THE U.S. INDIA NUCLEAR COOPERATION AGREEMENT – the end of the nuclear non-proliferation regime?

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SHAUN BURNIE,
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“This would be a sweet deal for India, but a body blow to the non-proliferation regime, so-called.” Paul Leventhal, Nuclear Control Institute, 2005.¹

“There is nothing in the Agreement which places an embargo on India’s right to carry out a nuclear test if it thinks this is necessary in India’s supreme national interest.”
Indian Prime Minister Singh, July 2008 ²

“If the [safeguards] agreement is approved today, and if an exception to the NSG directives is adopted [for India], it will be necessary to conclude that the non-proliferation regime that we know has reached its end.” Government of Switzerland to IAEA Board of Governors August 1st 2008³

¹ “Cirus reactor’s role in a U.S.-India nuclear agreement” Paul Leventhal, Nuclear Control Institute Presentation to Center for Nonproliferation Studies

² The Rediff Special/ Sheela Bhatt in New York, “It is sad that the N-deal is smeared in murky politics”

³ See, “Some in NSG predict prolonged debate over conditions for Indian exemption” Nuclear Fuel, August 11th 2008
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INTRODUCTION

In July 2005, U.S. President Bush and Indian Prime Minister Singh announced plans for an Indian–U.S. Civil Nuclear Cooperation Initiative (CNCI). Nuclear trade between the two states had been frozen following India’s first nuclear weapons test in 1974. India also was unable to conduct nuclear trade with the rest of the world. India has refused to sign the Treaty on the Non-Proliferation of Nuclear Weapons, (NPT), and is therefore not legally recognized as a nuclear weapons state. The new proposal if implemented would overturn long-standing U.S. policy and international efforts to control nuclear proliferation.

Under the nuclear proposal, India would be allowed to purchase U.S. nuclear material and technology. Other countries would also be able to conduct nuclear trade with India. In turn, it is claimed by proponents of the proposal that India would be required to separate its military nuclear program from its commercial program, strengthen its nuclear export controls, and open up some of its nuclear infrastructure to international inspection. India would also commit to supporting efforts to negotiate a global ban on the production of nuclear materials for military use.

There are complex motives behind the United States and India proposal. For the U.S. it is largely a combination of non-nuclear economic interests seeking access to India’s billion plus-market matched by the strategic and military objectives of allying India with U.S. policy in relation to China. For India, access to western technology (including military) and recognition of its true global significance are clear incentives. But unlike for the U.S. the nuclear benefits for India are clear and likely to be immediate.

More than three years after first being proposed the U.S./India proposal has not yet entered into force. This is due in part to the complexity of international agreements and the domestic political contexts in both the U.S. and in particular India. During 2006, hearings and debates in both the U.S. House of Representative and Senate convincing arguments were made as to why the U.S. India proposal effectively destroyed U.S. non-proliferation policy. Despite this, on December 9th 2006, the “Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006” was passed by both the U.S. Senate and House of Representatives. On December 18th, President Bush signed into law the Hyde legislation passed by Congress. Hereafter referred to as the U.S./India Agreement, one long-standing and leading non-proliferation Congress member described it as a,

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4 The NPT recognizes only those states to have conducted a nuclear weapons test before 1968 to be nuclear weapons states. Despite India having tested in 1974 and 1998, and possessing an arsenal of nuclear weapons it is legally not a nuclear weapon state under the NPT. For a more detailed analysis of this and other aspects of the Agreement in relation to the NPT see, The U.S. India Nuclear Cooperation Initiative and Article 1 obligations under the Nuclear Non-Proliferation Treaty (NPT, Sharon Squassoni, Foreign Affairs, Defense and Trade Division, Congressional Research Service, report prepared for House Representative Ed Markey, June 19th 2006.

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“sad day in the history of efforts to halt the spread of nuclear weapons and materials around the world.”

However, the U.S. Congress is committed to reviewing the U.S./India Agreement to determine whether it conforms to the terms of the Hyde Act. Before final approval by Congress the International Atomic Energy Agency (IAEA) and India are required to agree a new nuclear safeguards agreement; and the 45-nation Nuclear Suppliers Group must agree to permit the U.S.-India proposal to be exempt from their nuclear guidelines.

