

oncerns over a nuclear "black market" have focused international attention on the effectiveness of nuclear export controls. IAEA Director General Mohamed ElBaradei has stated that the emergence of a multinational illicit network demonstrated the inadequacy of the present export control system, that international cooperation on export controls lay on informal arrangements that were not only not binding but also limited in membership, and that export control information was not systematically shared with the IAEA.

This criticism, often heard on the political level, does not really do justice to the work of export control groups. The emergence of a multinational illicit network does not necessarily prove failures in export control systems. Criminal activities, by definition, try to circumvent existing rules and regulations, or they exploit the absence of such rules on State level. To fight such individual cases is not so much a task of regular export control systems, whose function lies primarily in establishing standards and procedures for export con-

trols on State level, but rather the task for intelligence services and their international cooperation.

How does the export control regime support nuclear non-proliferation?

The basis of the export control regime is the Nuclear Non-Proliferation Treaty (NPT). To define the current export control standards, one has to refer to the provisions of the NPT but at the same time also to the NPT Review Conferences, in which the sovereign of the NPT, the States Parties, have been expressing their understanding of the provisions of the Treaty. These conferences offer the opportunity to recognize developments in the understanding of security standards.

While the findings and conclusions of NPT conferences in the first instance relate to Treaty parties, the NPT strives

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for the universality of its security goals and the universal application of its requirements. Export controls can — and do — play an important role in fostering this universality goal by demanding the implementation of internationally agreed security standards in recipient countries before export licenses are granted. From this perspective it should be unacceptable if NPT parties only looked to the letter of the Treaty and not to what the sovereign has declared or decided over the years. It is the purpose of Review Conferences, enforced in 1995 with the decision for an "enhanced review mechanism", to review and interpret how the provisions of the Treaty should be applied.

Drawn from the deliberations in the NPT conferences, the current standards to be demanded as conditions of supply are the following:

Safeguards

The exporting States require from the recipient State safeguards according to the safeguards system established by the IAEA for NPT purposes. The current standard comprises safeguards agreements with the Agency based on the models INFCIRC/153 and INFCIRC/540 (the Model Additional Protocol).

Physical Protection

The prevention of theft of nuclear material and unauthorized access to nuclear material or facilities received its recognition as an important requirement at the international level only in the early 1970s when the IAEA developed and published its first recommendations and guidelines for the physical protection of nuclear material. As the NPT was drafted and agreed upon already in 1968, it does not contain a reference to this element. All NPT Review Conferences since 1975 on emphasized the need for appropriate physical protection on the systems on national level.

National export control provisions

Whenever nuclear items are transferred outside the country it is important to require from the recipient as a condition of supply that any re-export of those items should demand the same criteria as for the export to the recipient country. In order to implement that standard it is necessary to have appropriate legislation and licensing procedures in place in the recipient country.

How does the export control regime affect the IAEA's verification?

According to the NPT system, export controls require IAEA verification in the recipient country. In addition, export controls enable States to provide information to the IAEA on exports and imports as required by the Additional Protocol.

Cooperation between the IAEA and Exporting States

In recent years the IAEA has been expressing the wish to receive more information on exports. As the reporting of exports of sensitive nuclear items has become a regular feature of safeguards reporting through the additional protocol, this need for information is more or less satisfactorily covered. (Sensitive nuclear items often are called "trigger list" items because they require, or trigger, safeguards reporting; the list stems from the NPT Exporters Committee, known as the Zangger Committee, and is incorporated as Annex II in the IAEA Additional Protocol to the NPT comprehensive safeguards agreements.)

Regarding "dual use" (DU) items, there is a need to distinguish between information to the IAEA to be given on a regular and systematic basis and information required only in individual cases for particular countries of concern.

Different from trigger list items, DU items do not qualify for regular reporting to the IAEA because of their lower level of significance and their limited scope of controllability. There is no process of "government to government assurance" for DU items, as exists for trigger list items. Governments of recipient countries usually do not take responsibility for such items but limit their responsibility to statements that exports of DU items from their country require a license. This responsibility, disposed of in an "international import certificate", does not further involve the authorities of the recipient country. Whenever the IAEA gets information of a transfer of a DU item, the Agency would not regularly be able to receive confirmation about its arrival in the recipient country nor on where the item is located and used. This definitely limits the value of information, and the "digestion" of the information might become rather a burden for the IAEA.

