

Foreign and Commonwealth Office
International Nuclear Fuel Cycle Conference
17 March 2009

Multilateral Approaches to the Nuclear Fuel Cycle

Dr Mohamed ElBaradei

Director General, International Atomic Energy Agency (IAEA)

I. Introduction

Let me add my voice of welcome to all the participants at this important conference on multilateral approaches to the nuclear fuel cycle. This is such an important conference because we are witnessing a major increase in the interest of using nuclear energy due to energy security, climate change and many other considerations. With the increase in the use of nuclear energy for power generation there will definitely be an extensive need for nuclear fuel for powering the reactors and also for assurance of supply. It is, in my view, an opportune time to review the whole non-proliferation regime which we brought into force in 1970's with the aim that we have to establish a world free from nuclear weapons. There are four clusters, in my view, that we need to work on 39 years after the treaty came into force to ensure that at all times nuclear energy is exclusively used for peaceful purposes, and that we ensure that the gaps that might exist for the misuse of that technology are plugged. The four clusters that we need to work on simultaneously are: nuclear disarmament, verification, physical protection of nuclear material and multinational assurance of supply.

II. Nuclear Disarmament

On nuclear disarmament I am quite hopeful that we are entering a new phase with the commitment of President Obama and President Medvedev to slash drastically the existing stockpile, to move towards a comprehensive test ban treaty and a treaty that prohibits the production of nuclear material for military purposes, for redeployment of existing nuclear weapons and to move away from the Cold War deployment status. All these steps are urgently needed to create a new environment where we create a security system that does not rely on nuclear weapons. That is not something that is going to happen overnight, but we need to start and we need to start now.

III. Physical Protection of Nuclear Material

The second cluster is the physical protection of nuclear material and after 9/11 we have come to realise the increasing risk of extremist groups obtaining nuclear material or nuclear weapons. That is the most worrying prospect I have every day and night because the concept of deterrence does not apply to extremist groups. If they have nuclear weapons they will simply use them and we need to work together in every possible way to ensure that all nuclear material everywhere is adequately protected and there is a good physical protection system in place.

IV. Verification

The third cluster is safeguards and verification. The IAEA continues to verify the commitment by the Non-Nuclear Weapon States to make sure that they are not diverting nuclear material to military purposes. There again we need to continue to upgrade the system, ensure that the IAEA has adequate legal authority through the Additional Protocol – we still have over 100 countries that are not party to that Protocol – to give the Agency the necessary tools to go to places and obtain information. That is a must that we need to continue to work on. We need the technological tools, we need the human and financial resources to be able at all times to provide credible assurance that all nuclear material in Non-Nuclear Weapon States is under safeguards and exclusively for peaceful use. Until we move to nuclear disarmament we need to ensure that no additional countries cheat the regime and thus may add to the nine countries that already have nuclear weapons and, as I have said many times, this is nine countries too many.

V. Assurance of Supply

The fourth cluster, of course, is the subject of your conference, because we have seen an increasing trend for many countries to develop the sensitive aspect of the nuclear fuel cycle, enriching uranium or separating plutonium, and that is natural because, as I mentioned, there will be increasing use of nuclear energy around the globe and there will be an increasing need for nuclear fuel cycle services. There, we have two approaches: either that every country will continue to develop its own fuel cycle with all the expense involved or that we will try to multinationalise that part of the fuel cycle in a way that guarantees at all times that every country will have the fuel it needs. This approach has the distinct advantage of minimising the risk of proliferation. Therefore, in order to protect ourselves in addition to verification, in addition to disarmament, in addition to physical protection we need to add this new approach to the fuel cycle. Since 2003 I have been calling for a multinational approach to the fuel cycle, an approach that ensures on the one hand an absolute guarantee that all countries that are *bona fide* users of nuclear energy will have at all times the nuclear fuel they need, but on the other hand ensure that no one country will have only its own hands on an enrichment or reprocessing factory, to make sure that the margin of security continues to be wide and adequate.

I think that there are three steps that we need to take. One is first to establish a new mechanism by which states are guaranteed a supply of fuel in case of political disruption and there are a number of ways we can do that. One idea I put forward is a fuel bank to be administered by the IAEA and I am happy to report to you that we now have the required resources, \$150 million, that would enable us at least to initiate that bank and I intend in the next few months to go to our Board of Governors of Member States to provide them with a proposed framework as to how that bank would work. The IAEA will have physical custody of low-enriched uranium available to all those member states that need fuel on the basis of apolitical criteria agreed in advance. I must emphasise that the bank will not take away any rights that any state has under the Non-Proliferation Treaty.

There are other proposals on the table: there is a Russian proposal that also establishes a low-enriched uranium reserve stored in an international enrichment facility which will guarantee that the IAEA also will have at its disposal low-enriched uranium should the need arise. There is also a British proposal, the so-called ‘bond proposal’, which is similar to the Russian proposal and aims to ensure that the IAEA, could resort to material available in the UK that material will be available upon IAEA request. There is also a German proposal which establishes altogether a new enrichment facility to be owned by a number of states: a multinational nuclear enrichment facility.

These are some of the proposals that are on the table and we are looking at them. They constitute what I would call a menu of proposals, but all of them complement each other, all of them will add to the assurance of supply and the building of trust that at all times countries will have assurance of supply. I have always emphasised, however, that the ultimate aim should be full multinationalisation of the fuel cycle. The second step, in my view, would be that all new facilities, enrichment or reprocessing, should be multinational in nature under regional or international control, similar to the proposal of Germany. The third step would be to have existing facilities of enrichment and reprocessing converted into a multinational approach. To me, that is the ideal situation.

It is a bold agenda. It is going to take some time, but I think we need to start and we need to start with the first phase, which is the bank, the bond proposal, the Russian proposal and then move on until we reach the time, I hope, in tandem with our progress on nuclear disarmament and on physical protection to have a full multinational approach to the nuclear fuel cycle. We need to protect ourselves, we need to maximise the ability to use nuclear energy for peaceful purposes but at the same time we need to do everything we can to protect ourselves from the misuse of this technology.

All this is in your hands. This is quite a complex project, it has a lot of technical, legal and political aspects, but I am sure in this and subsequent conferences you will be able to address these issues and, ultimately, we will be able to work together, build trust and confidence that, yes, we, as an international community, are able to master that technology, maximise its use, minimise its danger. I wish you all the best and I look forward to seeing the outcome of your conference.

This is a full transcript report.