In March 2008 it was reported that the IAEA and India had reached agreement on a new safeguards agreement. After delays of months when the Indian government was unable to submit the agreement to the IAEA, in early July the text was finally presented to the IAEA Board of Governors for consideration. On August 1st, the 35 nation Board of Governors approved the IAEA safeguards agreement with India. The next stage in the U.S./India Agreement is for the 45 nation Nuclear Suppliers Group meeting in Plenary to adopt or reject a request from the U.S. for an exemption from NSG nuclear export guidelines. Having missed the annual NSG Plenary in Berlin in May 2008, sough approval at an extraordinary Plenary held August 21st – 22nd in Vienna, which did not reach agreement so further meetings are scheduled for September 4th-5th and possibly more.

This report attempts to review the details of the Agreement, the protracted negotiations, and the implications for global disarmament and nuclear non-proliferation efforts. By its conclusion, it should be clear that the U.S./India Agreement marks the end of the global nuclear non-proliferation regime of the past four decades. The implications therefore are of global significance and deserve to be fully disseminated and debated.

NUCLEAR-PROLIFERATION RISKS

Summary - Given that the U.S./India Agreement concerns the trade in nuclear materials and technology, there is a direct consequence for efforts to control the spread of nuclear weapons. Nuclear proliferation means not just actual nuclear weapons, but technology and materials, as well as perceived intentions by neighbouring states. In all these areas, the U.S./India Agreement is a major proliferation threat. Efforts to secure a permanent ban on nuclear weapons testing, and a ban on the production of weapons-usable materials – plutonium and enriched uranium will be fatally undermined. The reaction of Pakistan, India’s nuclear neighbour is predictably to prepare itself to meet the threat. The nuclear arms race in South Asia between India and Pakistan has simmered for over three decades. The


6 “India may submit ‘interpretation’ of safeguards agreement to board” see, Mark Hibbs, Nuclear Fuel March 24th 2008
U.S./India Agreement will provide the technical and material means for India to massively expand its nuclear arsenal moving to a three tiered ‘deterrent’ – air launched, land and submarine based. Pakistan is already expanding its production of fissile materials, and will justify it on the increased threat from India.

In addition to these dangerous developments, is the looming conflict between the United States and China. Already redirecting increasing proportions of its nuclear arsenal to China, the Bush administration sees the India Agreement as central to its strategy of ‘containing’ China with a strong nuclear powerful ally.

For U.S. defence and strategic planners the Agreement with India is about integrating India into its emerging confrontation with China – Indian nuclear armed submarines are to be eventually located in the Indian Ocean, within range of major Chinese cities. The knock on effect of this will be to further justify Chinese nuclear weapons modernization – already underway. Nuclear proliferation is the dynamic created by dangerous decisions – leading to potential catastrophic nuclear conflict. The U.S./India Agreement is one of the most ill-considered and dangerous developments in the last fifty years. These and other reasons are why the U.S./India Agreement marks the end of one era of nuclear proliferation, and the beginning of a new, potentially devastating one.

“India’s production of weapon grade plutonium is currently constrained by the competing demands of India’s nuclear-power reactors for its limited domestic supply of natural uranium. If India could import fuel for its civilian nuclear reactors, it could use more domestic uranium for the production of weapon materials.” International Panel on Fissile Materials.7

While the commitments by India under the proposed U.S./India Agreement appear positive, the consequences for global efforts to control and limit nuclear weapons proliferation are serious and potentially disastrous. India will be able to increase its nuclear weapons both qualitatively and in total number of warheads, while also resuming nuclear weapons testing without fear of disrupting nuclear fuel supply. It is for these reasons that the level of opposition from arms control organizations, non-proliferation groups, and peace and anti-nuclear organizations has been large-scale and global.8

The Treaty on the Non-Proliferation of Nuclear Weapons, (better known as the NPT) entered into force in 1970. Despite its weaknesses, it remains the only global framework requiring complete nuclear disarmament and nuclear non-proliferation. India has never signed the NPT.

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8 A leading role has been played by the Washington DC based Arms Control Association and groups and individuals worldwide, see, Fix the Proposal for Renewed Cooperation with India, January 7th 2008 www.armscontrol.org/pressroom/2008/NSGappeal.asp
From its initiation in the 1950’s, India’s nuclear program had access to global nuclear knowledge, technology and materials. It was in large part India’s military nuclear program that benefited from this assistance rather than its energy program. After its refusal to sign the NPT, and in particular after its first nuclear weapon test in 1974, India was denied access to the world’s nuclear market. While successive Indian governments have called for global nuclear disarmament, a further five nuclear weapons tests were conducted in 1998 (followed by Pakistan’s first nuclear weapons tests). These led to global (if limited) sanctions against both countries.

