was introduced in 1961 covering small electric power reactors up to 100 megawatts capacity. A revised system covering all reactors was introduced in 1965 and in 1966 it was extended to include nuclear fuel reprocessing plants. Provisions covering conversion and fabrication plants were added in 1968. Throughout this period, Canada was deeply involved in this process of developing the IAEA and its safeguards systems.

In February 1957, Canada announced its willingness to negotiate bilateral co-operation agreements with friendly countries. The agreements would cover, in particular, the supply of natural uranium for peaceful uses under safeguards provisions similar to those envisaged for the IAEA. Under such co-operation agreements, staff from Canada's Atomic Energy Control Board were able to carry out inspections of exported Canadian uranium and to verify fulfilment of undertakings with respect to peaceful uses. Although uranium exports were highlighted in these and earlier policy statements, the peaceful purposes requirements, with attendant safeguards measures, applied to reactor and other nuclear exports as well.

It was later in this period that the government made the decision that Canada would no longer supply materials to the nuclear weapons programs of its allies. In 1965, Prime Minister Lester B. Pearson announced in the House of Commons that:

As one part of its policy to promote the use of Canadian uranium for peaceful purposes the government has decided that export permits will be granted, or commitments to issue export permits will be given, with respect to sales of uranium covered by contracts entered into from now on, only if the uranium is to be used for peaceful purposes. Before such sales to any destination are authorized the government will require an agreement with the government of the importing country to ensure with appropriate verification and control that the uranium is to be used for peaceful purposes only.

After this time, every activity in the Canadian nuclear community was conducted exclusively for peaceful purposes.

Exporters and importers alike recognized that nationally administered safeguards lacked the credibility of international ones. Thus, as the IAEA's safeguards system developed, arrangements were made to transfer Canadian bilateral safeguards responsibilities to the Agency.