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**PROGRAMME FOR PROMOTING NUCLEAR
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**Dealing with the Risks of Nuclear
Terrorism: Physical Protection,
Nuclear Safety and Other Initiatives**

BY

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(PRESENTATION 5)
Dear Colleagues,

My intervention is entitled "*Dealing with the Risks of Nuclear Terrorism: Physical Protection, Nuclear Safety and Other Initiatives*".
(Slide 1) These issues are addressed by the PPNN Study: paragraph 18, Part II "Nuclear Non-Proliferation", pp. 36 to 39.

Many speakers here have already stressed that the tragic events of 11 September 2001 have made us view the nuclear terrorist threat in a quite different perspective: from a sheer hypothesis, this threat has, unfortunately, become a possible reality. It is necessary to review the existing international and national standards for preventing malicious use of nuclear and radioactive materials. Not only should the international law instruments now in force be adapted to the present-day realities, but new international law acts must be adopted without delay. This is exactly the purpose of the Draft Comprehensive Convention on International Terrorism submitted by India and the Draft International Convention for the Suppression of Acts of Nuclear Terrorism submitted by Russia that are being discussed now at the United Nations. Reaching agreement on definitions of terrorist crimes, which would reflect, in a broadest and most objective way, the notion of terrorism while being acceptable to all States, appears to be the major stumbling block in the discussion of the Indian draft **(Slide 2)**.

The latest events have shown that the Russian Draft (**Slide 3**) which is designed to fill the international law niche relating to possible acts of nuclear terrorism is timely. The Draft outlines specific actions regarding malicious use of nuclear and radioactive materials and is in no way linked to solution of questions dealing with the use of nuclear weapons, which are traditionally discussed at disarmament forums.

It appears that a consensus has emerged that the co-ordinating role in strengthening the international regime for prevention of possible acts of nuclear terrorism should be played by the International Atomic Energy Agency (IAEA), which has already now at its disposal effective international control mechanisms. This involves, first of all, the IAEA system of safeguards called upon to monitor non-diversion of nuclear materials and installations to military purposes. It will be recalled that at present the IAEA safeguards cover over 900 nuclear installations, and hence their material, throughout the world. Last November the Agency worked out an Action Plan to combat nuclear terrorism, which has been amended to incorporate the proposals and considerations offered by Member States and is to be discussed in Vienna by the IAEA Board of Governors on 18-22 March. Let me bring to your notice the major provisions of the Agency's programme of action that would be presented by the IAEA Director General in his report *Protection Against Nuclear Terrorism: Specific Proposals*.

The following likely threats are discussed: (**Slide 4**)

Theft of nuclear weapons: Though theft of nuclear weapons as highly unlikely, in theory such a possibility cannot be excluded since this

represents the most serious threat in terms of its potentially devastating consequences;

Acquisition of nuclear material for the purpose of building a nuclear device: There is a need to ensure permanent protection of nuclear material and to assist States in enhancing their national systems for physical protection of nuclear material as well as accounting and control. The recent reported discovery of documents showing that that terrorist organisations have been working towards building their own nuclear weapon only stress the need to counter the potential threats;

Acquisition of any radioactive material for the purpose of making a “dirty bomb” that produces dispersion of radioactive material: When in the hands of terrorists, radioactive material can be no less harmful than nuclear one. What is involved is, first of all, radioactive sources which are used on a world-wide scale while States cannot always ensure their reliable security.

Violent and malicious acts against nuclear facilities: There is a real danger of direct, for instance air, strikes against nuclear facilities. And erecting several-meter-high concrete walls and covers can hardly solve the problem: what is needed in the first place is strengthening physical protection of facilities, developing multi-echelon defence around NPPs and other nuclear facilities.

The IAEA Secretariat has selected, out of the original thirteen general Activity Areas, the following eight areas that require immediate decision: **(Slides 5-8)**

- **Physical protection of nuclear materials and facilities** as the first line of defence against possible acts of terrorism;

- **Detection of malicious activities involving nuclear and other radioactive materials.** The plan stresses the need to help States to develop their own capabilities, primarily against theft and illicit possession, as well as trafficking for gain;

- **State Systems for Nuclear Material Accountancy and Control.** The objective is to ensure the implementation of a multitude of State's obligations, e.g. under safeguards agreements, the CPPNM, bilateral agreements and export control regimes;

- **Security of radioactive material.** Improved national security measures with respect to radioactive material and with a particular focus on very large sources that have fallen out of control (includes locating and securing "orphan" sources);

