear landscape confronts us with challenges along four axes: regional nuclear proliferation; nuclear terrorism; great powers nuclear relations; and the security implications of increased interest in nuclear energy.

In search for response to the question *How to advance the disarmament agenda? a* new conceptual thinking is required for many reasons.

First, there is a need to apply a holistic approach and to develop a more unified understanding of and approach to managing the risks and opportunities posed by the 21<sup>st</sup>-century challenges of weak and failed states and non-state actors on one hand and re-armaments and proliferation of WMD and missile technologies on the other.

Second, in the past only very limited number of global powers and some other countries were assumed to know how to acquire nuclear weapons and other types of WMD. Now about 40 nations are in a position to produce the nuclear weapons and many more "could become so based on their participation in civilian nuclear energy programs" (M.E. Baradei, "Towards a safer world," *The Economist*, Oct. 16, 2003). The increasing number of nuclear-capable actors has to be the most serious subject of concern.

Third, it is high time to revitalize global cooperation on disarmament within the line of recommendations presented by Hoover's Institutions, by Hans Blix's Report, and in some other findings, including expected Evans–Kawaguchi Report.

One more difficulty with an otherwise undisputed need to re-focus international attention on disarmament and arms control (in line with new realities, threats, globalization etc.) is the States attitude towards arms control arrangements reached in the past.

As nuclear technology becomes almost immediately available through the Internet (and through other means, of course) the NPT regime is seen by nuclear States as *de facto* not sufficient to prevent proliferation. On the other hand, for non-nuclear States it is equal more and more too political, and not technological, barrier for nuclear proliferation. Hence the need for increased transparency, openness, including CSBMs, as well as "security communities" like the Cracow PSI initiative mentioned earlier.

One should also constantly keep in mind that for non-State actors inter-State arrangements can only have any kind of limiting effect if they provide for information sharing and transparency, since due to their nature they are non-binding for them. The new efficient monitoring of financial transfers is much more significant than many declaratory documents.

The other example is conventional arms control, and first of all the CFE Treaty. The CFE regime is seen more and more (mainly in Russia) as political instrument, or arrangement mainly prejudging political position of its parties, and not so much as a regime imposing strict military limitations upon them. In the modern world, with its 21<sup>st</sup>-century monitoring technologies, the very notion of surprise conventional armed attack, which the CFE Treaty sought to preclude, is becoming obsolete. But not the availability and transfers of conventional armaments, which can and are being used for all kinds of other purposes.

However, the main problem with existing arms control and disarmament arrangements is that, even though some of them might be seen as overtaken by events or somewhat obsolete, due to the new terrorist threats, globalization, simplified transfer of technologies etc., their elimination or non-adherence to them may create a domino effect on the entire arms control system, which must be avoided.

The new operational activities should be preceded by a complex and comprehensive feasibility study. In search of a new ways to advance the non-proliferation and disarmament agenda more important is innovative and creative approach than re-organization of old and creation of new structures or institutions following some models or theoretical concepts. The new security system is emerging outside the framework of existing institutions and structures. It would be useful to involve in a systematic manner the group of leading independent experts who should be encouraged to contribute through informal networks offering new ideas about the desirable activities and gradual steps which has to be taken. A good example of the intellectual potential of independent thinkers is demonstrated both by the Hoover Plan and specific conclusions and recommendation presented by SIPRI (I have in mind Ian Anthony's paper "The Future of Nuclear Weapons in NATO").

The dilemma now is to find new incentives for renewed focus on arms control and disarmament, which could be linked to the new international security order. If there is a chance for new Grand Bargain for arms control, it is to be looked for on pragmatic grounds and in relation to broader security context. In other words, the new approach to arms control should probably be less political, more pragmatic and more closely linked to broader security arrangements.

Warsaw, November 20, 2008

# Report of the UN Secretary-General's Advisory Board on Disarmament Matters

(excerpts)

### I. Introduction

- 1. The Advisory Board on Disarmament Matters held its forty-ninth and fiftieth sessions, respectively, in New York from 20 to 22 February and in Geneva from 9 to 11 July 2008. The present report is submitted pursuant to General Assembly resolution 38/183 O. The report of the Director of the United Nations Institute for Disarmament Research (UNIDIR), approved by the Advisory Board serving as its Board of Trustees, has been submitted in a separate document (A/63/177).
- 2. Adam Daniel Rotfeld of Poland chaired the two sessions of the Board in 2008.
- 3. The present report summarizes the Board's deliberations during the two sessions and the specific recommendations it conveyed to the Secretary-General.

### II. Substantive discussions and recommendations

# A. Issues of energy security and the environment in the field of disarmament and non-proliferation

- 4. The Board exchanged views on issues of energy security and the environment, and their impact on the field of disarmament and non-proliferation. The background for that agenda item was recognition that the continuously rising global demand for energy and the ensuing competition for energy resources had a significant impact on international peace and security.
- 5. The Board had before it food-for-thought papers on the agenda item prepared by two members, Mahmoud Karem and Carolina Hernandez.
- 6. The Board also heard a presentation by an expert, Arjun Makhijani, President of the Institute for Energy and Environmental Research, on the ideas contained in his recently published scientific study, entitled *Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy*<sup>1</sup>, concerning the ways in which the

30

Arjun Makhijani, *Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy* (a joint project of the Nuclear Policy Research Institute and the Institute for Energy and Environmental Research) (IEER Press and RDR Books, 2007).

- United States of America could attain energy security with a zero carbon dioxide economy without resort to nuclear energy.
- 7. The issue of nuclear energy dominated the discussions on the agenda item. Many members agreed that the simultaneity of proliferation and energy concerns had created both political and economic obligations to address questions pertaining to the peaceful use of nuclear energy in a more concrete and urgent manner. Many Board members reiterated the right of States parties to the Treaty on the Non-Proliferation of Nuclear Weapons to obtain nuclear technology for peaceful purposes under the terms of the Treaty. In particular, there was some emphasis that all States parties to the Treaty had the right to pursue peaceful, civilian-use nuclear energy in cooperation with States, in a position to do so, that already had nuclear capabilities, including enrichment capabilities. Members also stressed the importance of reconciling the right to the peaceful use of nuclear energy under article IV of the Treaty and the need to strengthen the non-proliferation regime.
- 8. Numerous opinions were expressed on the need to address the issue of securing the nuclear fuel cycle to ensure non-diversion and provide States parties to the Treaty with peaceful nuclear power. Many members mentioned the need to develop arrangements for ensuring the reliable supply of fuel as a means of achieving the long-term sustainability of the production of nuclear energy. While welcoming various proposals regarding the nuclear fuel cycle and acknowledging their contribution to non-proliferation efforts, many members underscored the need to bring the discussion to a credible multilateral framework.
- 9. Certain members also stressed the importance of establishing a non-discriminatory system and some specifically warned against creating another divide between haves and have-nots. One member also stressed the importance of addressing the legitimacy of any future nuclear fuel cycle mechanism. While some members discussed economic aspects, others emphasized the need to take into account political and security aspects, noting that political and strategic aims drove certain countries to pursue enrichment and reprocessing programmes. It was also mentioned that a new multilateral mechanism regulating access to the nuclear fuel cycle should entail multilateral assurances of the supply of fissile material for energy purposes. To facilitate the establishment of such a new mechanism, the necessity for a multilateral treaty

banning the production of fissile material for nuclear weapons, as well as financial arrangements, was mentioned. Members commented on ongoing initiatives as well as proposals for the establishment of international uranium enrichment centres placed under International Atomic Energy Agency (IAEA) safeguards that would ensure stable supplies of nuclear fuel and assure non-diversion to weapons purposes. One member commented that a multilateral treaty banning the production of fissile material for nuclear weapons would facilitate the establishment of a new discipline for the nuclear fuel cycle.

- 10. The issue of the safety of nuclear materials was also discussed. Some members stressed that the security of nuclear facilities, including enrichment facilities, energy centres and nuclear waste materials warranted greater attention in the form of multilateral cooperation to combat possible attacks. One member expressed concern over the vulnerability of shipments by land or sea of spent nuclear fuel and reprocessed uranium for use in nuclear reactors worldwide owing to possible accidents or terrorist acts. The view was also expressed that the protection of energy and transit routes should not be tied to any global initiative.
- 11. One member called for support for efforts to "depoliticize" the discussions on nuclear energy. Several members were of the view that there was a need to involve the general public in a global debate on the advantages and disadvantages of nuclear energy.
- 12. Members stressed the importance of examining the negative implications of the search for energy security for the environment and non-proliferation. Some members expressed different views on the future role of nuclear energy, with some advocating further development of nuclear energy as green and clean energy and others highlighting proliferation risks and environmental damages. It was noted, however, that a broad debate on energy security was not within the disarmament and security mandate of the Board. A number of members underscored the important role of IAEA in addressing such issues.
- 13. The Board also considered related non-proliferation concerns. One member proposed to negotiate, within the IAEA framework, another legally binding instrument (a second additional protocol) on the peaceful use of nuclear energy, which would contain provisions on the interpretation of article IV in relation to articles I and II, especially non-proliferation. Another member emphasized the need to establish linkages between development and non-

- proliferation concerns so that multilateral mechanisms could be developed to tackle the energy and proliferation problems.
- 14. The Board underlined the importance of building confidence and mutual trust among States in that field. Some members welcomed the idea of regional security dialogue, including discussions on the peaceful use of nuclear energy among Middle Eastern countries. One member added, however, that as long as energy problems persisted, concerns over a "nuclear energy renaissance" were confined not only to the Middle East but also to all regions of the globe. Moreover, the Board exchanged views on the issue of Iran's nuclear programme, with concern expressed about its political and strategic aims. While members expressed diverse views on the question, several emphasized the centrality of the issue in addressing the concerns about energy security and nuclear proliferation.
- 15. Members also commented on the contribution of nuclear-weapon-free zones to non-proliferation goals while promoting the peaceful use of nuclear energy. In addition, they discussed the issue of verification, in particular in the context of non-compliance with safeguards obligations. The Board also noted the political commitment of the recent G–8 Summit in Japan with respect to the strengthening of the non-proliferation regime.

