

## **Nuclear Non-Proliferation: an IAEA Perspective**

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As delivered

I

In Africa context regional conflict fuelled by unmet development needs and the uncontrolled spread of small arms tend to overshadow security threats from weapons of mass destruction. Why then are we organizing a regional seminar on the non-proliferation of nuclear weapons?

In recent years Africa has been the continent with the highest number of major armed conflicts<sup>1</sup>. Around one-fifth of all Africans have been afflicted by armed conflicts, conflicts between States and within States. More than 1 million people died in the 1994 massacre in Rwanda. According to the SIPRI Yearbook, in Sudan, 1.9 million people have died of violence, famine and disease since 1983. *Small arms* have claimed most lives in conflicts in Africa. Small arms and light weapons - guns, rifles and knives - have been, in a sense, the weapons of mass destruction in Africa. In the words of the Bamako Declaration, the problems involving small arms sustain conflicts, exacerbate violence, contribute to the displacement of innocent populations, threaten international humanitarian law, and fuel and encourage terrorism. In his Millennium Report the UN Secretary-General put forward a catalogue of measures for reducing the number of small arms and increasing the transparency in arms transfers. In particular he proposed a moratorium on importing, exporting and manufacturing light weapons in West Africa, and an extension of the 'weapons for goods' programs that have worked well in Mozambique, Panama, El Salvador and Albania.<sup>2</sup>

Many of the conflicts in Africa must be seen against the background of the fact that per capita income is low (below what it was at the end of the sixties), that illnesses are widespread (1 million malaria deaths per year; 25 million people HIV positive) and access to water is scarce.

So far, weapons of mass destruction have luckily not been used in conflicts in Africa, with the exception of the use of mustard gas by the Italian Air Force in Ethiopia in the 1935/36<sup>3</sup>. With regard to nuclear weapons, Africa is, in many respects, a model.

- It is the only continent besides Australia where all countries are non-nuclear State parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

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<sup>1</sup> SIPRI Yearbook 2000, page 16

<sup>2</sup> “*We the Peoples. The Role of the United Nations in the 21<sup>st</sup> Century*”, A/55/1

<sup>3</sup> Monterey Institute of International Studies, *Annotated Chronology of Missiles and NBC Weapons* (www.cns.miis.edu)

- Africa is home to the most comprehensive regional Nuclear-Weapon-Free-Zone in the world, currently counting 55 signatories and – I understand - now 17 States Parties.
- Several of the most active and vocal proponents of nuclear non-proliferation, arms control and disarmament are African States, including South Africa, Egypt, Nigeria, Kenya, Algeria and Cameroon.
- The continent is also unique in that it is home to the only country that had nuclear weapons but gave up that capability and had its nuclear weapons destroyed and dismantled under international verification.

In sharp contrast to these strong expressions of States support for the non-proliferation regime and to the objectives of the NPT, it is striking how many African States have been slow in signing up to the international verification system of the IAEA. Bringing an NPT Safeguards Agreement into force within 18 months of depositing instruments of ratification of the NPT is a legal obligation for all parties to the Treaty. Worldwide there are 50 countries that have not yet brought into force an NPT Safeguards Agreements with the Agency. Currently, 31 of those States are situated in Africa. In contrast to Europe, Latin America and East Asia, where almost all States have Safeguards Agreements in force, 58% of all African States still have outstanding NPT obligations to conclude such agreements.

An extra dimension of this obligation is the Treaty of Pelindaba, the treaty that defines the African Nuclear-Weapon Free Zone. In article 9, each Party undertakes to conclude a comprehensive safeguards agreement with the IAEA so that the State's undertaking to conduct nuclear activities for exclusively peaceful purposes can be verified. A Safeguards Agreement pursuant to the NPT fulfills this obligation under the Treaty of Pelindaba.

Safeguards Agreements fulfill an indispensable role in the non-proliferation regime. You may think “But we don't have any nuclear material; we don't have nuclear activities”. That situation has been foreseen at the time the content and structure of the NPT Safeguards Agreement was formulated. For a country that declares that it has no nuclear material (or at least not more than a particular low threshold of nuclear material, and no nuclear material in a “facility”), there is the option to conclude a Safeguards Agreement with a so called Small Quantities Protocol. That Small Quantity Protocol has the effect that it holds in abeyance most of the specific provisions of Part II of the Safeguards Agreement, which so that the activities to be undertaken by the State pursuant to the Agreement are minimal. That situation can continue until the country is starting up activities that involve nuclear material in larger quantities, for example by building a research reactor.

