International Atomic Energy Agency

Statement on behalf of the IAEA Secretariat at the General Debate

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Delivered by

Vilmos Cserveny
Director
Office of External Relations and Policy Coordination

Four decades have elapsed since the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) was opened for signature in July 1968. Since then, the NPT has become the world's most adhered to multilateral nuclear non-proliferation, arms control and disarmament treaty. The International Atomic Energy Agency (IAEA), in which the States Party to the NPT and all nuclear-weapon-free zone treaties have vested the requisite verification authority, passed its fifty-year mark in 2007. Together, these treaties and the IAEA are the most important components of the nuclear non-proliferation regime and serve as vital tools for the safe and secure use of nuclear energy for peaceful purposes.

The NPT consists of three equally important pillars — nuclear non-proliferation; peaceful nuclear cooperation; and nuclear disarmament — and the premise that progress in any one pillar strengthens the integrity of the whole.

The activities of the IAEA are also based on three pillars. Through its work on nuclear verification, nuclear safety and security, and nuclear technology, the IAEA continues to play a key role as a catalyst for sustainable development and as a cornerstone for nuclear safety and security and verification of nuclear non-proliferation.

The Agency's statement today focuses on the activities of the IAEA, as relevant to the implementation of the Treaty, since the conclusion of the first session of the PrepCom in May 2007.

Verification of Nuclear Non-Proliferation Commitments

The 2000 NPT Review Conference Final Document recognized that IAEA safeguards are a fundamental pillar of the nuclear non-proliferation regime, play an indispensable role in the implementation of the Treaty and help to create an environment conducive to nuclear confidence, cooperation and disarmament. The NPT Parties also reaffirmed that the IAEA is the sole competent authority responsible for verifying and assuring, in accordance with its Statute and the IAEA's safeguards system, compliance with States' obligations under Article III.l of the Treaty. The 2000 NPT Conference also expressed its conviction that nothing should be done to undermine the authority of the IAEA in this regard. It urged the IAEA to continue implementing strengthened safeguards measures as broadly as possible; and called upon all States Party to give their full and continuing support to the Agency's safeguards system.

Comprehensive Safeguards Agreements

Since this time last year, a comprehensive safeguards agreement (CSA) entered in force for one State. There still remain, therefore, 30 NPT States without the required safeguards agreements in force. Out of these 30 States, 10 have already signed CSAs (yet to be brought into force), six have a CSA approved by the Board (still to be signed), and 14 States have still to initiate negotiations with the Agency. The IAEA once again urges these 30 States Parties that have still to conclude and bring into force their NPT safeguards agreements to do so without further delay; and recommends that every effort be made to accomplish this objective prior to the opening of the 2010 NPT Review Conference. On 5 and 6 May 2008 here in Geneva, the IAEA delegation will provide briefings about the conclusion of such agreements as well as the Agency's strengthened safeguards system.

Current Safeguards System

Under NPT safeguards agreements, the Agency has the right and the obligation to ensure that all nuclear material in all peaceful nuclear activities of the State is subject to safeguards. The Agency's obligation is thus not limited to nuclear material actually declared by a State; it also extends to that which is required to be declared. However, given the limitations of the verification tools provided to the Agency by CSAs, in practice it is only in respect of States which have both a CSA and an additional protocol in force that the Agency will be able to provide credible assurance not only of the non-diversion of declared nuclear material, but also of the absence of undeclared nuclear material and activities. As the additional protocol is a crucially important tool for effective verification by the Agency of compliance with non-proliferation obligations, adherence by all States is essential. Since May 2007, seven States have concluded additional protocols and nine have brought additional protocols into force — bringing the total to 125 States with additional protocols concluded and 87 with additional protocols in force. Among these, four nuclear-weapon States have brought their additional protocols into force.

Concluding additional protocols and bringing them into force at the earliest possible date will enable the Agency to discharge its safeguards responsibilities in a more comprehensive manner. In order to facilitate this process, since the 2007 PrepCom, the Agency has organized outreach events on strengthened safeguards in Gaborone, Geneva, Hanoi, New York, Sydney and Vienna.

Another major focus of such outreach was the amendment of small quantities protocols (SQPs) to CSAs with a view to facilitating the implementation of the IAEA Board of Governors' September 2005 decisions on SQPs which would allow for the application of more safeguards measures in States with limited nuclear activities. As of April 2008, there were 99 States with SQPs to their safeguards agreements. Of these, 25 had accepted the revised SQP text either by amending their existing SQP or by signing a CSA with an SQP based on the new standardized text. Moreover, two States have so far rescinded their non-operational SQPs.