### Recommendation

16. The Board suggested that the Secretary-General encourage a broader dialogue on the peaceful use of nuclear energy, including the various proposals for the establishment of national and multilateral nuclear fuel supply arrangements under a multilateral framework.

# B. The "Hoover Plan" for nuclear disarmament: multilateralism and the United Nations dimension

17. For its second agenda item, the Board discussed the so-called "Hoover Plan," or the Nuclear Security Project, a proposal launched in 2007 by former high-ranking United States officials<sup>2</sup>.2 The Board explored the implications of

The Project builds on the 4 January 2007 *Wall Street Journal* op-ed article by two former United States Secretaries of State, George Shultz (1982–1989), currently a distinguished fellow at the Hoover Institution at Stanford University, and Henry Kissinger (1973–1977), currently Chairman

- that private initiative relative to multilateral efforts towards nuclear disarmament and non-proliferation.
- 18. Two members, Kate Dewes and Michael Clarke, presented food-for-thought papers on the topic at the forty-ninth session.
- 19. At the forty-ninth session, a presentation was provided by Thomas Graham, Jr., Chairman of the Board of the Cypress Fund for Peace and Security, who was among the original endorsers of the op-ed article<sup>3</sup>. He gave a detailed description of various aspects of the Plan, including its history, motivation and future development. At the fiftieth session, the Board heard a presentation by Rolf Ekéus, Chairman of the Governing Board of the Stockholm International Peace Research Institute and former Executive Chairman of the United Nations Special Commission on Iraq from 1991 to 1997, who stressed that verification was pivotal to the success of the Plan's proposals for a nuclear-weapons-free world.
- 20. Given the Plan's national and trans-Atlantic character, several members stressed the need to expand the discussion to its multilateral aspects. It was stated that the Plan originated from former Government officials and was thus outside the official United States political arena. Other questions were raised about the Plan's added value since many ideas contained in the Plan were not considered to be new. Some members also noted that certain ideas in the Plan were unrealistic and underscored the importance of consolidating and revising the Plan in such a way as to make it more comprehensive, focused and achievable.
- 21. Some stressed that the Plan was not relevant to other regional and subregional contexts, in particular the Middle East region. It was proposed that in order to obtain wider international interest, the Plan would need to develop coherent

of Kissinger Associates, as well as Bill Perry, former Secretary of Defense (1994–1997), and Sam Nunn, former Senator and Chairman of the Senate Armed Services Committee. The article links a vision of a world free of nuclear weapons with urgent steps designed to reduce nuclear dangers. See www.nuclearsecurityproject.org.

A conference organized by George Shultz and Sidney D. Drell was held at the Hoover Institution to reconsider the vision that former Presidents Reagan and Gorbachev brought to Reykjavik in 1986. In addition to Messrs. Shultz and Drell, the following participants endorsed the view in the statement: Martin Anderson, Steve Andreasen, Michael Armacost, William Crowe, James Goodby, Thomas Graham, Jr., Thomas Henriksen, David Holloway, Max Kampelman, Jack Matlock, John McLaughlin, Don Oberdorfer, Rozanne Ridgeway, Henry Rowen, Roald Sagdeev and Abraham Sofaer.

- proposals for nuclear issues relevant to other regions, such as the Middle East and North-East Asia.
- 22. While acknowledging the diverse opinions about the Plan, many members underlined its significance, in particular in terms of its timing and the momentum it had created before the United States presidential election. Importance was also attached to the Plan's authors, noting their expertise, credentials and political influence. Several members emphasized the importance of translating the proposals into actual policy. Consequently, some members suggested that the United Nations would be a suitable forum where the Plan's proposals could be discussed and synthesized. Others commented on the need to discuss the Plan in the Nuclear Non-Proliferation Treaty framework.
- 23. Some members proposed a track II approach, with the five permanent Members of the Security Council discussing the Plan's merits initially and then moving to a wider discussion involving States not parties to the Nuclear Non-Proliferation Treaty and non-nuclear-weapon States. There were some suggestions that the Advisory Board could search for ways and means for the Secretary-General to bring the Plan to the attention of global policymakers. Some members also suggested that the Secretary-General should be advised to express support for the Plan. However, it was proposed instead that the Board advise the Secretary-General to seize the momentum created by the Plan and try to encourage broader discussions on it.
- 24. The Board members also exchanged views on other issues related to nuclear disarmament and non-proliferation. One member commented that instead of opposing the objectives of nuclear disarmament under the terms of article VI of the Nuclear Non-Proliferation Treaty or of making one objective dependent on the other in a purely sequential manner, it would be more promising for the international community to encourage a mutually reinforcing approach of those objectives with a view to undiminished global and regional security.
- 25. It was also stated that there was a growing worldwide consensus regarding the dangers of proliferation and that there was increasing support for the Nuclear Non-Proliferation Treaty as the cornerstone of international security. It was suggested that the Secretary-General could welcome the ongoing efforts by Treaty nuclear-weapon States towards decreased reliance on nuclear weapons for their national security, as well as towards the reduction of nuclear weapons

- globally. Another member, however, expressed support for the 1996 advisory opinion of the International Court of Justice to negotiate complete nuclear disarmament in good faith. It was also suggested that both nuclear and non-nuclear-weapon States propose and implement confidence-building measures, such as the strengthening of nuclear-weapon-free zones.
- 26. The importance of a personal role by the Secretary-General, as well as by the Special Representative for Disarmament Affairs, in generating political will in the field of nuclear disarmament and non-proliferation was underlined. In that context, a suggestion was made for a "friends of the Chair" mechanism, similar to the 1995 Review and Extension Conference of the Parties to the Treaty for the 2010 Review Conference, with perhaps the Special Representative for Disarmament Affairs, the Director-General of IAEA and the Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization assisting in the negotiation process, especially during the final week of the Review Conference.
- 27. Some members also stressed the need to seriously address regional disarmament and arms control issues and called for broader regional and subregional approaches. In that respect, some members also underlined the importance of taking note of existing regional differences.
- 28. A suggestion was also made to consider the role and function of existing multilateral documents, such as General Assembly resolutions and consensus language from the Nuclear Non-Proliferation Treaty Review processes, in seeking a path towards nuclear disarmament and non-proliferation.

### Recommendations

- 29. The Board made the following recommendations:
  - (a) The Secretary-General should continue to strengthen his personal role in generating political will in the field of nuclear disarmament and non-proliferation;
  - (b) The Secretary-General should seize the momentum created by the Nuclear Security Project ("Hoover Plan") and encourage wider discussions regarding the objectives of the Plan, with the United Nations possibly acting as a multilateral forum for such discussions.

#### C. Emerging weapons technologies, including outer space aspects

- 30. The Board continued its discussions on the agenda item, which it had started at its forty-eighth session in 2007.
- 31. At its forty-ninth session, the Board had before it food-for-thought papers on the agenda item prepared by two members, Elisabet Borsiin Bonnier and H.M.G.S. Palihakkara.
- 32. To meet the new risks and challenges from new weapons technologies, the need to elaborate and promote adequate international norms and rules, perhaps in the form of a code of conduct, was mentioned. Views were expressed although those technologies should neither be prohibited nor restricted, there still could be a need to focus on the offensive capabilities of such emerging technologies in a legally binding context. Some members stated that there was a close interconnection between the issues of disarmament and non-proliferation and the new security environment resulting from the development of new technologies for both offensive and defensive weapons purposes.
- 33. Some Board members reiterated concerns over the possibility of non-State actors acquiring emerging technologies for weapons purposes and the efforts that could be made to prevent such occurrences.
- 34. In addition, concern was expressed over the possibility of widening gaps between developed and developing States in connection with such emerging technologies.
- 35. As a means of addressing the foregoing challenges, the Board believed there was a need for greater transparency, better communication and increased confidence among the civilian, military and scientific communities on the issue of emerging technologies. Some members also stressed the requirement for broader involvement of the private sector in arms control and non-proliferation processes in the context of new weapons technologies, given the increasing prospects for the privatization of warfare. Furthermore, owing to the apparent lack of public awareness of the issues pertaining to emerging weapons technologies, views were expressed about the importance of raising the awareness of the general public, as well as the need to initiate a dialogue to facilitate early scientific warnings of certain emerging military technologies.
- 36. Other noteworthy views included the necessity of gaining a better understanding of the military doctrines and strategies behind the potential use

- of such emerging technologies, and the consideration of any potential spillover effects those new weapons technologies might have on global military expenditures.
- 37. Given the highly technical nature of the issue of emerging technologies, including outer space, some Board members commented on the need to engage scientists in such discussions. A discussion evolved around the recommendation the Board had made to the Secretary-General in 2007 regarding the creation by the Secretary-General of a high-level panel on space governance, and a suggestion was formulated to broaden the scope of such a panel to include eminent scientists on emerging weapons technologies and future implications for international peace and security.
- 38. Support was expressed for negotiations on an instrument on the prevention of an arms race in outer space. In that regard, support was also mentioned for proactive multilateral work by the United Nations in pursuing preventive diplomacy on space security issues, including international efforts to create a code of conduct which would include confidence-building measures and best practices to regulate space objects and outer space activities.
- 39. Members also discussed the issue of space security, including the danger of space debris. Different views were expressed regarding the approach to that issue. Some members stressed the need to negotiate a new legally binding instrument to prohibit an arms race in outer space. Another member expressed skepticism about an arms control treaty on outer space, noting that space debris was created by weapons on the ground, not space weapons.

#### Recommendations

#### 40. The Board made the following recommendations:

- (a) The Secretary-General should continue raising awareness of the risks/threats related to emerging weapons technologies and initiate a dialogue between Governments and the scientific community on emerging technologies with military applications;
- (b) The Secretary-General could consider the creation of a high-level panel, including eminent scientists, on the issue of emerging weapons technologies, including outer space aspects, and their possible implications for international peace and security.