Despite fifty years of development, India’s nuclear power program as of December 2007 generates less than half the electricity it obtains from wind energy. Around 3% of its electricity is supplied by nuclear power compared to 8.5% from wind power. While it has failed to provide significant electricity, it has provided India with the atomic bomb. The effect of India’s exclusion from global nuclear trade over the past three decades is impossible to quantify, though it’s unlikely that its nuclear program would today be generating significantly greater electricity – due in large part to India’s relative impoverished economic status during the 1970s-1990’s.

If implemented the U.S./India nuclear deal will most likely lead to new reactor construction, but it is India’s nuclear weapons capability that will be most enhanced.

Some specific examples:

- India has limited natural uranium supplies – insufficient for fuelling even its existing nuclear energy program at the same time as fuelling its military needs. Its planned expansion of nuclear power will require more uranium than it can meet from domestic sources. Permitted access to world uranium resources, India will fuel its power program with imported uranium while reserving its domestic uranium for its military program. This will be permitted under the Agreement;

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9 The rapid response by Pakistan to India’s nuclear tests in 1998 was to conduct their own series of tests. They had warheads on the shelf ready to be tested. The signal to India (and the United States) was that Pakistan had a nuclear deterrent – perhaps more functioning than India’s. A consequence of the Agreement will be rapid access by Indian graduate students to advanced nuclear research with direct application to its weapons program. The U.S. is not only endorsing India’s nuclear status, it intends that it be enhanced.

• India plans to increase the number and capability of its nuclear weapons—moving from solely air launched to land (missile) and sea (submarine) launched. This will require additional stocks of fissile material—principally plutonium, and some highly enriched uranium. The U.S./India Agreement places no limits on the use of domestic uranium to be used in plutonium production reactors or uranium enrichment plants;

• Large stockpiles of plutonium contained in spent fuel will remain outside international safeguards, permitting their use for military purposes;

• India interprets the Agreement as giving it permission to import plutonium reprocessing and uranium enrichment technology—currently prohibited. Thus India’s capacity to produce weapons material will be enhanced under the U.S./India Agreement;

• India has plans for plutonium based fast breeder reactors. Once India has access to the global nuclear market, its ability to move forward with these will be enhanced. India intends to develop its breeder program for strategic use—energy and weapons—and will exclude the program from international safeguards and oversight.12

Nuclear weapons designers agree that it is not the capability to design a nuclear weapon that determines the pace of a country’s acquisition of nuclear weapons, but, rather, the availability of nuclear weapons materials (plutonium and highly enriched uranium) that can be turned to weapons purposes.13 The proposed Nuclear Cooperation Agreement will provide the means for India to significantly enhance its nuclear weapons capability.

11 One year after the 1998 nuclear tests, a draft Report of the National Security Advisory Board on Indian Nuclear Doctrine, was published, which called for a “doctrine of credible minimum nuclear deterrence” based upon a “triad of aircraft, mobile land-based missiles and sea-based assets”. See, India’s Nuclear Bomb, The Impact on Global Proliferation, George Perkovich, 2001 updated edition. While progress remains slow on these, developments are ongoing. For example, on February 26th 2008, India test fired a missile from a submersible platform about 50 meters deep in the Bay of Bengal. Frequently cited as the K-15, also called the Sagarika, which is planned submarine launched ballistic missile that two years ago India’s defense minister told lawmakers did not exist. According to reports Russia and Israel have approached to assist with extending the range of the missile, as cited in India’s Nuclear Forces, Nuclear Notebook in Bulletin of Atomic Scientists September/October 2005, prepared by Robert S. Norris and Hans M. Kristensen of the Natural Resources Defense Council. Data for all nuclear weapon states is available online at www.thebulletin.org; Reports also suggest that the India’s first nuclear powered submarine the Advanced Technology Vessel (ATV) would be ready for sea trials in 2009, see Arms Control Association, Wade Boese, at www.armscontrol.org/act/2008_04/IndiaTest.asp. Three ATV’s are planned, but if delayed India is considering approaching Germany and France for six conventional diesel submarines, NRDC opcit.

