

Special Event at the IAEA General Conference 2006

Enrichment Bonds: A Voluntary Scheme for Reliable Access to Nuclear Fuel

The fewer the number of enrichment installations, and the more they are under multi-national control, the lower the potential for nuclear proliferation. The proposal on an IAEA Mechanism for Reliable Access to Nuclear Fuel (RANF) presented to the Board of Governors in June 2006 is a step towards achieving this aim through robust fuel assurances.

Normally, the world market will work to deliver supplies at market prices. The arrangements in RANF seek to deal with circumstances in which a supplier (or supplier state) might choose for non-commercial reasons to withhold supplies to a state. They seek to put in place an assurance of supply backed up by international commitments through the IAEA.

The UK co-sponsored the RANF scheme in June and since then we have been considering how this assurance might actually work in practice. The aim of the present paper is to set out one such idea. Whether potential recipients wanted to participate would be a matter for them to decide, balancing the value of the assurance against the huge cost and technological challenge of developing their own enrichment capabilities. We welcome any comments.

An enrichment "bond"

States with no direct access to stocks of uranium, like the UK, would find it difficult to support a reserve of enriched uranium with physical supplies. Consequently we have been developing a "bonding" principle, which might enable supplier states to participate through national enrichment providers. At this stage we have dealt only with the supply of enrichment services; the inclusion of suppliers of uranium would broaden the nature of the assurance.

An enrichment bond would involve an agreement between supplier state government(s), the recipient state and the IAEA, in which the supplier government(s) would guarantee that, subject to compliance with international law and to meeting the non-proliferation commitments to be assessed by the IAEA, national enrichment providers will not be prevented from supplying the recipient state with enrichment services in the event that the guarantee is invoked.

Conditions for invoking the bond

The assurance mechanism will need to depend on the meeting of conditions on both sides: that the recipient state has in place arrangements to assure the international community that they are not proliferating; and that the LEU supplier company/state will not unreasonably withhold supplies through the IAEA. These are outlined in more detail below.

