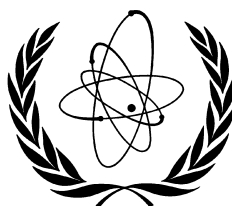

STATEMENT BY THE DIRECTOR GENERAL

**SOME MAJOR CHALLENGES: NUCLEAR NON-
PROLIFERATION, NUCLEAR ARMS CONTROL AND
NUCLEAR TERRORISM**

**Vienna, Austria
Symposium on International Safeguards:
Verification and Nuclear Material Security
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INTERNATIONAL ATOMIC ENERGY AGENCY

SOME MAJOR CHALLENGES: NUCLEAR NON-PROLIFERATION, NUCLEAR ARMS CONTROL AND NUCLEAR TERRORISM

Today I would like to share with you a few thoughts on some of the challenges the international community and the IAEA face in the fields of non-proliferation, nuclear arms control and nuclear terrorism.

ENSURING AN EFFECTIVE, UNIVERSAL AND ADEQUATELY FINANCED SYSTEM FOR THE VERIFICATION OF NUCLEAR NON-PROLIFERATION

Let me start by referring to a major challenge that is the focus of this symposium, namely to ensure that the IAEA safeguards system — the system that verifies States' non-proliferation commitments — is effective, universally adhered to and adequately financed.

Effectiveness of the system

As you are aware, the Agency safeguards system verifies the non-proliferation commitment made under the 1970 Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the most adhered to international agreement after the United Nations Charter. As such the Agency plays a key role — as an objective and technically credible body — in building mutual confidence among parties to the NPT by providing assurance of their compliance.

The discovery of the clandestine nuclear weapon programme in Iraq after the 1991 Gulf War made it, however, painfully clear that the safeguards system developed in connection with the NPT was not adequate in and by itself to enable the Agency to detect possible undeclared activities and provide the comprehensive assurance expected under the NPT. This is because the Agency's rights of access to information and sites under that system is rather limited and mainly focused on the detection of diversion of declared material and activities. This discovery jolted the international community into agreeing to empower the Agency with additional verification rights that correspond to its responsibilities. These rights are designed to provide the Agency with the tools necessary to verify not only *declared* nuclear material and activities, but also the absence of *undeclared*

material and activities. These rights were incorporated into a model protocol additional to safeguards agreements, approved in 1997 by the Agency's Board of Governors.

The additional protocol authorizes the Agency to receive a broad range of information about all aspects of a State's nuclear fuel cycle and nuclear related activities. It also provides for a broad right of access for Agency inspectors to nuclear related facilities and locations, as well as to fuel cycle related research and development locations.

Currently, the Agency's priorities are two-fold: the implementation of the additional protocol measures in States that are party to the protocol, and the meshing of existing and new safeguards measures with a view to have an integrated safeguards system that is both effective and efficient. "Integrated safeguards" promises to usher in a smart, information driven, non-discriminatory system that is designed to draw comprehensive conclusions regarding compliance by a State with its non-proliferation obligations. It adopts new approaches, including a focus on the State as a whole, and increased interaction between the Agency and the State's System of Accounting and Control. The overriding objective continues to be a safeguards system that is effective in providing the required assurance. The conceptual framework of integrated safeguards is nearing completion, and shortly the Agency will be ready to apply the full framework to those States which qualify for its application, namely States that have a comprehensive safeguards agreement and an additional protocol in force, and for which the Agency has completed the necessary evaluation and has drawn the required conclusions.

Given the fact that we are charting new territory, it is necessary that integrated safeguards continue to evolve as we gain experience. In this connection, I trust that the discussions this week will provide insight on some of the important questions that are relevant to our efforts to strengthen the safeguards system. For example:

How well and to what extent does the safeguards system balance its quantitative elements with those features requiring more qualitative judgment — and how should the balance between the two be decided? This is a particularly important question for integrated safeguards which sees an increasing reliance on qualitative judgment.