*(...)* 

#### VII. Conclusions

- 53. By opting to change its method of work and discuss the same agenda items during both its sessions in 2008, the Board was able to have more in-depth and lively deliberation on the three topics chosen, and to present a more cohesive report and considered recommendations.
- 54. The question of nuclear energy dominated the discussions on the topic of energy security and environment, with diverging views expressed by some members. Considerable interest was expressed on the Nuclear Security Project ("Hoover Plan") and its possible implications for multilateral nuclear disarmament and non-proliferation. Although the Board recognized that the Plan originated from former Government officials in the United States, many members underlined its significance, especially in terms of its timing and momentum, and encouraged broader multilateral discussions on its objectives. The Board was able to spend considerable time deliberating over the issue of emerging weapons, including outer space issues. However, given the highly complex and technical nature of the issue, many members emphasized the need for broader involvement of governmental, academic, scientific and industrial communities in discussing the possible implications of such technologies for international peace and security.

Source: UN General Assembly, doc. A/63/279, August 11, 2008

# Vision of the World Free of Nuclear Weapons ("Hoover Plan") by James E. Goodby, Hoover Institution, Stanford University

Former secretaries of state George Shultz and Henry Kissinger, former secretary of defense William Perry, and former chair of the Senate Armed Services Committee Sam Nunn (D-Ga.), wrote in the *Wall Street Journal* on January 4, 2007 that:

Reassertion of the vision of a world free of nuclear weapons and practical measures toward achieving that goal would be, and would be perceived as, a bold initiative consistent with America's moral heritage. The effort could have a profoundly positive impact on the security of future generations. Without the bold vision, the actions will not be perceived as fair or urgent. Without the actions, the vision will not be perceived as realistic or possible.

This conclusion is central to the case for revisiting the idea of a world free of nuclear weapons as an operationally meaningful goal. It emerged from two conferences at Stanford University's Hoover Institution, and was strongly supported by participants at an international conference organized by the Norwegian Foreign Ministry in Oslo in February 2008.

Lying behind the conclusion was a judgment that the world is approaching a time when nuclear weapons will be more widely available, as deterrence becomes less effective and increasingly hazardous as a policy choice. And another judgment was that the steps the international community is taking to address current nuclear threats do not adequately respond to the danger.

This concern was addressed at the first Hoover Institution conference in 2006, on the twentieth anniversary of the remarkable summit at Reykjavik in October 1986 when President Ronald Reagan and General Secretary Mikhail Gorbachev endorsed the vision of a world free of nuclear weapons.

The initial Hoover conference participants considered what it would take to rekindle the vision shared by Reagan and Gorbachev and decided that another conference should be held to discuss a series of practical steps leading to major reductions in the nuclear danger. At a second conference at the Hoover Institution one year later, this time in cooperation with the Nuclear Threat Initiative (NTI), the goal of a world free of nuclear weapons was reaffirmed, and specific steps toward

that end were elaborated in considerable detail. The conference considered near-term steps that should be taken starting in 2008. These were listed in a second article by Shultz, Kissinger, Perry, and Nunn in the *Wall Street Journal* on January 15, 2008.

The article declared that the United States and Russia should extend key verification provisions of the Strategic Arms Reduction Treaty of 1991; take steps to increase the warning and decision times for the launch of all nuclear-armed ballistic missiles, thereby reducing risks of accidental or unauthorized attacks; discard any existing operational plans for massive attacks that still remain from Cold War days; and undertake negotiations toward developing cooperative, multilateral ballistic missile defense and early-warning systems, as proposed by Presidents George W. Bush and Vladimir Putin at their 2002 Moscow summit.

The four principals pointed to the need to:

- accelerate work dramatically to provide the highest possible standards of security for nuclear weapons, and for nuclear materials everywhere in the world, to prevent terrorists from acquiring a nuclear bomb;
- start a dialogue, including within NATO and with Russia, on consolidating the nuclear weapons designed for forward deployment to enhance their security and as a first step toward careful accounting for them and their eventual elimination:
- strengthen the means of monitoring compliance with the Nuclear Non-Proliferation Treaty (NPT) to counter the global spread of advanced technologies; and
- adopt a process for bringing the Comprehensive Test Ban Treaty (CTBT) into effect, which would strengthen the NPT and aid international monitoring of nuclear activities.

The article also emphasized four other key issues:

First, the United States and Russia must undertake further substantial reductions in U.S. and Russian nuclear forces beyond those recorded in the 2002 U.S.-Russian Strategic Offensive Reductions Treaty. As the reductions proceed, other nations should quickly become involved.

Second, an international system of controls should be developed to manage the risks of the nuclear fuel cycle. Multilateral facilities will have to be devised and

operated with the support of a strengthened International Atomic Energy Agency (IAEA), guaranteeing that the low-enriched uranium required for power reactors will be available, that the fuel will remain under appropriate multilateral controls, and that the spent fuel will be removed to internationally operated facilities.

Third, a verifiable treaty should be completed to prevent all nations, both nuclear and non-nuclear, from producing nuclear materials for weapons, and a more rigorous system of accounting and security for nuclear materials should be developed.

Fourth, states must turn the goal of a world without nuclear weapons into a practical enterprise among nations by applying the necessary political will to build an international consensus on priorities.

Here, it should be said that the U.S.-Soviet experience of the Cold War does not provide any grounds for complacency regarding the theory that nuclear deterrence can keep the peace through the threat of mutual assured destruction. The history of the Cold War establishes quite clearly that the U.S.-Soviet competition was unique. Nations that for the first time are building nuclear weapons, or planning to, may succeed in using their newfound power to avoid war, but this cannot be counted on. Very special circumstances made nuclear deterrence between the Soviet Union and the United States a successful instrument of peace, although one that always carried with it the vast risk of annihilation on a global scale. Each of the two nations believed it would ultimately prevail, largely through peaceful means, and thought preventive war was unnecessary. Moreover, the United States and the Soviet Union had no territorial claims against the other. They were insulated by thousands of miles from the daily frictions that arise when adversaries live side by side.

Given these circumstances, the Soviet Union and the United States had the luxury of time to develop rules, tacit and otherwise, to tilt the scales against the use of nuclear weapons. These circumstances do not exist in the Middle East, Northeast Asia, or South Asia, and they may not exist in other parts of the world where nuclear weapons competition could suddenly erupt. To assume that nuclear deterrence will always work successfully, even in very different conditions, is an exercise in wishful thinking.

Even during the 1980s, President Reagan questioned the utility of nuclear weapons as the bases for deterrence. Reagan was ahead of his time, and was

roundly criticized by the nuclear mandarins of the day for daring to think seriously about eliminating nuclear weapons. But his legacy persists in four lines of thought:

A recognition of the ultimate futility of dependence on nuclear weapons for national security;

- A paradigm shift from arms control, as practiced since the early 1960s, to nuclear disarmament;
- Ballistic missile defense as a key to eliminating nuclear weapons;
- The *de facto* termination of the doctrine of "protracted nuclear war" as it was understood in the 1970s.

The United States and Russia have reduced their nuclear arsenals significantly since the end of the Cold War, but each has thousands of nuclear weapons in its inventory even though the strategy of mutual assured destruction (MAD) has become obsolete. The real danger lies elsewhere: terrorists are anxious to get their hands on an atom bomb or other nuclear device and will pay a high price to do so. They are determined to find vulnerabilities and to exploit them. So far, the civilized world has patched the potential leaks in time. A thriving nuclear black market was broken up just a few years ago, but it operated without detection for a long time. Even the most meticulous control systems sometimes loses track of the thousands of nuclear weapons or their components. That happened twice in the past year just in the United States.

The equation that should inform policy is this: more atomic bombs or warheads in more hands equals more chances for them to be lost, stolen or used in anger. Each nation has an interest in preventing this deadly progression, even if it means rolling back its own holdings of nuclear weapons.

It would make a difference if the nuclear weapons states, led by the United States and Russia, joined in removing nuclear weapons from their war plans and taking prudent steps to reduce the numbers of deployed weapons to zero. And, very importantly, it would create a solid front against the acquisition of nuclear weapons by Iran, North Korea, and others that might seek to emulate those nations.

Is a world without nuclear weapons a practical possibility? Yes, if denuclearization is taken a step at a time, if something other than deterrence based on nuclear weapons is devised to promote security, and if nations develop a cooperative monitoring system that focuses on the nuclear fuel cycle, on detection

of any deployed nuclear weapons systems, and on any efforts to reconstitute a deployed nuclear strike force. Naturally, finding all the nondeployed nuclear warheads in the world is going to be the last stage in a long process.

The spirit, if not the letter, of Reagan's legacy persists in the language of Secretary of Defense Robert Gates and Secretary of Energy Samuel Bodman, who wrote in their September 2008 "White Paper" on nuclear weapons that they believed the United States should "rely, over time, more heavily on a responsive nuclear weapons design and manufacturing infrastructure to manage risks, and less on an inventory of non-deployed warheads." The logical end-state of such a policy could be a world without nuclear weapons—both deployed and non-deployed—where the hedge against defiance of the world's will to escape from the nuclear deterrence trap would be a responsive nuclear infrastructure and cooperative defenses against any outlaw that attempted to initiate a nuclear attack.

For a long time, the world will probably have to get along with perhaps a few nations having just a few nondeployed nuclear weapons. Recessed deterrence (an arsenal stored in such a way as to require lengthy preparation to assemble and launch warheads), latency (a technical capability that has not been constructed), and virtual arsenals (arsenals that have been deconstructed but can be rebuilt) are the kinds of options that need to be addressed by serious analysts. These conditions should not be the end of the road, but they are steps in the right direction, and positive political developments will have to occur to make a world without nuclear weapons a reality.