Financing of the safeguards system

Effective implementation of safeguards is also dependent on the availability of the necessary financial resources. The Agency currently safeguards nearly 950 facilities in more than 70 countries on a regular safeguards budget of approximately 110 million euros per year. It is clear that if the Agency is to continue to provide credible verification assurances, and strengthen its safeguards system, the complexity of its verification mission must be matched by the required resources.

Safeguards Implementation

The Secretariat's findings and conclusions, which are based upon an evaluation of all the information available to the IAEA in exercising its rights and fulfilling its obligations, are published annually in the Safeguards Implementation Report. The report for 2007 will cover 82 States that have both CSAs and additional protocols in force; 72 States with CSAs in force, but without additional protocols; four out of five NPT nuclear-weapon-States with voluntary offer safeguards agreements; and three States that have concluded item-specific safeguards agreements.

One of the verification issues which has attracted attention of the States parties to the NPT was the implementation of the NPT safeguards agreement with Iran. The IAEA has continued to verify the non-diversion of declared nuclear material. However, it has not been in a position to provide credible assurance regarding the absence of undeclared nuclear material and activities in Iran. The Agency has been able to clarify a number of the outstanding safeguards issues relating to Iran's past nuclear activities. The Agency expects Iran to continue to build confidence about the scope and nature of its current nuclear programme by providing clarifications on the remaining outstanding issues and full implementation of the additional protocol. Contrary to the decisions of the UN Security Council, Iran has not suspended its uranium enrichment related activities and continued its heavy water related projects.

As for the Democratic People's Republic of Korea (DPRK), the Agency, pursuant to the ad-hoc verification arrangements emanating from the request of the States in the six -party talks, continues to verify that the DPRK's nuclear installations at the Yongbyon nuclear facility as well as the 200 MW(e) Nuclear Power Plant in Taechon remain shut down.

Advisory Committee of the Board within the Framework of the IAEA Statute

A Committee established by the IAEA Board of Governors to consider ways and means to strengthen the effectiveness and efficiency of the safeguards system concluded its work in and presented its report to the Board in June 2007. The report noted that constructive discussion and useful exchange of views among Member States took place throughout the work of the Committee. The documentation and clarifications provided by the Secretariat were considered particularly helpful in increasing the understanding and awareness of the Member States of important and current issues related to strengthening safeguards.

Nuclear Safety and Nuclear Security

The 2000 Final Document also underlined the importance of enhanced nuclear safety, spent fuel and radioactive waste management, and safe transportation of radioactive materials and commended the Agency's activities and plans in these areas. The Agency's activities in the field of nuclear safety are organized in three broad programmes: nuclear installation safety; nuclear safety coordination; and radiation and waste safety.

Safety and security are primarily national responsibilities but failure can have far reaching consequences beyond national borders. In 2007, the nuclear industry continued to demonstrate a high level of safety and security worldwide. There was a strong consensus on the need for maintaining continuing vigilance in both areas. With renewed interest in nuclear power generation, comparable attention and commitment must be given to an equally ambitious enhancement of global safety and security, including adequate planning for sustainable safety infrastructure.

The threat of nuclear terrorism continues as a matter of concern to the international community. In response, an international nuclear security framework has emerged through the development and approval of a series of legally binding and non-binding international instruments. However, progress on entry into force of these instruments, particularly the Amendment to the Convention on the Physical Protection of Nuclear Material, remains slow. New impetus to this process is expected by the progress achieved by bringing into force the International Convention for the Suppression of Acts of Nuclear Terrorism in 2007.

Worldwide commitment to the international safety and security instruments, application of IAEA safety standards, sound national safety and security infrastructures including an independent and technically competent regulatory body and a vigorous knowledge sharing will ensure that the existing global nuclear safety and security regime remains strong. The IAEA continued to support national and international efforts for the safe and secure use of nuclear technology. The Agency's safety review services continued to play an important part in evaluating the effectiveness of the Agency's safety standards.

Ensuring the Nuclear Security of Major Public Events

The IAEA continued to assist States in ensuring nuclear security at major public events, and during the year established projects with the governments of Brazil and China in preparation for the 2007 Pan American Games and the 2008 Olympic Games, respectively. The IAEA's cooperation included supplying radiation detection equipment, providing up-to-date information, and conducting national workshops and training programmes.