12 See , “Both from the point of view of maintaining long term energy security and for maintaining the minimum credible deterrent the Fast Breeder Programme just cannot be put on the civilian list.” Indian Department of Atomic Energy Chair, Pallava Bagla, “On the Record: Amil Kakodkar,” Indian Express, 8 February 2006.

qualitative increase in India’s nuclear arsenal is why the U.S./India Agreement in part is dangerous. Increased weaponization leads to the development of new nuclear doctrines, including war-fighting strategies, and a cascade of further regional proliferation. It also increases the risk further of accidental nuclear war.

“Many similarly see hypocrisy in rewarding India, a nuclear weapon state outside the NPT, while punishing Iran, an NPT member state that does not yet have the bomb.” Sharon Squassoni, Carnegie Endowment/New Republic, August 2007.  

The effect on global efforts to prevent the proliferation of plutonium reprocessing and uranium enrichment technology will be further undermined by the U.S. India Agreement.

The Bush Administration has agreed in principle to the transfer of such sensitive technology to India, as well as permitting future reprocessing in India of U.S. supplied uranium spent fuel. Very few nations in the world today undertake such reprocessing and only three sanctioned by the United States actually to do so: France, the UK and Japan.

However other states, in particular South Korea and Taiwan, have made successive attempts since the 1970’s to obtain reprocessing approval from the U.S. For good reason, every administration since President Ford has blocked these attempts on nuclear non-proliferation grounds. The U.S./India Agreement will only encourage these states to continue their efforts. The point has been made repeatedly that the U.S./India Agreement further undermines negotiations with Iran to curtail its uranium enrichment program – it, unlike India, is a member of the NPT and interprets its status as an NPT party as permitting access to such technology.

Underlying the U.S./India Agreement is the Bush administration's rejection of historic approaches to nuclear non-proliferation. A combination of heavy nuclear industry lobbying (particularly French) and non-proliferation assessments that the nuclear genie can no longer be controlled as in the past, they have adopted a policy of ‘controlled proliferation’ whereby allied states get access to sensitive technology – reprocessing and uranium enrichment. This Global Nuclear Energy Partnership (GNEP) as it is called and launched by President Bush in 2006 is planned to be at the centre of a new global nuclear supply regime. As of February 2008 the U.S. has signed up 21 partner nations.

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14 The U.S.’s Catastrophic Nuclear Deal with India: Power Failure

15 As a consequence, the stockpile of commercial, nuclear weapons usable plutonium at approximately 250 metric tons, is equivalent to that contained in all military programs since 1945. see, www.fissilematerials.org


17 As of February 26th 2008, the U.S. has signed GNEP partnerships with China, France, Japan, Russia, Australia, Kazakhstan, Bulgaria, Hungary, Lithuania, Romania, Slovenia and Ukraine, Poland, Ghana, Jordan, Canada, UK, South Korea, Italy and Senegal,
http://www.gnep.energy.gov/gnepPRS/gnepPR022608.html
Under GNEP those hosting uranium enrichment and plutonium reprocessing plants will provide fresh fuel and spent fuel services to the other nations pursuing nuclear power generation. India as yet has not signed up to GNEP, but has already indicated its willingness to host a fuel bank for supply to third countries.  

The long standing charge from a majority of non-nuclear weapons states which are party to the NPT is that the large commercial nuclear powers discriminate in the supply of technology and materials. Under Article IV of the Treaty, non-nuclear weapons states are entitled to develop nuclear technology for peaceful use. States consider it one of the “fundamental objectives of the Treaty”. While it remains a fundamental flaw in the Treaty (by providing the means by non-nuclear weapons states can acquire technology and material that could be used for nuclear weapons), it was the basis of the ‘bargain’ that allowed the NPT to enter into force. Many states have argued that they have not sufficiently benefited from Article IV, while the nuclear weapons states have failed to meet their disarmament commitments under Article VI.

At the 2000 Review Conferences of the NPT, nations called on all parties, “not to cooperate or give assistance in the nuclear or nuclear-related field to States not party to the Treaty in a manner which assists them in manufacturing nuclear weapons or other nuclear explosive devices.”

And at both the 1995 and 2000 Review Conferences nations agreed that non-NPT signatory nations should not have access to the same kind of assistance in developing nuclear technology and materials that are the rights of NPT signatories under Article IV. The obvious point being that the U.S./India Agreement is a total rejection of the agreements reached at the last two NPT Review Conferences.