The efforts of governments will succeed or fail to the extent that their goal is not to perpetuate indefinitely a regime based on discrimination but to remove discrimination between the nuclear haves and have-nots. It is argued by some skeptics that a decision by nuclear-weapon states to reduce and eventually eliminate their nuclear arsenals will not affect the decisions of other countries that currently are weighing the importance of nuclear weapons for their security. Nations act in accordance with what their common sense tells them is the likely state of their world in the decades ahead. Now they expect to see nuclear weapons spreading to more and more states. So they keep their own options open. Nations once expected chemical weapons to be used in war. They are still liquidating the unused chemical weapons of World War II. Expectations about the actions of others have always played a large part in policymaking, and it is no different in the

nuclear arena. The goal of policy must be to change current expectations about the nuclear future.

So what should the new U.S. president do? He should call his Russian counterpart on his first full day in office and offer to meet with him to discuss how best to curtail the threat posed by nuclear weapons. Perhaps these two men will have in their minds a key conclusion of the 2008 *Wall Street Journal* article:

Progress must be facilitated by a clear statement of our ultimate goal. Indeed, this is the only way to build the kind of international trust and broad cooperation that will be required to effectively address today's threats. Without the vision of moving toward zero, we will not find the essential cooperation required to stop our downward spiral

The two leaders, aided by their advisors, eventually could decide to amend the treaty signed by their predecessors in Moscow in May 2002. That treaty permits 1,700 to 2,200 operationally deployed nuclear weapons in 2012. Why not change that to 1,000 by 2012?

Why not reaffirm a commitment to work for zero operationally deployed strategic nuclear weapons within the two terms that the two presidents may enjoy? Operationally deployed warheads and missiles are relatively easy to detect. At least, the new leaders could agree to reduce strategic warheads to numbers on the same scale as those of Britain, China and France that, collectively, total about 500.

If all of this seems too ambitious, let us keep in mind another observation made by Messrs. Shultz, Kissinger, Perry, and Nunn:

...In some respects, the goal of a world free of nuclear weapons is like the top of a very tall mountain. From the vantage point of our troubled world today, we can't even see the top of the mountains, and it is tempting and easy to say we can't get there from here. But the risks from continuing to go down the mountain or standing pat are too real to ignore. We must chart a course to higher ground where the mountaintop becomes more visible.

Warsaw, November 21, 2008

# Speech at the 45<sup>th</sup> Munich Security Conference by Dr. Henry Kissinger, Former U.S. Secretary of State

Over 200 years ago, the philosopher Immanuel Kant defined the ultimate choice before mankind: World history would ultimately culminate in universal peace either by moral insight or by catastrophe of a magnitude that left humanity no other choice.

Our period is approaching having that choice imposed on it. The basic dilemma of the nuclear age has been with us since Hiroshima: how to bring the destructiveness of modern weapons into some moral or political relationship with the objectives that are being pursued. Any use of nuclear weapons is certain to involve a level of casualties and devastation out of proportion to foreseeable foreign policy objectives. Efforts to develop a more nuanced application have never succeeded, from the doctrine of a geographically limited nuclear war of the 1950s and 1960s to the mutual assured destruction theory of general nuclear war of the 1970s.

In office, I recoiled before the options produced by the prevalent nuclear strategies, which raised the issue of the moral right to inflict a disaster of such magnitude on society and the world. Moreover, these prospects were generated by weapons for which there could not be any operational experience, so that calculations and limitations were largely theoretical. But I was also persuaded that if the U.S. government adopted such restraints, it would be turning over the world's security to the most ruthless and perhaps genocidal.

In the two-power world of the Cold War, the adversaries managed to avoid this dilemma. The nuclear arsenals on both sides grew in number and sophistication. Except for the Cuban missile crisis, when a Soviet combat division was initially authorized to use its nuclear weapons to defend itself, neither side approached their use, either against each other or in wars against non-nuclear third countries. They put in place step-by-step a series of safeguards to prevent accidents, misjudgments and unauthorized launches.

But the end of the Cold War produced a paradoxical result: the threat of nuclear war between the nuclear superpowers has essentially disappeared. But the spread of technology—especially peaceful nuclear energy—has multiplied the feasibility of acquiring a nuclear weapons capability by separating plutonium or from enriching the uranium produced by peaceful nuclear reactors. The

sharpening of ideological dividing lines and the persistence of unresolved regional conflicts have magnified the incentives to acquire nuclear weapons, especially by rogue states or non-state actors. The calculations of mutual insecurity that produced restraint during the Cold War do not apply with anything like the same degree to the new entrants in the nuclear field and even less so to the non-state actors. Proliferation of nuclear weapons has become an overarching strategic problem for the contemporary period.

Any further spread of nuclear weapons multiplies the possibilities of nuclear confrontation; it magnifies the danger of diversion, deliberate or unauthorized. Thus if proliferation of weapons of mass destruction continues into Iran and remains in North Korea in the face of all ongoing negotiations, the incentives for other countries to follow the same path could become overwhelming. And how will publics react if they suffer or even observe casualties in the tens of thousands in a nuclear attack? Will they not ask two questions: What could we have done to prevent this? What shall we do now so that it can never happen again?

Considerations as these induced former Senator Sam Nunn, former Secretary of Defense William Perry, former Secretary of State George Shultz and I—two Democrats and two Republicans—to publish recommendations for systematically reducing and eventually eliminating the danger from nuclear weapons. We have a record of strong commitment to national defense and security. We continue to affirm the importance of adequate deterrent forces, and we do not want our recommendations to diminish essentials for the defense of free peoples while a process of adaptation to new realities is going on. At the same time, we reaffirm the objective of a world without nuclear weapons that has been proclaimed by every American president since Dwight D. Eisenhower.

Such a world will prove increasingly remote unless the emerging nuclear weapons program in Iran and the existing one in North Korea are overcome. Both involve the near-certainty of further proliferation and of further incorporation of nuclear weapons into the strategies of nuclear weapons states. In the case of Iran, the permanent members of the Security Council have called for an end to the enrichment of materials produced by the program for peaceful uses of atomic energy. In the case of North Korea, China, Russia, Japan, South Korea and the United States have demanded the elimination of nuclear weapons. North Korea has agreed to abandon its nuclear weapons program but, by procrastinating in its

implementation, threatens to create a legitimacy for the stockpile it has already achieved.

I have long advocated negotiations with Iran on a broad front, including the geopolitical aspect. Too many treat this as a kind of psychological enterprise. In fact, it will be tested by concrete answers to four specific questions: (a) How close is Iran to a nuclear weapons capability? (b) At what pace is it moving? (c) What balance of rewards and penalties will move Iran to abandon it? (d) What do we do if, despite our best efforts, diplomacy fails?

A critical issue in nonproliferation strategy will be the ability of the international community to place the fuel cycle for the material produced by the peaceful uses of nuclear energy under international control. Is the International Atomic Energy Agency (IAEA) capable of designing a system which places the enrichment and reprocessing under international control and in locations that do not threaten nuclear proliferation?

#### A NEW AGENDA

Arresting and then reversing the proliferation of nuclear weapons places a special responsibility on the established nuclear powers. They share no more urgent common interest than preventing the emergence of more nuclear-armed states. The persistence of unresolved regional conflicts makes nuclear weapons a powerful lure in many parts of the world to intimidate neighbors and serve as a deterrent to the great powers who might otherwise intervene in a regional conflict. Established nuclear powers should strive to make a nuclear capability less enticing by devoting their diplomacy to diffuse unresolved conflicts that today make a nuclear arsenal so attractive.

A new nuclear agenda requires coordinated efforts on several levels: first, the declaratory policy of the United States; second, the U.S.-Russian relationship; third, joint efforts with allies as well as other non-nuclear states relying on American deterrence; fourth, securing nuclear weapons and materials on a global basis; and, finally, reducing the role of nuclear weapons in the doctrines and operational planning of nuclear weapons states.

The Obama administration has already signaled that a global nuclear agenda will be a high priority in preparation for the Review Conference on the Nuclear Non-Proliferation Treaty scheduled for the spring of 2010. A number of measures

can be taken unilaterally or bilaterally with Russia to reduce the preemptive risk of certain alert measures and the deployment of tactical nuclear weapons.

Russian Relations: For over 30 years after the formation of the Western Alliance, the Russian threat was the motivating and unifying force in Western nuclear policy. Now that the Soviet Union has broken up, it is important to warn against the danger of basing policy on a self-fulfilling prophecy. Russia and the United States between them control around 90 percent of the world's nuclear weapons. They have it in their control to reduce the reliance on nuclear weapons in their bilateral relationship. They have already done so for 15 years on such issues as the Cooperative Threat Reduction Program. The immediate need is to start negotiations to extend the START I agreement, the sole document for the verification and monitoring of established ceilings on strategic weapons, which expires at the end of 2009. That should be the occasion to explore significant reductions from the 1,700 to 2,000 permitted under the Moscow Treaty of 2002. A general review of the strategic relationship should examine ways to enhance security at nuclear facilities in Russia and the United States.

A key issue has been missile defense—especially with respect to defenses deployed against threats from proliferating countries. The dialogue on this subject should be resumed at the point at which it was left by President George W. Bush and then-President Vladimir Putin in April 2008. The Russian proposal for a joint missile defense toward the Middle East, including radar sites in southern Russia, has always seemed to me a creative political and strategic answer to a common problem.

— Allies: The effort to develop a new nuclear agenda must involve our allies from its inception. U.S. and NATO policy are integrally linked. Key European allies are negotiating with Iran on the nuclear issue. America deploys tactical nuclear weapons in several NATO countries, and NATO's declaratory policy mirrors that of the United States. Britain and France—key NATO allies—have their own nuclear deterrent. A common adaptation to the emerging realities is needed, especially with respect to tactical nuclear weapons. Parallel discussions are needed with Japan, South Korea and Australia. Parallel consultations are imperative with China, India and Pakistan. It must be understood that the incentives for nuclear weapons on the subcontinent are more regional then those of the established nuclear powers and their threshold for using them considerably lower.