In individual cases this concern may be totally different. When the IAEA is reviewing a particular country because of certain doubts or inconsistencies, information on DU items can be of importance. Agency inspectors may have encountered inconsistencies like extraordinary equipment, or may have found equipment from a particular country and want to know if other related equipment has been exported to the same country. In such cases inquiries with particular exporting countries are useful and necessary, as information of transfer of DU items would be an additional means to complete or at least improve the picture for the IAEA. In such cases Member States should provide all information needed by the IAEA on individual goods and on procurement practices of such countries. This is in line with the decision of the 1995 NPT Review Conference, as reaffirmed in 2000, that all support should be given to the IAEA to enhance its capability in safeguards

But this would not take away the fact that the value of DU information would still be minor compared with the level of information the Agency would receive from a good report-

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ing system on trigger list items on the basis of Annex II of the Additional Protocol. It is therefore necessary for the Agency to focus on the establishment and continuous improvement of its means for information treatment on Annex II reporting, as well as to consider how to improve the possibilities on import information, in particular on the standardisation of import reporting equal to export reporting. At the same time it is important for the Agency to review and, when necessary, update the list of Annex II.

What is needed to close major gaps in export controls?

Export control regimes set up the security requirements for recipient countries. They harmonize these requirements on a wide international basis, contribute to their universality by demanding them as a condition of supply, promote the knowledge of security requirements through outreach activities and can serve as a basis, together with the IAEA, for co-ordination and co-operation in technology transfer. As the list of items and activities in Annexes I and II of the Additional Protocol are based on the Committee trigger list, the Committee can advise the IAEA on these technologies.

Looking toward internationally agreed standards, current deficiencies are mainly related to State implementation.

- As to the Additional Protocol, some NPT States claim that there is no obligation to conclude such an instrument. This is not in line with the concept of NPT Art. III: The Treaty's non-nuclear-weapon-States (NNWS) have the obligation to negotiate with the IAEA an Additional Protocol, just as they are required to conclude a comprehensive safeguards agreement. NPT Article III.1 stipulates two tasks: (a) the IAEA has to establish and maintain a system for safeguards that meets the purposes of the Treaty; (b) nonnuclear-weapon States have to embark upon negotiations with the IAEA to enable the Agency to fulfill its verification task according to its safeguards system for NPT purposes. This concept clearly shows that there is only one safeguards system for NPT purposes. Any improvement or strengthening of this system requires the Agency to implement the system to its last state-of-the-art. NNWS have to embark upon negotiations with the IAEA whenever there is a need to enable the Agency to fulfill its safeguards task.
- From this logic it is neither understandable nor acceptable why NPT States should have difficulties to accept their Additional Protocols. The IAEA Director General has stressed the fact that for the Agency to be able to fulfill its verification responsibilities in a credible manner, the Additional Protocol must become the standard for all countries that are party to the NPT. Do Member States really want the Agency to be deficient in its capabilities, in particular if we take it that the Additional Protocol was adopted by consensus in the IAEA Board of Governors in 1997 and

- also by consensus confirmed at the 1995 and 2000 NPT Conferences? Why is this consensus support missing when it comes to implementation?
- In physical protection of nuclear material, the critical question is how this requirement can be verified. Only a few supplier States have appropriate inspection teams to check physical protection systems in recipient States. In strengthening of this export control requirement the IAEA can play an important role through its voluntary International Physical Protection Advisory Service (IPPAS). As a condition of supply the supplier could demand that the recipient State invites an IPPAS mission and provides its findings to the exporter.

In order to observe the necessary confidentiality for national security information, the mission's report should provide an executive summary that describes in general terms whether the national measures are adequate for the nuclear programme according to the IAEA's guidelines and recommendations.

• In the area of national rules and regulations for export controls, States may need assistance in establishing appropriate nuclear legislation. Export control groups such as the Zangger Committee and the Nuclear Suppliers Group stand ready, through their outreach programmes, to assist individual States, directly or through the IAEA, with the establishment and adaptation of rules and regulations on the national level.

The 2005 NPT Review Conference will be an opportunity to review developments in export controls over the last five years, and in particular to address the question of standards and their implementation by Member States. This will be an opportunity for the Zangger Committee to present its report to the Conference and also to seek guidance for its future work. Since 2000, in line with the NPT's "enhanced review mechanism", the Committee has been reviewing its understandings in order to include all standards described above. It will present the status of this review to the Conference.

The Conference should guide the Committee in order to make sure that its understandings comprise the most recent state of the art of export control requirements. As the Committee wishes to meet its function as "faithful interpreter" of the NPT export control provisions, it takes account of such guidance by the NPT States.

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