The U.S./India Agreement, GNEP and Article IV of the NPT are indeed interconnected – they provide the means for states to develop the technology and materials for nuclear weapons development. Whereas the justified critics of the U.S/India Agreement cite the danger to the NPT regime, they also largely remain silent on the inherent contradiction inside the NPT. The IAEA’s leading role in providing states with nuclear training, dual-use technology also remains largely unsaid. India in pursuing advanced commercial

18 "We run a full nuclear fuel cycle of our own and we would be happy to participate in providing a home for a nuclear fuel bank," Indian foreign secretary Shiv Shankar Menon said on Saturday while delivering the keynote address to the International Institute of Strategic Studies’ global forum, The Times of India, April 20th 2008.


20 ibid

21 Opcit, The U.S. India Nuclear Cooperation Initiative and Article I obligations under the Nuclear Non-Proliferation Treaty (NPT), Sharon Squassoni.
nuclear technology is acting no differently to a large number of ‘peaceful’ nuclear states – within the European Union, North-east Asia – Japan and South Korea, and Latin America. In the case of most EU states and Japan and South Korea they have done so under the U.S. nuclear umbrella, including in many cases joint military training in nuclear weapons use. There is therefore rank hypocrisy at the heart of the nuclear non-proliferation regime, and in the past India was right to challenge it. They have now abandoned that role and have joined the other side.

If one thing can be said in its favor, the U.S./India Agreement and its disregard for the principles of the NPT, combined with GNEP, at least bring home the reality that the nuclear non-proliferation regime is fundamentally failing and that urgent measures are required to revise and renew it.

U.S. CHINA CONNECTION

"No one should be fooled into thinking that the US interest in India and the nuclear deal is about global warming and reducing pressure on oil... The actual rationale is to develop a strategic relationship to deal with the perceived challenges from China."**

Anuradha Chenoy, professor of international studies at the Jawaharlal Nehru University (JNU).

With the stated aim of transforming the U.S.-India relationship into “a global partnership that will provide leadership in areas of mutual concern and interest”, Bush and Singh always intended that the U.S./India Nuclear Agreement be much more than just nuclear commerce. One central strategic factor that is a major determinant in the U.S./India Agreement is United States policy towards China. Absent the Soviet threat, China has quietly moved centre stage in Pentagon nuclear war planning and targeting.**

The Pentagon’s Nuclear Posture Review issued in 2001 is a critically important document setting as it does the blueprint for a Cold War Mark II, this time with China. In 2006 the Pentagon's quadrennial Defense Review Report**, singled out China as the country with ‘greatest potential’ to challenge the U.S. militarily. In contrast, the Pentagon described India as “emerging as a great power and key strategic partner…( with) Shared values as long standing, multi-ethnic democracies provide the foundation for continued and increased strategic cooperation and represent an important opportunity for our two countries.”

For China, the Agreement is further evidence of U.S. policy,

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"The United States has decided that using India to check and balance China is of more importance than non-proliferation, and that worries China,"\(^{26}\) Shen Dingli.

As China is aware, the U.S./India Agreement is directly connected to Pentagon plans for containing and confronting China, with India lined up to play a role similar to that played by western Europe after 1945. Those who have suggested that China will be able to be assured that the Agreement is not part of a containment strategy are deceiving themselves.\(^{27}\) It will add a South Asian dimension to an arms race, including nuclear weapons-modernization, already underway in the North Asia and Asia/Pacific region.

THE U.S. INDIA AGREEMENT: IMPACT ON NUCLEAR TEST BAN TREATY AND FISSILE MATERIAL TREATY

"The agreement does not in any way affect India's right to undertake future nuclear tests if it is necessary in India's national interest." Prime Minister Singh, August 2007

Two long-standing treaties of the global nuclear disarmament and non-proliferation regime are the Comprehensive Nuclear Test Ban Treaty or CTBT; and the Fissile Material Treaty (FMT). The Test Ban treaty was agreed in 1996 but has yet to enter into force, while the Fissile treaty has yet to be negotiated. The U.S./India Agreement as drafted will not require India to sign the CTBT or the FMT.