The complexity of these issues explains why my colleagues and I have chosen an incremental, step-by-step approach. We are not able to describe the characteristics of the final goal: how to determine the size of all stockpiles, how to eliminate them or to verify the result. Affirming the desirability of the goal of a world free of nuclear weapons, we have concentrated on the steps that are achievable and verifiable. My colleague, Sam Nunn, has described the effort as akin to climbing a mountain shrouded in clouds. We cannot describe its top or be certain that there may not be unforeseen and perhaps insurmountable obstacles on the way. But we are prepared to undertake the journey in the belief that the summit will never come into view unless we begin the ascent and deal with the proliferation issues immediately before us, including the Iranian and North Korean nuclear programs.

A closing word: A subject at first largely dominated by military experts has increasingly attracted the commitment of disarmament advocates. The dialogue between them has not always been as fruitful as it should be. Strategists are suspicious of negotiated attempts to limit the scope of weapons. Disarmament advocates occasionally seek to preempt the outcome of the debate by legislating restrictions that achieve their preferred result without reciprocity—on the theory that anything that limits nuclear arsenals, even unilaterally, is desirable in and of itself.

The two groups need to be brought together. So long as other countries build and improve their nuclear arsenals, deterrence of their use needs to be part of Western strategy. The efficiency of our weapons arsenals must be preserved. The program sketched here is not a program for unilateral disarmament. Both President Barack Obama and Senator John McCain, while endorsing this approach, also made it clear, in President Obama's words, that the United States cannot implement it alone.

The danger posed by nuclear weapons is unprecedented. They should not be integrated into strategy as simply another more efficient explosive. We thus return to our original challenge. Our age has stolen the fire from the gods; can we confine it to peaceful purposes before it consumes us?

Munich, February 7, 2009

### Start Worrying and Learn to Ditch the Bomb by Douglas Hurd, Malcolm Rifkind, David Owen and George Robertson

During the Cold War nuclear weapons had the perverse effect of making the world a relatively stable place. That is no longer the case. Instead, the world is at the brink of a new and dangerous phase—one that combines widespread proliferation with extremism and geopolitical tension.

Some of the terrorist organisations of today would have little hesitation in using weapons of mass destruction to further their own nihilistic agendas. Al-Qaeda and groups linked to it may be trying to obtain nuclear material to cause carnage on an unimaginable scale. Rogue or unstable states may assist, either willingly or unwillingly; the more nuclear material in circulation, the greater the risk that it falls into the wrong hands. And while governments, no matter how distasteful, are usually capable of being deterred, groups such as al-Qaeda, are not. Cold War calculations have been replaced by asymmetrical warfare and suicide missions.

There is a powerful case for a dramatic reduction in the stockpile of nuclear weapons. A new historic initiative is needed but it will only succeed by working collectively and through multilateral institutions. Over the past year an influential project has developed in the United States, led by Henry Kissinger, George Shultz, William Perry and Sam Nunn, all leading policymakers. They have published two articles in The Wall Street Journal describing a vision of a world free of nuclear weapons and articulating some of the steps that, cumulatively taken, could help to achieve that end. Senator John McCain has endorsed that analysis recently. Barack Obama is likely to be as sympathetic.

A comparable debate is now needed in this country and across Europe. Britain and France, both nuclear powers, are well placed to join in renewed multilateral efforts to reduce the number of nuclear weapons in existence. The American initiative does not call for unilateral disarmament; neither do we. Instead, progress can be made only by working alongside other nations towards a shared goal, using commonly agreed procedures and strategies.

The world's stockpiles of nuclear weapons are overwhelmingly controlled by two nations: the United States and Russia. While Washington is in possession of about 5,000 deployed warheads, Russia is reported to have well over 6,000,

making its stockpile the largest in the world. It is difficult to understand why either the American or Russian governments feel that they need such enormous numbers of nuclear weapons.

Hard-headed Americans, such as Dr Kissinger and Mr Shultz, have argued that dramatic reductions in the number of nuclear weapons in these arsenals could be made without risking America's security. It is indisputable that if serious progress is to be made it must begin with these two countries.

The US and Russia should ensure that the Strategic Arms Reduction Treaty of 1991 continues to provide the basis for co-operation in reducing the number of nuclear weapons. The treaty's provisions need to be extended. Agreement should be reached on the issue of missile defence. The US proposal to make Poland and the Czech Republic part of their missile defence shield has upset the Kremlin. It has been a divisive issue, but it need not be. Any missile threat to Europe or the United States would also be a threat to Russia. Furthermore, Russia and the West share a strong common interest in preventing proliferation.

Elsewhere, there are numerous stockpiles that lie unaccounted for. In the former Soviet Union alone, some claim that there is enough uranium and plutonium to make a further 40,000 be deployed in those countries that do not possess the necessary infrastructure or experience in dealing with stockpiles. These specialists should be deployed to assist both in the monitoring and accounting for of nuclear material and in the setting up of domestic controls to prevent security breaches. Transparency in these matters is vital and Britain can, and should, play a role in providing experts who can fulfill this important role.

The Non-Proliferation Treaty, for 40 years the foundation of counter-proliferation efforts, in need of an overhaul. The provisions on monitoring compliance need to be strengthened. The monitoring provisions of the International Atomic Energy Agency's Additional Protocol, which require a state to provide access to any location where nuclear material may be present, should be accepted by all the nations that have signed up to the NPT. These requirements, if implemented, would have the effect of strengthening the ability of the IAEA to provide assurances about both declared nuclear material and undeclared activities. At a time when a number of countries, including Iran and Syria, may be developing a nuclear weapons programme under the guise of civilian purposes, the ability to be clear about all aspects of any programme is crucial.

Bringing the Comprehensive Test Ban Treaty into effect would, similarly, represent strong progress in the battle to reduce the nuclear threat. The treaty would ban the testing of nuclear weapons, ensuring that the development of new generations of weapons ceases. However, it will only come into force once the remaining nine states who have not yet ratified it do so. Britain, working through NATO and the EU, must continue to encourage those remaining states that have not yet agreed to the Treaty—India, Pakistan, Egypt, China, Indonesia, North Korea, Israel, Iran and the United States—to ratify it.

A modern non-proliferation regime will require mechanisms to provide those nations wishing to develop a civilian nuclear capability with the assistance and co-operation of those states that possess advanced expertise and that are able to provide nuclear fuel, spent-fuel management assistance, enriched uranium and technical assistance. But, in return, proper verification procedures must be in place and access for the IAEA must not be impeded.

Achieving real progress in reducing the nuclear weapons threat will impose obligations on all nuclear powers not just the US and Russia. The UK has reduced its nuclear weapons capability significantly over the past 20 years. It disposed of its freefall and tactical nuclear weapons and has achieved a big reduction of the number of warheads used by the Trident system to the minimum believed to be compatible with the retention of a nuclear deterrent. If we are able to enter into a period of significant multilateral disarmament Britain, along with France and other existing nuclear powers, will need to consider what further contribution it might be able to make to help to achieve the common objective.

Substantial progress towards a dramatic reduction in the world's nuclear weapons is possible. The ultimate aspiration should be to have a world free of nuclear weapons. It will take time, but with political will and improvements in monitoring, the goal is achievable. We must act before it is too late, and we can begin by supporting the campaign in America for a non-nuclear weapons world.

Sir Malcolm Rifkind, Lord Hurd of Westwell and Lord Owen are all former foreign secretaries; Lord Robertson of Port Ellen is a former NATO secretary-general

Source: The Times, June 30, 2008

## For a Nuclear Weapon Free World by Massimo D'Alema, Gianfranco Fini, Giorgio La Malfa, Arturo Parisi, Francesco Calogero

Dear Editor, an article published in the *Wall Street Journal* entitled "A world without nuclear weapons," signed by George Schultz and Henry Kissinger, former Secretaries of State under Republican Presidents Reagan and Nixon, and by Bill Perry and Sam Nunn, the former Defense Secretary under President Clinton and the Democratic chairman of the Senate Defense Committee, in January 2007 opened up an extremely important debate for the future of humanity. In that article, the four American statesmen proposed the total elimination of nuclear weapons. Their argument, taken up again in a second article in January 2008, is that, unless the nuclear-weapon states—and there are now 8 of them—and especially the two main ones, United States and Russia, take the lead in launching a process aimed at their total elimination, it will become increasingly difficult to prevent other countries from acquiring them, with the risk that sooner or later these weapons may be used, and that would have catastrophic consequences for the world.

The importance of their article lies in the fact that, for the first time, the issue of complete elimination of nuclear weapons was being addressed, in the United States, by politicians who represent the mainstream of American strategic policy, from both parties, stressing the fact that this is an objective to be pursued in the interests of both the nation and the world. Several very important statements followed their Op-ed. The two U.S. presidential candidates have substantially agreed with this aim, as have the majority of those who, in the past, held positions of major responsibility in the USA in this field. In Russia, there was a positive reaction by Gorbachev and a more cautious, but not negative, reaction by the Government. In Britain, Gordon Brown spoke out favourably; the Defence Minister proposed hosting experts from the United States, Russia, England, France and China in the English nuclear labs, in order to establish the methodologies of verification for the elimination of nuclear weapons; recently, the *Times* carried an article by another bipartisan quartet, including three former Foreign Ministers and a former Secretary General of NATO, expressing agreement. In France, the Defence White Paper indicates that the objective to be pursued is the elimination of nuclear weapons. In Australia, the Government has established a new international Commission of Experts, whose task is to chart the road towards the elimination of all nuclear weapons. There have been innumerable positive reactions among non-governmental groups.