What is the proper balance between direct inspection and remote monitoring and why, in the year 2001, does the development of an effective camera system remain apparently so difficult, and when can we expect the current problems to be resolved?

How credible is wide-area environmental monitoring, and when will it become feasible to make use of it?

To what extent can the safeguards system make further use of satellite imagery?

Answers to these and other technical and policy questions will be especially helpful to the Secretariat as we move forward.

Participation in the system

In the Safeguards Implementation Report (SIR) for 2000, the Agency was able to conclude that for all 140 states with safeguards agreements in place the nuclear material and other items placed under safeguards remained in peaceful nuclear activities or were otherwise adequately accounted for. Moreover, for seven States the Agency's evaluation was able to provide broader assurance: not only that there had been no diversion of *declared* nuclear material, but also that there was no indication of the presence of *undeclared* nuclear material or activities. In the process of reaching these conclusions, the Agency was able to achieve more of its inspection goals than ever before, while still adhering to the "cost neutrality" objective — despite continuous increases in the amount of nuclear material and the number of facilities under safeguards.

These achievements are noteworthy. However, it should not divert our attention from the fact that for the safeguards system to fully achieve its objective all non-nuclear-weapon States should subscribe to the strengthened safeguards system. Of the 187 States party to the NPT, a total of 50 remain without a comprehensive safeguards agreement in force, and only 22 additional protocols have entered into force. This clearly is an unacceptable situation. As I said, if the Agency is to be able to perform its responsibilities it must be given the corresponding authority. All States need to take seriously their non-proliferation obligations. In the past year, we have increased our efforts to promote the conclusion of safeguards agreements and additional protocols, by means of regional seminars, and by systematically approaching capitals, but the response by States is disappointingly slow.

In that connection, I have for a number of years been entrusted by the Agency's General Conference to promote the application of Agency safeguards to all nuclear facilities in the Middle East as a step towards the establishment of a nuclear weapons free zone in that region. Regrettably I have not yet been able to make progress in fulfilling this

mandate. I do hope, however, that future progress in the Middle East Peace Process will enable me to make parallel progress in this important security issue.

Financing of the system

Effective implementation of safeguards is also dependent on the availability of the necessary financial resources. The Agency currently safeguards over 900 facilities in 70 countries on a regular safeguards budget of approximately US \$80 million per year. And while our verification responsibilities have continued to grow, our safeguards budget, like the rest of the Agency budget, has been one of “zero real growth.” This has forced us to rely on unpredictable “voluntary” funding for almost one-fifth of our safeguards activities, and has left us increasingly short of essential human resources, and technology needs. It is clear that if we are to continue to provide credible verification assurances, the complexity of our verification mission must be matched by the required resources.

MAKING PROGRESS IN NUCLEAR ARMS CONTROL

I now turn to a second major challenge, namely making progress on the nuclear arms control and disarmament front. This, we should continue to remember, is an essential part of the mutual commitment made under the NPT: universal adherence to the non-proliferation regime by all the non-nuclear-weapon States; steady progress towards nuclear disarmament by the five weapons States; and equal access by all to peaceful nuclear technology. While the end of the Cold War helped to motivate good progress on nuclear arms control in the early and mid 1990s, the process unfortunately slowed in the latter part of the decade. The START I and II Treaties made significant cuts in the level of deployed strategic weapons but START II has yet to enter into force. Efforts to end nuclear weapons development achieved an important milestone in 1996, with the Comprehensive Test Ban Treaty; however, the reluctance of a number of key States to take the steps needed to bring it into force — together with the ongoing debate on the continued relevance of the Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty) — has led to almost complete stagnation in the nuclear arms control efforts.

