



# **Neither a Determined Proliferator Nor a Responsible Nuclear State: India's Record Needs Scrutiny**

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Bush Administration and Indian officials have argued that India's non-proliferation record is impeccable. However, much of that argument rests on whether India has provided significant nuclear weapons assistance to another country, such as the assistance Pakistan provided through the Khan network or China provided Pakistan. We do not believe that India has proliferated in that manner, at least with regard to nuclear weapons, fissile materials, or major nuclear facilities. But lesser known faults of India's non-proliferation record need to be evaluated in the context of the US/Indian nuclear agreement. If India is to be accorded special status by the United States and the Nuclear Suppliers Group, it needs to meet the standard of a country with an exemplary non-proliferation record. In addition, ignoring known flaws in India's non-proliferation record risks US national security, a dangerous approach in the post-9/11 world.

## **Weaknesses in India's Non-Proliferation Credentials**

Our March 10, 2006 article "India's Gas Centrifuge Program: Stopping Illicit Procurement and the Leakage of Technical Centrifuge Know-How," discussed several weaknesses in India's non-proliferation credentials. Three main weaknesses are summarized below:

- **Illicit Procurement.** Indian nuclear entities and trading companies have procured nuclear dual-use equipment and material overseas without specifying that the end-user is an unsafeguarded uranium enrichment plant. In so doing, India has conducted illicit procurement for its nuclear programs. Below, we summarize information from a European intelligence "early warning" assessment listing India as one of six proliferant countries that require European companies to exercise special care to prevent illegal exports. Unless India stops such procurements, preventing exports to civil nuclear industries from benefiting military nuclear facilities will be extremely difficult. Foreign suppliers will face an unreasonable burden in attempting to verify the civil end use of exports to India. Before the US/India deal is approved, the United States should ensure that

India commits to stopping illicit procurement for its military nuclear and missile programs.

- **Centrifuge Know-How Leakage.** India's procurement system for its gas centrifuge program leaks sensitive gas centrifuge information through its bidding or “tendering” process. The United States needs to ensure that India’s classification guidelines and practices do not increase the chance of nuclear proliferation, endangering US, Indian, and others’ national security.
- **Poorly Implemented National Export Control System.** Indian export controls are poorly implemented and the possibility of onward proliferation, such as where imported items are re-exported, remains a serious concern. Proliferant states are known to target Indian industries. If the US/India deal is approved by Congress, proliferant states will find India more attractive, because India’s imports of nuclear dual use items will dramatically increase. This increase in imports will place a severe strain on India’s export control system, as it struggles to ensure that Indian companies do not illegally retransfer imported items or reverse engineer and market them internationally. The A. Q. Khan network targeted countries with inadequately enforced, albeit well-designed, export control laws, such as South Africa and Switzerland. The United States should abide this crucial lesson by accelerating its work with India to strengthen the implementation of Indian export control laws and regulations. Congress should condition its support of the US/India agreement on India making substantial improvements in the effectiveness of its export control system.

## **Information Supplementing the March 10 Report**

### **India’s Illicit Procurement**

In early January 2006, the *Guardian* reported on a 55-page confidential European “early warning” intelligence assessment that forewarns European companies about several proliferant states, such as Pakistan, Iran, Syria, and North Korea, that are engaged in illicit procurement to outfit their nuclear, chemical, and biological weapons programs and associated delivery systems. A country included in the July 2005 assessment but not listed by the *Guardian* is India. The report contains two “early warning” sections on India, which serve as a warning about India’s technology procurements for its national laser program, ballistic missile programs, and nuclear program. This intelligence report is in sharp contrast to statements by Indian officials following the release of our March 10 report, in which they denied conducting any illicit procurement.

The section on nuclear procurements warns companies about Indian entities that are part of the Indian Department of Atomic Energy (DAE) and are said to be targeting European firms in an effort to buy materials for nuclear weapons development and uranium enrichment facilities. Although the Indian effort is not as deceptive as those of Iran, North Korea, and Pakistan, which depend on centrally directed procurement networks aimed at the systematic disguising of end users, the report warns European government officials and high-technology manufacturers to be suspicious of approaches by Indian

nuclear entities and their intermediaries. The ISIS report from March 10 provides examples of Indian and off-shore trading companies soliciting items on behalf of DAE entities. In approaching foreign suppliers, these companies tried to hide that the end user was the DAE.

The section on Indian laser programs warns about Indian efforts in recent years to obtain modern Western laser technology for nuclear research and development. It adds that increased cooperation with institutions in Russia has also been noticed.

Although outside our normal purview, key points from the missile section are summarized. The missile section of the document contains language that shows why it is critical to maintain a sharp line between military and civil nuclear facilities and programs. The report acknowledges that India is largely self-sufficient in civil and military missile technology, although the report states that India continues to depend on Western industrial countries for the import of technology as well as equipment and facilities for both programs. Due to the close organizational intertwining of India's civil and military missile programs, the report states it is almost impossible to determine whether an import is meant for civil or military use.

The report also suspects that Indian missile companies may be proliferating. The report lists the most important Indian state organizations, para-governmental institutions, and private companies working in the missile area. It then states that Indian "organizations, respectively companies," support the missile technology programs of other proliferant states. It cannot be excluded that Indian technology and products flow to third countries, the report concludes. The report did not name any such countries or companies involved in possible transfers.

### **More on the Tender Documents**

We determined that a sub-entity of the Department of Atomic Energy, Indian Rare Earths (IRE) Ltd., has leaked detailed and sensitive gas centrifuge information while procuring for its gas centrifuge enrichment plant near the city of Mysore. IRE uses popular technology procurement websites and national newspapers to invite interested firms to purchase bid documents. The tender advertisements and documents do not indicate to the bidder that the items will be used in a gas centrifuge facility. These documents cost approximately \$10, and some of them contain detailed drawings and manufacturing instructions for direct use centrifuge components and other sensitive centrifuge-related items. Acquisition of the tender documents does not appear to be difficult. Instructions on the advertisements indicate that IRE allows written requests for bid documents and will send them to the requestor by mail. Although the most sensitive items are likely to be manufactured by Indian firms, the tender documents do not restrict foreign firms or individuals from participating in the process.

While preparing a report on India's gas centrifuge program, ISIS discovered that cryptic newspaper advertisements were actually part of the process to outfit the Indian gas centrifuge program, codenamed the Rare Materials Project (RMP). Over the next year,

ISIS obtained hundreds of these advertisements in what turned out to be a difficult effort to discern patterns in RMP's historical procurement for centrifuges. Recently, there was a disturbing change whereby advertisements included requests for bids to make sensitive rotors and contained enough detail to definitively tie them to key centrifuge components. This change led us to report this practice to the US government early this year and eventually release the March 10 report. We fully expect the US government to address this issue with the Indian government.

The tender documents can contain drawings with precise specifications and requirements. The level of detail is sufficient such that these documents would be considered classified in supplier countries and not distributed without careful controls over their use and requirements for their protection. The existing process releases know-how to firms that may not intend to bid, may have forged their identity, or may be seeking centrifuge design information for secret nuclear programs.

Another concern is that a manufacturer that wins a bid may be willing to sell the same item to other buyers once the original order is finished. Any controls in place to stop such additional sales could not be discerned.