We think it is important that Italy, too, should give indications that go in that same direction. Our joint signatures, like those on the Op-eds in other countries, are evidence of the fact that in both main political camps, and in the scientific community, there is a shared common opinion on the importance of this issue and this aim. We wish to suggest the main steps along this road. The first is the entry into force of the Treaty banning all forms of nuclear testing, including underground tests, thus enshrining into a treaty the current moratorium. The second is to set in motion the stalled negotiations, within the Disarmament Conference in Geneva, on the FMCT, which prohibits the production of highly enriched uranium and of plutonium with the isotope composition necessary for the production of nuclear weapons. Here, too, there is a de facto moratorium, but without any formal agreement and without verification measures. The entry into force of these two Treaties would be appreciated by non-nuclear-weapon states and would prepare a more favourable ground for the periodical Conference of the Non-Proliferation Treaty planned for 2010, strengthening the world's nonproliferation regime, including the monitoring of the actual observance of commitments—in both letter and spirit—envisaged by the NPT.

We are fully aware that the road that will lead us to the elimination of nuclear weapons is long. It will call for certain political conditions. The first is an actual improvement in the relations between the nuclear superpowers, the United States and Russia, who still maintain—despite recent reductions—over nine-tenths of all nuclear weapons in the world. This would help the other nuclear weapon states recognized by the NPT—Britain, France and China—to do their part. It is also necessary to reduce the tensions in those parts of the world where the risk of nuclear weapons actually being used is highest, perhaps even by terrorist groups. We refer here to South-east Asia (India and Pakistan) and to the Israeli-Palestinian-Arab problem in the Middle East. In both these contexts, moves by the nuclear weapons states indicating that they are progressing towards a nuclear weapons free world would undoubtedly have a positive effect. Italy and Europe can and must do what they can to promote the path towards the total elimination of nuclear weapons. It is clear that this final result will be achieved only with the commitment of the major protagonists, United States and Russia, and of the other nuclear weapon states. But the spread of a new way of thinking—of a new "shared wisdom"—is a fundamental step along this path, and Italy too must contribute. It is necessary that on these fundamental issues for the very survival of humanity, despite our legitimate—indeed necessary—political differences, we join together in recognizing a superior, common interest.

Massimo D'Alema, former Prime Minister (1998–2000) and Foreign Minister (2006–2008); Gianfranco Fini, former Foreign Minister (2004–2006) and current President of Chamber of Deputies, Italian Parliament; Giorgio La Malfa, former Minister for European Affairs (2005–2006); Arturo Parisi, former Defence Minister (2006–2008); Francesco Calogero, Department of Physics, University of Rome, from 1989 to 1997 Secretary General of Pugwash (Nobel Peace Prize, 1995)

Source: Corriere della Sera, July 24, 2008

## Toward a Nuclear-free World: a German View by Helmut Schmidt, Richard von Weizsäcker, Egon Bahr and Hans-Dietrich Genscher

In 2007 Henry Kissinger, George Schultz, William Perry and Sam Nunn issued an appeal for a world free of nuclear weapons.

Their knowledge and experience as respected secretaries of state and defense and chairman of the Senate Armed Services Committee under Republican and Democrat administrations gave their concerns about the growing nuclear threat special weight.

Being realists, they knew that the abolition of all nuclear weapons could only be achieved gradually, and therefore they proposed urgent practical steps aimed at realizing this vision.

The appeal met with broad approval and prominent support in the United States; as far as we know no supporting decisions by European governments were issued.

Our responses takes into account Germany's expectations of the incoming Obama administration.

Our century's keyword is cooperation. No global problem—be it the issue of environment and climate protection, providing for the energy needs of a growing world population or tackling the financial crisis—can be resolved by confrontation or the use of military force. America bears a special and indispensable responsibility.

This is all the more true when the number of countries possessing nuclear weapons or acquiring the capability to produce such weapons—and thus the raw material for terrorism on a catastrophic scale—is increasing. At the same time, existing nuclear-weapon states are developing new nuclear arms.

We unreservedly support the call by Messrs. Kissinger, Schultz, Perry and Nunn for a turnaround on nuclear policy, and not only in their country. This applies in particular to the following proposals:

 The vision of a world free of the nuclear threat, as developed by Ronald Reagan and Mikhail Gorbachev in Reykjavik, must be rekindled.

- Negotiations aimed at drastically reducing the number of nuclear weapons must begin, initially between the United States and Russia, the countries with the largest number of warheads, in order to win over the other countries possessing such weapons.
- The Nuclear Non-Proliferation Treaty (NPT) must be greatly reinforced.
- America should ratify the Comprehensive Nuclear Test-Ban Treaty.
- All short-range nuclear weapons must be destroyed.

From Germany's point of view it must be added:

- The Strategic Arms Reduction Treaty (START) expires this year. Its extension is the most urgent item on the agenda for Washington and Moscow.
- It will be vital to the credibility of the 2010 NPT Review Conference that nuclear-weapon states finally keep their promise under the Nuclear Non-Proliferation Treaty to reduce their nuclear arsenals.
- The Anti-Ballistic Missile (ABM) Treaty must be restored. Outer space may only be used for peaceful purposes.

Cooperation in the interests of shared security enabled Presidents George H.W. Bush and Gorbachev to eliminate the mutual threat posed by medium-range nuclear missiles at the end of the Cold War and, in 1990, to undertake the largest-ever conventional disarmament effort. In more than 18 years since then, what we now call the Treaty on Conventional Armed Forces in Europe (CFE) has become the basis for Europe's stability. To this day it continues to address the interests of all concerned.

That stability has been strong and reliable enough to withstand German reunification and the end of the Warsaw Pact, to survive the implosion of the Soviet Union, to enable Baltic States to regain their sovereignty and to stand up to NATO and EU enlargement and the realities of the world at the beginning of 2009.

These arrangements would be jeopardized for the first time by the American desire to station missiles and a radar system on extra-territorial bases in Poland and the Czech Republic, on NATO's eastern border.

A return to the era of confrontation, leading to a new arms race and new tension, can be best avoided by an agreement on missile defenses that would also serve the interests of NATO and the EU—that is, a restored ABM Treaty. This

would also make it easier to adapt the CFE Treaty and pave the way for a greater dimension in arms controls.

Barack Obama called in Berlin for Cold War mindsets to be overcome. This ties in with the ideas discussed following the end of the Cold War under the motto, "security stretching from Vancouver to Vladivostok." Gorbachev was unable to realize his vision of a European house; Russian President Dmitri Medvedev has now called for a new pan-European security structure.

We recommend giving this opportunity careful consideration. Security and stability for the northern hemisphere can only be achieved through stable and reliable cooperation among America, Russia, Europe and China.

This cooperation would respect existing NATO, European Union and Organization for Security and Cooperation in Europe (OSCE) agreements and, if necessary, take its own institutional shape. Stable security in the northern hemisphere would certainly defuse global crises and make them easier to resolve.

Serious endeavors by the United States and Russia toward a nuclear-weapons-free world would make it easier to reach an agreement on adequate behavior with all other nuclear-weapon states, regardless whether they are permanent members of the UN Security Council. A spirit of cooperation could spread from the Middle East via Iran to East Asia.

Due to its policy of détente, backed up by its allies, Germany created the preconditions for its self-determination. Germany owes its peaceful reunification to the "2+4 Treaty" (signed in 1990 by East and West Germany and the four occupying powers: the U.S., Soviet Union, Britain and France) in which the principle of cooperation across former borders proved its worth.

The treaty enabled historic progress to be made on disarmament and arms control for Europe as a whole. One result was the NATO-Russia Council, which can only be fully effective in a spirit of cooperation. Relics from the age of confrontation are no longer adequate for our new century.

Partnership fits in badly with the still-active NATO and Russian doctrine of nuclear first use, even if neither side is being attacked with such arms. A general non-first-use treaty between the nuclear-weapon states would be an urgently-needed step.

Germany, which has renounced the use of nuclear, biological and chemical weapons, has every reason to call on the nuclear-weapon states not to use nuclear weapons against countries not possessing such arms. We are also of the opinion that all remaining U.S. nuclear warheads should be withdrawn from German territory.

Cooperation, our century's keyword, and secure stability in the northern hemisphere can become milestones on the route to a nuclear-weapon-free world.

This is our answer to the appeal issued by Messrs. Kissinger, Schultz, Perry and Nunn.

The writers all held high office in the Federal Republic of Germany: Helmut Schmidt, a Social Democrat, was chancellor 1974–1982; Richard von Weizsäcker, a Christian Democrat, was president 1984–1994; Egon Bahr, a minister in Social Democratic governments, was an architect of the policy of "ostpolitik"; Hans-Dietrich Genscher, of the Free Democrats, was foreign minister 1974–1992.

Source: The International Herald Tribune, January 9, 2009

## Multilateral Enrichment Sanctionary Project (MESP) Germany's proposal to independent fuel supply security for consumer countries and to minimize proliferation concerns

In response to the IAEA Director General's 2006 initiative on multilateral approaches for assurances of nuclear fuel supply, Germany has developed a proposal entitled "Multilateral Enrichment Sanctionary Project" (MESP).

The **main idea** is that countries interested in having a reliable and independent supply of nuclear fuel could decide that they want as a multilateral venture a **commercially-run enrichment plant**.

They would be willing to locate it in a **territory administered by the IAEA** and have the plant **managed by an international commercial company**. The incentive for these countries is that they get independent access to LEU for their nuclear power plants without having to develop the technology on their own The proposal is based on **two main pillars**:

- 1. Interested states would establish **one or several multilateral enrichment companies.** The company/companies would operate **under regular market conditions** as additional actors in the existing international enrichment market.
- 2. The enrichment company/companies would be **located in an area** administered by the IAEA.

#### The philosophy behind MESP

The aim is to establish an enrichment facility, which should not be subject to the control of a single national government. It has therefore to be put under the (exclusive) oversight of the IAEA. In order to secure its independence from one single national government, the facility has to be located in an "international" territory given to the IAEA by a host country. Like existing other enrichment companies the plant shall work on a commercial basis being an additional supplier of enrichment services. MESP will serve economic and non-proliferation goals: it is an incentive to participate in enrichment processes without the need to develop enrichment technology nationally and it contributes to reduce the spread of sensitive technology whilst enabling ownership and control of enrichment services for others than the already existing enrichers. It widens the geographical scope of

enrichment facilities and is not under the influence of one single national government.