For a number of years the IAEA has been supporting an initiative to submit to Agency verification weapon usable nuclear material released from the military programmes of the Russian Federation and the USA. Although progress has been slow, consultations have continued in an effort to resolve various legal and technical issues. In the last year, some progress has been made on developing technical criteria and methods for

implementing verification measures. Agreement, however, is still to be reached on the scope of the verification measures, the nature of the material subject to verification, and the duration of verification under the agreements. Last month, I met here in Vienna with the Russian Federation Minister of Atomic Energy and the United States Secretary of Energy to take stock of progress and to give impetus to this important arms control initiative — which, if successful, would ensure that large amounts of weapon usable material are irreversibly removed from these military programmes.

In my view, progress towards nuclear arms control is not only overdue but is essential to the sustainability of the non-proliferation regime in the long run. The “unequivocal commitment” by the nuclear weapon States during the 2000 NPT Review Conference to “accomplish the total elimination of nuclear weapons” is certainly a positive sign, but will have to be translated soon into concrete steps to gain credibility. Examples of those steps would include, inter alia, ratification of the START II treaty and the conclusion of START III, universal ratification of the Comprehensive Nuclear Test Ban Treaty, and the commencement of the long anticipated negotiation towards a treaty that would prohibit the further production of fissile material for weapons purposes (the so-called “cut-off” treaty).

With regard to the three States — India, Pakistan and Israel — that have decided, for their own perceived security reasons, to retain the nuclear weapons option, I believe it is essential to actively engage them in the efforts to consolidate the non-proliferation regime and move towards nuclear disarmament. As we have been made amply aware by recent events, security is a global concern that requires global solutions and global participation.

As I have proposed in other forums, the feasibility of moving towards the elimination of the current nuclear arsenals depends critically on our ability to develop a credible alternative to nuclear deterrence. In my view, the best disincentive to acquiring nuclear weapons and other weapons of mass destruction will be a security system that is rooted in economic and social development, good governance, and respect for human rights and cultural differences, with agreed mechanisms in place for the peaceful settlement of disputes, and for credible and independent verification of arms control agreements.

PROTECTION AGAINST NUCLEAR TERRORISM

I turn now to a third major and recent challenge, that is protection against nuclear terrorism. The Agency has long been active in encouraging States to make security an integral part of the management of their nuclear programmes. The recent attacks in the United States were, however, a wake-up call to us all that more can and must be done. In the week immediately following the tragedy, the IAEA General Conference adopted a resolution which requested that I initiate a thorough review of Agency activities and programmes relevant to preventing acts of nuclear terrorism.

We are already engaged in a variety of activities relevant to combating nuclear terrorism — including of course the safeguarding of nuclear material, but also including our activities to ensure physical security, to prevent and respond to illicit trafficking of nuclear material and other radioactive sources, to enhance the safety of nuclear facilities, and to respond to emergencies. In each of these areas of activity, the Agency develops legal norms and guidelines, promotes international co-operation, provides expert advice, training and equipment and performs varying degrees of oversight.

We are currently reviewing in depth each of these programmes to identify additional measures that need to be taken. Specifically, we are considering expanding the scope and reach of many of our services with a view, in particular, to upgrade physical protection of nuclear material and radioactive sources, to enhance accident prevention and mitigation in nuclear facilities, and to reinforce the emergency response mechanisms. Equally, we will review existing conventions and guidelines — including the Convention on the Physical Protection of Nuclear Material — to ensure that they are comprehensive and effective, and we will make every effort to promote their universal application. To enable the Agency to enhance its services in all these areas, and with a view to assist States that lack the resources to upgrade the security of their nuclear facilities and material, we are exploring the feasibility of establishing a Fund for Protection Against Nuclear Terrorism. A preliminary paper that outlines our proposed response to the threat of nuclear terrorism will be submitted to our Board of Governors next month.

Clearly, these are unconventional threats that require unconventional responses. And it is my hope that the Friday special session of this symposium will help us in shaping our response.

CONCLUSION

We live in a critical time — a time in which the global community faces complex challenges and difficult agendas. Recent events have, however, catapulted security concerns to the very top of every agenda. This naturally lends a heightened sense of relevance to your discussions this week. I encourage your thoughtful participation, and I wish you a most productive symposium.