Illicit Nuclear Trafficking

In November 2007, the IAEA's International Conference on Illicit Nuclear Trafficking held in the United Kingdom, reviewed the global experience in combating illicit trafficking and considered international measures on prevention, detection and response. The conference concluded that illicit nuclear trafficking remained an international concern, and that efforts must continue to establish effective systems, technical and administrative, to control movement of nuclear and other radioactive materials, and to prevent and detect their uncontrolled and unauthorized movement. Established in 1995, the IAEA Illicit Trafficking Database programme now benefits from the voluntary participation of nearly 100 States. As of April 2008, ITDB Participating States had reported or otherwise confirmed 1,416 incidents including 322 incidents involving the seizure of nuclear material or radioactive sources. Of particular concern were those incidents involving the unauthorized possession of HEU and plutonium; since 1993, 15 such incidents were reported to the ITDB. In 395 of the confirmed cases, the materials were reported stolen or lost. It is noteworthy that the majority of the materials recovered have not been reported as stolen or misplaced by States, and conversely the majority of materials reported by States as stolen/misplaced have not been recovered.

4th Review Meeting of the Convention on Nuclear Safety

Nuclear safety officials from all the world's nuclear power countries convened in Vienna on 14 April to review the state of nuclear safety worldwide. The Convention on Nuclear Safety (CNS) aims to promote nuclear safety, safety culture, safety management and knowledge sharing among current and future nuclear power States. As of April 2008, there are 65 signatories to the Convention and 61 Contracting Parties. Notably, all countries with operating nuclear power plants are now parties to the Convention. The review meeting is also considering two important issues: the number of new nuclear power programmes under consideration around the world and how to bring new momentum and focus to the peer review process on nuclear safety.

Technical Cooperation

The 2000 Final Document called for an expanded use of the Agency's technical co-operation programme. For more than four decades, this programme develops human capacity and supports the building of infrastructure to ensure the use of nuclear technology in a safe, secure and peaceful manner. Technical cooperation projects continued to focus on areas identified by Member States as being of key importance to their development needs. Since your last meeting in 2007, human health was the largest single area of the core programme, supporting the use of nuclear techniques for the prevention, diagnosis and treatment of disease, as well as for the improvement of nutrition, particularly of children. In Latin America, for example, 370 centres deliver external radiotherapy, but most lack sufficient qualified medical physicists. Last year TC projects provided a range of training and equipment throughout the region, strengthening local capacities and improving national health care. The Agency's Programme of Action for Cancer Therapy (PACT) has secured pledges, grants and donations amounting to over $3 million for the PACT Model Demonstration Sites, now operational in Albania, Nicaragua, Sri Lanka, the United Republic of Tanzania, Vietnam and Yemen, as well as other activities.

The second largest area was food and agriculture, where the objectives were to control insect pests and to improve livestock and crop production, making it more environmentally sustainable. A regional TC project in Africa, completed last year, has helped 23 African countries to address hunger. The project helped countries to develop a range of drought tolerant crops.

The overall resources of the TC programme reached a total of around $100 million in 2007, for technical cooperation projects in 122 countries. One hundred and sixty training courses were arranged for 2287 participants, 3546 expert missions were organized, 1661 fellows and scientific visitors were trained, and $47 million worth of equipment and supplies were provided.

Nuclear Technology

The Agency's activities in nuclear technology range from the generation of electricity in nuclear power plants, to the eradication of pests through irradiation, the use of isotopic techniques in nutrition and water development programmes and food irradiation.

In the energy sector, the linkage between development and security is particularly evident. Energy security is a major concern for both developed and developing countries. If current consumption trends hold, analysts predict a 50% increase in global energy consumption by 2030 — and 70% of that increase is expected to come from developing countries. This growth in demand is understandable when we consider that nearly every aspect of development — from increasing food production to improving health care — requires reliable access to modern energy services.

The current global energy imbalance cannot continue indefinitely. Roughly 1.6 billion people live without access to electricity, and 2.4 billion rely on traditional biomass because they have no access to modern fuels. In some African countries, for example, the per capita electricity consumption is around 50 kilowatt-hours per year. That translates to an average availability of 6 watts — less than what is needed to power a PC — for each person. To put this in perspective: the developed countries that make up the Organisation for Economic

Cooperation and Development (OECD), on average, consume electricity at a rate per capita of 8600 kilowatt-hours per year - roughly 170 times higher.