- **Assessment of safety/security related vulnerability of nuclear facilities** focuses on external events such as a jumbo jet crashing into an installation containing nuclear material. The need for strengthening the capability of States to assess the vulnerability of their nuclear facilities to possible malicious acts;

- **Response to malicious acts or threats**, in order, for instance, to mitigate a "dirty bomb" explosion effects. Part of the proposal deals with upgrading the IAEA's Emergency Response Centre to respond to possible terrorist attacks;

- **Adherence to and implementation of international agreements, guidelines and recommendations.** Intensification of existing activities to persuade more countries to adhere to and implement international instruments, especially those relating to the new threat. This also includes assistance to establish the necessary national legal framework;

- The eighth area -- **Nuclear security co-ordination and information management** -- targets consolidation of nuclear security information through fostering information exchange. This could lead to developing a new layer of activities.
services.

Although all these areas are topical, the following ones have been singled out as top priorities: **(Slide 9)**

--Increased number and scope of the International Physical Protection Advisory Service (IPPAS) missions and other assessment services.

-- Locating and securing highly radioactive orphan sources.

-- Assistance to Member States in implementing recommended improvements of State regulatory systems and security arrangements for nuclear material and nuclear installations.

-- Promotion of adherence to international instruments.

-- Increased training, and the development and conduct of new training with respect to improved security of nuclear and other radioactive material and nuclear facilities.

As you understand, the activities will require additional financing. The IAEA Secretariat has requested about US \$ 33,5 million to be spent for those purposes during next three years. In addition to that, control equipment upgrading and installation, for instance at border check points, should this be decided, will require some US \$ 20 million annually. Though it is presumed that the funding will be voluntary, major debate on this issue is yet to come.

In connection with this I would like to note that a reasonable balance needs to be struck between transparency and confidentiality to prevent sensitive information from falling into the hands of potential terrorists.

Let us turn now directly to **the PPNN Document**. Paragraph 18 contains an analysis by the authors of those provisions of the Final Document of the 2000 NPT Review Conference which deal with the need to foster the international physical protection regime for nuclear material and facilities, as well as with spent fuel and radioactive waste management, enhancing nuclear safety of NPPs and countering illicit trafficking in nuclear and other radioactive material.

Almost all these issues identified in the PPNN study are covered by the existing international nuclear legal instruments including the Convention on the Physical Protection of Nuclear Material, the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (it entered into force last June).

Next week (11-15 March) Vienna will host a meeting of international experts who are to work out an Additional Protocol to the Convention on the Physical Protection of Nuclear Material (**Slides 10-11**). This involves broadening the scope of the Convention to include nuclear installations, storage, use or transport of nuclear material within a country (at present the Convention is applicable only to international transportation). At the same time, there is understanding that the Convention will not cover military material and installations, nor will it stipulate national reporting. It

has been proposed that the working out of an Additional Protocol should be completed as early as this year to be followed by a Diplomatic conference at the end of the year to adopt it.

The PPNN recommendations (page 37) reflect the importance of bringing about universal adherence to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (**Slide 12**) -- the first international legal instrument in this field. At present there are huge quantities of accumulated radioactive waste in the world, and not all countries possess necessary infrastructure for their safe processing and disposal.

On 15-26 April 2002 a second review meeting of the Convention on Nuclear Safety (**Slide 13**) will be held in Vienna which is to consider national reports by States Parties to the Convention. The Convention covers, in the first place, NPPs and relevant fresh or spent nuclear fuel storage and processing facilities. The PPNN recommendations (page 38) stress that the meeting of the Parties to the Convention should focus on enhancing security of NPPs against possible terrorist acts.

And to conclude, the last but not the least issue addressed in this part of the Study -- illicit trafficking in nuclear material (ITNM) (**Slide 14**). The recent events have shown that extremist groups have not abandoned their attempts to get hold of nuclear and radioactive material to be used for terrorist purposes. Since 1993, 408 State acknowledged ITNM cases have been entered in the IAEA Data Base, 167 of which are dealing with nuclear materials (this involves mainly depleted, natural or low-enriched uranium). There were 14 most dangerous cases, in terms of proliferation, involving

HEU and plutonium. The Study recommendations (page 39) call for improved co-ordination of relevant activities carried out by States and the international organisations (IAEA, Interpol, World Customs Organisation and others). Apart from preventive action by special services, an important role should be played by the IAEA in maintaining an effective exchange of information and fostering the Data Base on ITNM facts.

I thank you, dear colleagues, for your indulgence.