

as an integral part of a significant nuclear energy program and that effective technical, institutional and safeguards measures have been put into place to ensure that there is no misuse of the separated plutonium. Canada has recently developed an approach whereby this control will be implemented on a long term, predictable basis. Many of our nuclear partners see this as important for their energy security in the future. Australia, another major uranium supplier, has adopted a similar approach. Canada also requires a control over high enrichment. Light water reactors require natural uranium, which consists of two isotopes, U-238 (99.3 per cent) and U-235 (0.7 per cent), to be slightly enriched in the U-235 isotope to maintain a reaction. This enrichment is typically up to 2 per cent or 3 per cent. Very high enrichment of U-235 leads to weapons usable material. Internationally 20 per cent enrichment has been designated as a cut-off point and Canada exercises a prior consent right over enrichment beyond 20 per cent U-235. Since high enrichment for nuclear fuel cycle activities is relatively rare, the focus of attention has been on reprocessing and plutonium use.

v) Physical protection

Since all countries regard matters of physical security as falling strictly within their national jurisdiction, physical protection is a sensitive question. In implementing this requirement, Canada seeks from its nuclear partners a commitment that they will apply levels of physical protection to nuclear material which as a minimum would satisfy the recommendations of the IAEA as they are set out in document INFCIRC 225 (Rev 1).

VI Implementing Canada's Non-Proliferation Policy

One-hundred-and-fifteen states are currently party to the NPT. All are theoretically eligible for nuclear co-operation with Canada. Many, however, are developing countries which do not have nuclear energy programs now and are unlikely to have them in the future.

Canada now has nuclear co-operation agreements reflecting all its policy requirements with:

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| Australia | - in force March 9, 1981 |
| Euratom | |
| (Belgium, Denmark, France, FRG, Greece, Ireland, Italy, Luxembourg, the Netherlands, United Kingdom) | |
| | - in force January 16, 1978 |
| Finland | - in force August 15, 1976 |
| Japan | - in force September 2, 1980 |