I return to my initial question: why it is timely and relevant to hold a seminar in Africa on the non-proliferation of nuclear weapons. And the answer is not only a matter of outstanding legal obligations.

A second answer to the question of why to hold this seminar on non-proliferation of nuclear weapons for African States is given by looking at the subtitle of the seminar: *The Role of Safeguards Agreements and Additional Protocols*.

In the past decade, the verification role of the IAEA has expanded through a series of changes, precipitated by the discovery of a clandestine nuclear weapons programme in a non-nuclear-weapon State. In fact one of the reasons for organizing this seminar is to describe these changes as clearly as possible. One should bear in mind that in the seventies when the concepts of an NPT Safeguards Agreement were developed, States were not used to international inspections. Moreover, in light of the distinction in the NPT between non-nuclear-weapon States (who had to accept inspections) and nuclear-weapon States (who didn't), leading NNWS succeeded in making the verification provisions more limited than originally foreseen. During the Gulf War in 1991 the limits of the safeguards system as it had been set up in the seventies became painfully clear. Yes, a State has to declare *all* its nuclear material to the IAEA and the IAEA has the right and the obligation to ensure that safeguards are applied to all that nuclear material, but it became clear that the tools that the Agency had at its disposal to give that assurance were too limited.

In the early nineties and then in 1995 – after a thorough period of study called Programme 93+2 - the IAEA Board of Governors endorsed a series of safeguards strengthening measures that could be taken within the Agency's existing authority. The Board considered that a further set of strengthening measures would require additional authority for the Agency. After two years of negotiation in what was called Committee 24 the Board agreed on a Model Additional Protocol. "Additional", that is, to Safeguards Agreements. Later we will go into the subject matter of the Additional Protocol. Let it suffice here to say that the IAEA – both the Member States represented at the Board with the full backing of the General Conference, and the Secretariat – consider it very important that all States, but in particular those that have concluded Comprehensive Safeguards Agreements (like NPT Safeguards Agreements), also conclude Additional Protocols. Only with such Additional Protocols in force, can the IAEA give broad assurances to the international community, not only about non-diversion of nuclear material, but also about absence of undeclared nuclear material and activities. So the second reason for the seminar is to bring you up to date with the sometimes revolutionary changes the safeguards system has gone through in the last decade, to explain what effect it has on the application of safeguards, and to see how the Agency can help you to come on board or respectively to have your experience under the Additional Protocol, so that others can profit from the experiences of those who concluded an Additional Protocol already.

A third reason for organizing this seminar is that nearly all African States are benefiting one way or the other from the peaceful uses of nuclear energy and that it is generally agreed that such a pursuit carries with it certain responsibilities not only in terms of safeguards, but also of safety and security. In today's world, it is more important than

ever to track not only nuclear material, but also other radioactive material. Let me stress this point. From a non-proliferation perspective nuclear material, like uranium or plutonium, material for nuclear fission, is obviously key. But tracking other radioactive material is important too, not only for reasons of safety, but also from a perspective of security. Radiation dispersal devices, also known as dirty bombs, consisting of a radiation source, like cobalt-60 or strontium-90, that could come from a hospital or a paper mill, triggered with conventional explosives to cause terror and fear, have pointedly been referred to as “weapons of mass disruption“. There is evidence that international crime trade nuclear and other radioactive material. Since the IAEA began a voluntary reporting scheme on such material some 10 years ago, 440 incidents have been reported, most of them cases that involved sealed radioactive sources: caesium-137, cobalt-60, strontium-90 etc. But a fair amount, 191 cases, involved nuclear material, 18 of which involved highly enriched uranium or plutonium. Among the potential buyers might be terrorist networks, which use globalization to spread their operations to all corners of the world. Africa has not been spared, in this regard, with thousands of victims of terrorism in Northern Africa, and fatal attacks in Kenya and Tanzania. This clearly points to the crucial importance of controlling nuclear and other radioactive material, nuclear facilities and radiation sources. In this respect, safeguards agreements play a determining role by obliging states to set up national authorities for this purpose. Safeguards agreements help the State to put their house in order. And if need be, the IAEA can provide assistance.