#### The structure of MESP

MESP requires cooperation between the IAEA, a Host Country, and a Technology Provider. 3 entities have to be created:

- 1. The **Group of Interested States (GIS)**. The GIS will have to sign a framework agreement with the IAEA. The GIS members will have to agree among themselves about the foundation of a consortium under civil law—the MESP Enrichment Company.
- 2. The MESP Enrichment Company (MESP-EC). This commercial entity could be chartered under the legal system of any state chosen by the GIS. The MESP-EC might install subsidiaries or subcontractors, e.g. a Sales Company or Operating Company. Its enrichment plant would be located in the MES
- 3. The **Multilateral Enrichment Sanctuary (MES).** This is a territory administered by the IAEA, where the IAEA has all necessary rights and immunities to enable the construction and unhampered operation of an enrichment plant by a commercial company.

#### The role of the GIS

The GIS will negotiate the framework of operations between the MESP-EC and the IAEA and will encourage their national nuclear industries to create and participate in the MESP-EC. The GIS will most likely be formed by countries with an interest to build new nuclear power plants and would prefer to rely on the fuel supply of different sources than existing suppliers to the international market. Other members might be countries which would like to give their industry an opportunity to invest in enrichment.

The GIS shall be open to invite other countries to join the GIS at a later stage.

It will, however, be excluded that companies from outside the GIS might invest (directly) in the MESP-EC.

It would be against the spirit and intentions of MESP, if one single government or private enterprise controlled a majority of MESP-EC shares.

#### The role of the (commercial) MESP-Enrichment Company

The MESP-Enrichment Company will be the operator and owner of the enrichment facility and take all commercial decisions. The MESP-EC will have all responsibilities to ensure the safe and secure functioning of the plant.

#### The role of the IAEA

The IAEA will administer the MES and control the operating enrichment plant.

The IAEA acts especially as the nuclear regulator after the commissioning of the plant. The IAEA will have no influence on the commercial decisions of the MESP-EC, however it should be considered that the IAEA can veto contracts on enrichment services in case the potential client does not fulfill the criteria set by the Board of Governors for the release of material

#### The role of the Host Country

The Host Country shall hand over a part of its territory—the sanctuary—and certain sovereignty rights to the IAEA. It might be involved in the licensing processes. It will not have a say in the commercial operations of the MESP-Enrichment Company. The host country of the MES has to be acceptable to the international community and the site should contribute towards geographical diversification of enrichment facilities, i.e. it should not be in one of the current enriching states. The site needs reliable infrastructure and good accessibility. The Host Country should be politically stable and verifiable uphold the Safeguards Agreements and the NPT.

If not already in place, the Host Country will have to establish appropriate legislation for licensing a nuclear facility, establish the necessary regulatory authority and sign all appropriate international conventions and agreements relevant for safety, security and questions of liability of a nuclear installation. Criteria will have to be decided upon by the Board of Governors of the IAEA.

#### The financing of MESP

MESP will be based on a commercially operating enrichment plant, which will generate income. The construction of the plant has to be financed by those companies nominated by the GIS—Governments. It will be their decision to raise money in the international financial markets. The IAEA will agree with the GIS

that the MESP-EC has to be financially sound. It is not intended that the plant and its operation will be subsidised.

The MESP-EC will have to pay fees to the IAEA to compensate for the additional work associated with the administration.

Vienna, September 22, 2008

Source: IAEA, Information Circular 735, September 25, 2008

# International Commission On Nuclear Non-Proliferation and Disarmament

(Excerpts)

#### Aims

Recognising the need to clearly add value, given numerous major commission and panel reports (including the Canberra Commission 1996, Tokyo Forum 1999, Blix Commission 2006 and IAEA Commission 2008), much other ongoing high-level research, and a number of current government-sponsored and second-track initiatives, the aims of the Commission should be:

- to reinvigorate at a high political level the global debate on the need for nuclear nonproliferation and disarmament, in the context both of the 2010 NPT Review Conference and beyond;
- to restate the case for nuclear non-proliferation and disarmament in terms that are not only technically sound but compelling for political decision makers and those who influence them;
- to emphasise the interconnectedness of the issues, and challenges, in relation to nonproliferation, disarmament and the peaceful uses of nuclear energy, and to give equal weight to each area;
- to engage all relevant global actors, including both parties and non-parties to the NPT and the civil nuclear industry, in identifying the most effective policy approaches; and
- to make practical and realistic recommendations, in the context of both the NPT and other necessary regimes, for achieving nuclear non-proliferation and disarmament.

#### **Key Underlying Issues**

#### (1) Challenges in the Nuclear Environment

The Commission will carry out its work against the background of a number of major developments of concern in the nuclear landscape in the last decade or so:

 the emergence of India and Pakistan since 1998 as nuclear-armed states outside the NPT, joining Israel (notwithstanding its continued policy of strategic ambiguity);

- North Korea's purported withdrawal from the NPT, nuclear test in 2006, and uncertain commitment to denuclearisation;
- Iran's development within the NPT of proliferation sensitive nuclear activities, including uranium enrichment and heavy water technologies;
- accelerated concern post 9/11 about the risk of nuclear or radiological terrorism;
- the impact of the internet and black market activity in substantially increasing knowledge of, and access to, sensitive nuclear technology;
- the major renewal of interest in nuclear energy for electricity generation generated by concern about climate change and energy security with accompanying additional proliferation risks if the 'nuclear renaissance' is mismanaged, and the need, accordingly, for renewed attention the 3S issues (safeguards, safety and security);
- increasing post-Cold War discontent with NPT nuclear -weapon states' performance in meeting their nuclear disarmament obligations.

# (2) Continuing Reality of Drivers of Nuclear Weapons Acquisition and Retention

The Commission will need to recognise, and bring a realistic and inclusive approach to, the many factors continuing to drive nuclear weapons acquisition and retention, including:

- the need of nuclear-armed states and their allies for reassurance that nuclear disarmament, in all its phases, will not diminish their security (including in areas like North East Asia, where regional tensions have not been fully resolved and US extended deterrence is seen as a stabilising factor);
- the long-standing differences that have fuelled proliferation in South Asia, the Middle East and North-East Asia, with all parties involved having security needs that have to be identified, acknowledged and addressed;
- the continued attractiveness of nuclear weapons as tools of geopolitical prestige and for domestic political advantage; and
- massive imbalances in offensive conventional military capabilities.

#### (3) Need to Change the Terms of the Current Debate

The Commission—through the credibility of its membership, the quality of its arguments and the effectiveness of its advocacy—should aim to:

- help change the formulaic and unproductive nature of the current international nuclear debate between nuclear-weapon states and non-nuclear-weapon states, developed and developing country NPT parties, and NPT parties and non-parties;
- help overcome the mindset that nuclear weapons have become irretrievably
  entrenched in the architecture of global security—by developing a clear
  understanding that not only can more initial progress be made on disarmament,
  but that there is in fact a road to zero—albeit one that will be very hard to
  navigate in its final stages—and that even if nuclear weapons cannot be
  uninvented, they can be outlawed;
- help end the current stand-off among NPT parties as to where the primary emphasis should be placed—by promoting understanding of the close inter-relationships between non-proliferation, disarmament and peaceful uses of nuclear energy, and acceptance that progress is required across all three pillars of the NPT, with movement in each part likely to encourage progress in the others; and
- help bridge the present gulf between NPT parties and non-parties, by encouraging a willingness to find new ways of achieving universally applicable disciplines and constraints, that strengthen and broaden the application of the NPT's nonproliferation norms and create a new momentum for disarmament by all nuclear armed states.

**(...)** 

Gareth Evans Yoriko Kawaguchi Co-chairs 27 August 2008

# International Conference ARMS CONTROL REVISITED: NON-PROLIFERATION AND DENUCLEARIZATION

Warsaw, 20-21 November, 2008

#### **AGENDA**

#### Thursday, 20th November

#### 14.45–15.30 **Opening of the Conference**

Introductory remarks:

- **Prof. Adam Daniel Rotfeld,** Chairman of the UN Secretary General's Advisory Board on Disarmament Matters
- **Dr. Bates Gill,** Director of the Stockholm International Peace Research Institute (SIPRI)
- H.E. Sérgio de Queiroz Duarte, High Representative for Disarmament, United Nations

15.30–18.00 Session 1: New Actors—New Risks
Moderator: Prof. Adam Daniel Rotfeld

#### Introductory speakers:

- H.E. Andrzej Olechowski (Former Minister of Foreign Affairs, Poland)
- **Prof. George Perkovich** (Carnegie Endowment for International Peace, United States)
- **Dr. Vladimir Yermakov** (Director for Strategic Capabilities Policy, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs, Russia)

#### Discussants:

- H.E. Hu Xiaodi (former Ambassador for Disarmament Affairs, China)
- **H.E. Jeremy Issacharoff** (Deputy Chief of Mission, Embassy of Israel in the U.S., member of the UN Secretary General's Advisory Board on Disarmament Matters)
- H.E. Dr. Mahmoud Karem (Ambassador of Egypt to Belgium, Luxembourg, European Union and NATO, member of the UN Secretary General's Advisory Board on Disarmament Matters)

• Lukasz Kulesa (Polish Institute of International Affairs)

Issues under discussion:

- New security environment: new players—the emergence of new powers and non-state actors (state's disintegration, failed and weak states)
- The new status and role of two global nuclear powers—Russia and the United States—in the arms control process
- India, Pakistan and Israel—military challenge for the political non-proliferation process
- Uncertainty and unpredictability as the elements of the new strategic context
- Terrorist organizations and the weapons of mass destruction: how to mitigate the threat?

