



GC

GC(42)/INF/15
21 September 1998

International Atomic Energy Agency
GENERAL CONFERENCE

GENERAL Distr.
Original: ENGLISH

Forty-second regular session
Item 12 of the provisional agenda
(GC(42)/2)

**MEASURES TO STRENGTHEN INTERNATIONAL CO-OPERATION IN NUCLEAR,
RADIATION AND WASTE SAFETY**

**International Conference on the Safety of Radiation Sources and the Security of Radioactive
Materials**

1. An International Conference on the Safety of Radiation Sources and the Security of Radioactive Materials, co-sponsored by the Agency, the International Criminal Police Organization (INTERPOL), the World Customs Organization and the European Commission, took place last week (14-18 September) in Dijon, France. It was hosted by the Government of France, and its organization was facilitated by the French Commissariat à l'énergie atomique.
2. The Conference was attended by 232 participants from 60 countries and by 20 participants from international organizations.
3. On 18 September, in the Concluding Session, the Chairman of the Conference Programme Committee, Dr. D. Beninson, Argentina, summarized the major findings of the Conference as follows:

“The attention of the radiation protection community was in the past focused on the prevention of accidents involving radiation sources subject to regulatory control, but the rise in the incidence of illicit trafficking in radioactive materials during the early 1990s led to greater awareness of the problem of radiation sources that are - for various reasons - not subject to regulatory control. Bearing this in mind, the Conference concluded that:

- (a) Sources of ionizing radiation must have sufficient protection to allow for safe normal operations.
- (b) The possibility of accidental exposures involving radiation sources must be anticipated and there must be appropriate safety devices and procedures. In this connection:

- (i) weaknesses in the design and construction of radiation sources must be corrected;
 - (ii) a high level of safety culture in the handling of radiation sources must be promoted, so that - inter alia - human errors are minimized through good training; and,
 - (iii) regulatory infrastructures for the control of radiation sources must be supported by governments and be able to act independently, and the regulatory authority in each country must maintain oversight of all radiation sources in that country - including those which have been imported.
- (c) Radiation sources should not be allowed to drop out of the regulatory control system. This means that the regulatory authority must keep up-to-date records of the person responsible for each source, monitor transfers of sources and track the fate of each source at the end of its useful life.
- (d) Efforts should be made to find radiation sources that are not in the regulatory authority's inventory, because they were in the country before the inventory was established, or were never specifically licensed or were lost, abandoned or stolen (such radiation sources are often referred to as "orphan" sources).
- (e) Because there are many "orphan" sources throughout the world, efforts to improve the detection of radioactive materials crossing national borders and moving within countries by carrying out radiation measurements and through intelligence-gathering should be intensified. Optimum detection techniques need to be developed, and confusion would be avoided if international agreement could be achieved on quantitative levels that would trigger investigations at border crossings.

It is clear from these points that the key common element which would have the greatest part to play both in the avoidance of "orphan" sources - with their potential for misuse or accidents - and in the achievement and maintenance of safe and secure operating conditions is effective national regulatory authorities operating within suitable national infrastructures.

Governments are urged to create regulatory authorities for radiation sources if they do not exist. Whether the regulatory authority is newly created or has been in existence for some time, the government must provide it with sufficient backing and with sufficient human and financial resources to enable it to function effectively. Only in this way can the problem of the safety of radiation sources and the security of radioactive materials be tackled at its roots and eventually brought under control.

Further efforts should be made to investigate whether international undertakings concerned with the effective operation of national regulatory control systems and attracting broad adherence could be formulated."