There are currently 439 nuclear power reactors in operation in 30 countries. These reactors supply just over 15% of the world's electricity. To date, the use of nuclear power has been concentrated in industrialized countries. In terms of new construction, however, the pattern is different; 17 of the 35 reactors now being built are in developing countries, and most of the recent expansion has been centred in Asia and Eastern Europe. But it is not only these two regions where we are witnessing a resurgence of interest in nuclear power. A number of countries e.g., in the Middle East are seriously considering the introduction of nuclear power programmes. And a large number of countries with existing nuclear programmes are working to expand their nuclear generation capacity either by new reactors or by extending the lifetime of existing ones.

What does the future hold for nuclear power? It seems clear that, for a number of the factors already referred to above, nuclear power will continue to be part of the global energy mix. But the degree to which we witness what some are already calling a "nuclear renaissance" will depend on a number of specific issues. It is vital that the expected increase in the use of nuclear power is managed properly, taking into account all economic, safety, security and non-proliferation requirements.

If expectations of a surge in nuclear power materialise, the question arises - where will the nuclear fuel come from? Will it remain in the hands of the few existing suppliers? There are proposals for the creation new mechanisms that will assure supplies of nuclear fuel and reactors to countries which want them, while strengthening non-proliferation through better controls over the sensitive parts of the nuclear fuel cycle: uranium enrichment and plutonium separation.

It is, of course, for States to decide how to respond to the challenges posed by the growth in the use of nuclear energy, especially the questions associated with the fuel cycle. So far, 12 proposals have been made to the IAEA Secretariat on different ways of assuring supply of nuclear fuel. The proposals cover a broad spectrum, from establishing an IAEA-controlled last resort reserve of low enriched uranium to providing backup assurance of supply and setting up international uranium enrichment centres.

As the IAEA Director General said at a recent international conference on fuel assurances held in Berlin, "in the long term, a new nuclear framework would be helped by truly innovative reactor and fuel cycle technology which is safer than what we have at present and proliferation-resistant — in other words, designed in a way that makes it more difficult or impossible to misuse for weapon purposes. It would also require the application of a robust IAEA safeguards system, in which a comprehensive safeguards agreement and an additional protocol are the universal standard. And we will need equally stringent international nuclear safety and security regimes."

Conclusion

For fifty years the IAEA has worked to bring the benefits of nuclear technology to humankind, while minimizing its risks. It is well known that during the past decade the cornerstone of the non-proliferation regime — the NPT — has been beset by concerns about compliance with the provisions of the Treaty and growing tension between its non-proliferation and disarmament related aspects. However, nuclear non-proliferation and disarmament are mutually reinforcing, and the IAEA will be well positioned for the

advancement of both and ready to contribute to strengthening the regime during this crucial time.

Although the IAEA's primary role is the verification of the non-proliferation commitments of States under the NPT and nuclear-weapon-free zone treaties, its Statute provides for a possible role in assisting States in the verification of nuclear disarmament. Indeed the IAEA Statute directs the Agency to conduct its activities "in conformity with policies of the United Nations furthering the establishment of safeguarded worldwide disarmament".

Safety and security both require continued vigilance and should always be considered as works in progress. For example, gaps exist today in the coverage of international conventions and codes of conduct and in the development and application of the normative infrastructure. And the number of countries that have subscribed to the international instruments needs to increase. These gaps need to be filled as a matter of high priority. As the expectations and demands of States for the increased uses of nuclear energy increase, so will the need for the IAEA to help promote more effective and integrated approaches towards enhancing nuclear safety and security.

The use of nuclear applications is bound to grow as nuclear technology takes advantage of the synergies and opportunities for innovation in today's interconnected world. Rising populations, longer life expectancy and environmental stress will create challenges in the fields of energy supply, health, food security, natural resources and water availability. In addressing these challenges, the IAEA, can bring together a broad and probably unique knowledge base.

Let me conclude with a quote from the IAEA Director General who said recently that "we will not succeed in creating a world in which the benefits of peaceful nuclear energy are available to all countries which want it, while preventing the spread of nuclear weapons, unless trust is established at every stage and at all levels: trust that access to nuclear technology will be guaranteed and not interrupted for political reasons; trust that no new countries will seek to develop nuclear weapons; and trust that the nuclear weapon States will learn to live without the protection which they believe their nuclear weapons provide".

Thank you.