#### Denuclearization in Practice: the Experience of Belarus and Ukraine

- **Stanislau Shushkevich** (former Head of the Belarusian State—Chairman of the Supreme Soviet from 1991 to 1994)
- H.E. Borys Tarasyuk (former Minister of Foreign Affairs, Ukraine)

Open discussion

20.00 **Dinner** 

Keynote speech: **Prof. Steven Miller** (Harvard University) *The New Opening in Arms Control: Perspectives after the US Elections* 

#### Friday, 21st November

9.30 - 12.00

Session 2: New Weapons—New Threats

Moderator: Dr. Slawomir Dębski, director of
the Polish Institute of International Affairs

#### Introductory speakers:

- **Prof. Thérèse Delpech** (Director of Strategic Affairs at the French Atomic Energy Commission)
- **Prof. Sergey Rogov** (Director of the Institute of United States of America and Canada, Russian Academy of Sciences)

#### Discussants:

- Air Commodore Khalid Banuri (Director, Arms Control and Disarmament Affairs, Strategic Plans Division, Joint Staff Headquarters, Pakistan)
- **H.E. Jacek Bylica** (Head of the NATO Weapons of Mass Destruction Centre)
- **H.E. Ho-Jin Lee** (Ambassador of the Republic of Korea to Finland, member of the UN Secretary General's Advisory Board on Disarmament Matters)
- H.E. Adam Kobieracki (Director of the Department of Security Policy, Ministry of Foreign Affairs, Poland)
- H.E. Carlo Trezza (Special Envoy of the Italian Minister of Foreign Affairs for Disarmament, Arms Control and Non Proliferation, member of the UN Secretary General's Advisory Board on Disarmament Matters)
- H.E. Witold Waszczykowski (Deputy Head, National Security Bureau, Poland)

#### Issues under discussion:

- New generation of nuclear weapons
- An urgent need for a dramatic reduction of nuclear weapon stockpiles
- Bio-security and the threat of bio-terror; ballistic and cruise missiles; missile defense
- Space-based weapons
- New instruments: Global Threat Reduction program, PSI, Global Initiative to Combat Nuclear Terrorism
- How should compliance be monitored under new conditions

#### Open discussion

13.00-15.30

Session 3: New Initiatives—New Instruments
Moderator: Dr. Bates Gill, Director of the
Stockholm International Peace Research Institute
(SIPRI)

#### Introductory speakers:

- **Prof. James E. Goodby** (Hoover Institution, Stanford University, member of the Bipartisan Security Group, United States)
- **H.E. Peter Gottwald** (Commissioner of the Federal Government for Arms Control and Disarmament, Germany)
- **H.E. Valerie Grey** (Deputy Permanent Representative, Australian Permanent Mission to the Conference on Disarmament, Geneva)

#### Discussants:

- **H.E. Leslie M. Gumbi** (Permanent Representative of South Africa to the UN and other international organizations in Vienna)
- **H.E. Andrzej Towpik** (Permanent Representative of Poland to the United Nations, New York)

#### Issues under discussion

- · What has to be done to motivate states to engage in arms control
- New Initiatives: the Nuclear Threat Initiative (The "Hoover Plan" for Nuclear Disarmament), Australia-Japan International Commission on Nuclear Nonproliferation and Disarmament
- The problem of 'spoilers': inclusive vs. confrontational approach
- How to react to cases of non-compliance?
- New type of confidence-building measures and verification
- How to adjust old institutions to new needs?
- What has to be done: new politically binding instruments, new institutions for new problems (institutional reform)

#### Open discussion

15.30–15.45 Coffee break

15.45–17.00 Roundtable discussion

Conclusions by: Dr. Ian Anthony (SIPRI)

#### **List of Participants**

#### Dr. Ian ANTHONY (UK)

Senior Fellow and Leader of the Non-proliferation and Export Control Project at SIPRI, Stockholm

#### Air Commodore Khalid BANURI (Pakistan)

Director, Arms Control & Disarmament Affairs (ACDA) at Pakistan's Strategic Plans Division (SPD), Islamabad

#### **Ambassador Jacek BYLICA (NATO)**

Head of Weapons of Mass Destruction Centre (WMDC) at NATO International Secretariat in Brussels

#### Mr. Tadeusz CHOMICKI (Poland)

Director of Department of Asia and Pacific, Ministry of Foreign Affairs, Warsaw

#### Dr. Sławomir DEBSKI (Poland)

Director of the Polish Institute of International Affairs (PISM), Warsaw

#### Ms. Thérèse DELPECH (France)

Director of Strategic Affairs at the French Atomic Energy Commission, Paris

#### Ambassador Sérgio de Queiroz DUARTE (United Nations)

High Representative for Disarmament, United Nations, New York

#### Dr. Bates GILL (USA)

Director of the Stockholm International Peace Research Institute, (SIPRI), Stockholm

#### Prof. James E. GOODBY (USA)

Research Fellow at the Hoover Institution, Stanford University

#### **Ambassador Peter GOTTWALD (Germany)**

Commissioner of the Federal Government for Arms Control and Disarmament, Berlin

#### Ms. Valerie GREY (Australia)

Deputy Permanent Representative to the Australian Permanent Mission to the Conference on Disarmament, Geneva

#### Ambassador Leslie M. GUMBI (South Africa)

South Africa's Ambassador/Permanent Representative to the United Nations Office and International Organizations in Vienna and South Africa's Ambassador to Austria, Slovenia and Slovakia, Vienna

#### Prof. Dr. Erwin HÄCKEL (Germany)

Professor of political science at the University of Konstanz, chairman of the task force on non-proliferation of weapons of mass destruction at the German Council on Foreign Relations (DGAP), Berlin

#### Ambassador HU Xiaodi (China)

Former Ambassador for Disarmament Affairs of China; former member of the UN Advisory Board on Disarmament Matters, Beijing

#### Mr. Jeremy ISSACHAROFF (Israel)

Deputy Chief of Mission, Embassy of Israel in the U.S., member of the UN Secretary General's Advisory Board on Disarmament Matters

#### Dr. Mahmoud KAREM (Egypt)

Ambassador of the Arab Republic of Egypt to the Kingdom of Belgium and the Grand-Duchy of Luxembourg, member of the UN Secretary General's Advisory Board on Disarmament Matters, Brussels

#### **Ambassador Adam KOBIERACKI (Poland)**

Director of the Department of Security Policy, Ministry of Foreign Affairs, Warsaw

#### Mr. Łukasz KULESA (Poland)

Head of the Research Office at the Polish Institute of International Affairs (PISM), Warsaw

#### Prof. Roman KUŹNIAR (Poland)

Director of the Strategic Studies Centre, Institute of International Relations at Warsaw University

#### Dr. Zdzisław LACHOWSKI (Poland)

Senior Fellow of the SIPRI Euro-Atlantic Security Programme, Stockholm

#### Ambassador Ho-Jin LEE (Republic of Korea)

Ambassador of the Republic of Korea to Finland, member of the UN Secretary-General's Advisory Board on Disarmament Matters, Helsinki

#### Prof. Steven E. MILLER (USA)

Director of the International Security Program at John F. Kennedy School of Government, Harvard University

#### Dr. Jerzy M. NOWAK (Poland)

President of the Euro-Atlantic Association, former Polish Ambassador to OSCE, Spain and Head of the Polish Mission to NATO, Warsaw

#### Dr. Andrzej OLECHOWSKI (Poland)

Former Minister of Foreign Affairs, Warsaw

#### Dr. Krzysztof PATUREJ (OPCW)

Director of the Office of Special Projects in the Organisation for the Prohibition of Chemical Weapons, The Hague

#### **Prof. George PERKOVICH (USA)**

Vice-president for studies and Director of the Nonproliferation Program at the Carnegie Endowment for International Peace, Washington D.C.

#### Mr. Grzegorz POZNAŃSKI (Poland)

Director of the Bureau of Diplomatic Security, Ministry of Foreign Affairs, Warsaw

#### Dr. Sergey ROGOV (Russia)

Director of the Institute of United States of America and Canada, Russian Academy of Sciences, Moscow

#### Prof. Dr. Adam Daniel Rotfeld (Poland)

Former Minister of Foreign Affairs of Poland, Chairman of the UN Secretary General's Advisory Board on Disarmament Matters, Warsaw

#### Mr. Jacek SAWICZ (Poland)

Counsellor at the Permanent Mission of the Republic of Poland to the United Nations Office and other International Organizations, Geneva

#### **Prof. Stanislau SHUSHKEVICH (Belarus)**

Former Head of the Belarusian State – Chairman of the Supreme Soviet of Belarus, Minsk

#### Mr. Bernard SITT (France)

Director of Center of International Security and Arms Control Studies, Paris

#### Mr. Marek SZCZYGIEŁ (Poland)

Deputy Director of the Department of the Security Policy, Ministry of Foreign Affairs, Warsaw

#### Mr. Borys TARASYUK (Ukraine)

Former Minister of Foreign Affairs, Member of Parliament and Chairman of the Verkhovna Rada (Parliament) Committee on European Integration, Kiev

#### Ambassador Andrzej TOWPIK (Poland)

Permanent Representative of Poland to the United Nations, New York

#### **Ambassador Carlo TREZZA (Italy)**

Member of the UN Secretary General's Advisory Board on Disarmament Affairs, Diplomatic Advisor at the Center for High Defense Studies, Ministry of Defence, Rome

#### Dr. Witold WASZCZYKOWSKI (Poland)

Deputy Head of the National Security Bureau, Warsaw

#### Dr. Vladimir YERMAKOV (Russia)

Director for Strategic Capabilities Policy, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs, Moscow

#### Mr. Jerzy ZALESKI (United Nations)

Senior Political Affairs Officer, UN Department for Disarmament Affairs, Geneva

#### Mr. Łukasz ZIELIŃSKI (Poland)

Head of Non-proliferation Division, Department for Security Policy of the Ministry of Foreign Affairs, Warsaw