For my last reason for organizing this Seminar I would like to draw the circle still a bit wider and stress the element of partnership. Safeguards agreements, the verification activities based on it, and the Agency non-proliferation assurances derived from it, are part of preventive diplomacy. They contribute to stability among the countries of a region. A situation in which some have nuclear weapons or may be acquiring or developing nuclear weapons and others don't is inherently instable and a source of tension.

The Agency's assurances based on its inspection activities provide transparency. Yes, we live in times of transparency, and also for the Agency the time is long gone that we relied on Government information alone. Nowadays we look at a broad range of information sources, including sometimes satellite imagery. But at the same time the Agency provides a filter, separating credible information from not credible information, fitting the information within what we know about a State's nuclear activities and going back to the State when we have questions. We do not want to rely on satellite information and other open sources alone. We want a partnership with the Government that provides the transparency to us.

## II

I would now like to place this Seminar in the broader IAEA perspective on nuclear non-proliferation. It is clear that non-proliferation, in other words preventing the spread of nuclear weapons, has a horizontal and a vertical component. The two have to be seen in relation to each other. Progress regarding nuclear disarmament will have a positive effect on strengthening the horizontal non-proliferation regime and vice versa. The cornerstone

of the non-proliferation regime, the NPT, recognizes these two components and their interrelationship.

The last few years have shown that the road towards nuclear disarmament has its ups and downs. Ms. Hoppe, who was the Secretary-general of the last NPT Review Conference, already referred to the implementing the 13 practical steps agreed upon in 2000 during that last NPT Review Conference and she will no doubt come back to them in her later presentation. Many of these agreed “practical steps” have not yet been taken. No nuclear test explosions have been conducted, but the Comprehensive Test Ban Treaty is not yet closer to entry into force. The ABM Treaty, that “cornerstone of strategic stability” has been scuttled, but a further nuclear reduction treaty between the United States of America and the Russian Federation has recently been signed. That treaty implies a considerable reduction of the number of operational nuclear warheads in the coming decade, but the principle of irreversibility is not incorporated in it. For the IAEA of particular relevance is the elaboration of verification arrangements for placing – irreversibly - nuclear material from former nuclear weapon programmes under IAEA verification. Most of the legal and technical work under this so called Trilateral Initiative has been done, but the finalization and implementation await further developments in a broader context. The G8 Summit in Canada this week might bring some progress in this regard.

Turning now to horizontal non-proliferation, I would like to repeat what I said before: safeguards agreements are an indispensable part of the non-proliferation regime. However, they are not the only part. Nuclear weapons free zones are another important component. Proper national export control arrangements – and international cooperation to harmonize these arrangements - are yet another. Other national regulations are important as well: regulations that protect the spread of sensitive nuclear knowledge in a State, or national rules and regulations for the protection of nuclear material. Especially after September 11, the importance of the Convention on the Physical Protection of Nuclear Material, for which the IAEA is depositary, has grown and just last week an expert group nearly finished the final details for proposing an amendment to the Convention.

Safeguards Agreements are not only an indispensable part of the non-proliferation regime, but also a central part. As I said, during the last decade the limitations of the safeguards agreements have come to light, and the critical analysis of those limitations led to a set of strengthening measures and to the Additional Protocol. We cannot truly strengthen the regime if not all States have Safeguards Agreements and Additional Protocols. So, that is why we are here: to describe and discuss Safeguards Agreements and Additional Protocol and their implementation; during this Seminar in the context of Africa; in the context of the safe and peaceful uses that are most important for African countries. To describe and discuss these legal instruments, to clarify the meaning and importance of their different provisions, and to ask for your active participation, as applicable, in concluding such a comprehensive Safeguards Agreement and an Additional Protocol in the context of the NPT and the Treaty of Pelindaba. When that all works out I am sure we will have a fruitful and constructive Seminar.

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