COMPREHENSIVE TEST BAN TREATY

The United States and former Soviet Union conducted over 1700 nuclear tests during the Cold War\(^{28}\). So far, India has conducted six nuclear weapons tests. While India will never conduct the number of tests by either superpower (or even lesser nuclear powers such as the UK, France and China\(^{29}\)), it is embarked on an enhanced nuclear weapons development program. Not surprisingly India’s nuclear weapons program is not open to international scrutiny. Analysts have estimated its stockpile at between 40 and 50 assembled nuclear warheads.\(^{30}\) Plans to increase this to between 300 and 400 weapons

\(^{26}\) Shen Dingli of Fudan University, Shanghai, quoted in “China likely to swallow anger over India nuclear deal” Chris Buckley, Reuters Beijing, August 29, 2007.

\(^{27}\) “But how will China vote?” Ravni Thukral, Honorary Director Euro-Asia Institute and Reader at the Department of East Asian Studies, University of Delhi August 4th 2007.

\(^{28}\) Between 1945 and 1992 the U.S. and Soviet Union conducted 1745 nuclear tests, see NRDC Nuclear Program archive, https://www.laondaverde.com/nuclear/nudb/datab15.asp

\(^{29}\) Ibid, France, UK, and China conducted 300 nuclear weapons tests between 1952 and 1996.
were reported in 2004. The timeframe for such a development will certainly be longer than that planned by the Indian Defense Ministry, and it may never be reached. But aided by the U.S. India Agreement, Indian policy is to increase its nuclear forces.

Whereas advanced computer simulation can substitute for real weapons test data, India’s nuclear weapons establishment could in future make the case for further nuclear weapons tests. The proposed Agreement does not limit India’s options for further nuclear tests.

The Agreement does not require India to sign and ratify the Comprehensive Test Ban Treaty, CTBT. In addition, even if India were to resume nuclear weapons testing there is no commitment by the U.S. to end nuclear trade. Under the United States Atomic Energy Act (1954), and the Hyde Act on the U.S./India Agreement, the testing of a nuclear weapon requires the United States to cut off nuclear trade with that state. The U.S./India Agreement, considered unprecedented in nuclear cooperation agreements offered by the United States, contains language that is open to interpretation. Suspension of nuclear trade following a test is not clear.

And as far as the Indian Government is concerned,

“Whatever is stated in the Hyde Act is not binding on us. How [the US] deals with it is their problem.” Pranab Mukherjee August 16th 2007

Under the terms of the U.S./India Agreement, in the event of U.S. nuclear fuel supply to India being suspended, alternative fuel supplies would be found, with the active assistance of the United States. On non-proliferation grounds the Agreement completely fails to deter India from future nuclear weapons testing.

Since the CTBT was agreed in 1996, 176 nations have signed the treaty. However, it has yet to receive sufficient signature and ratifications for it to enter into force. Specifically, two of the five official nuclear weapons states, the United States and China have yet to

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31 Indian Defense Ministry source to Defense News in late 2004 that in the next five to seven years India will have 300–400 nuclear and thermonuclear weapons distributed to air, sea, and land forces, November 1st, 2004, as cited in ibid.

32 NRDC report that in 2003 the need to control the expanding program led to the establishment of the Nuclear Command Authority and tri-service Strategic Forces Command. Over the next decade, according to Defence Ministry sources cited in Defense News, India expects to spend $2 billion a year to create a Strategic Forces Command infrastructure, ibid.


34 “Singh coalition tries to finesse challenge to safeguards negotiation” Sunil Saraf, New Delhi; Mark Hibbs, Bonn Nuclear Fuel Sept 10th 2007
ratify, while seven other states required to sign and ratify have not done so, including India and Pakistan.\(^{35}\)

More than five decades ago, India was the first to call for a complete ban on nuclear weapons tests.\(^{36}\) However, by 1996 it saw the Treaty as sanctioning a nuclear haves and have-nots status, with it in the latter group. The United States which had long opposed a CTBT in the 1990’s, recognized the non-proliferation advantages of securing such a Treaty, specifically as a way of capping India and Pakistan’s nuclear weapons development. India’s position that the CTBT needed to be more focused on disarmament led to them proposing language in the drafting of the CTBT that would require complete nuclear disarmament within “a time bound framework” but it was opposed by the five official nuclear weapons states. As India saw it at the time, the CTBT was only agreed to by the large nuclear weapons states after they had conducted over 2000 nuclear tests and developed tens of thousands of nuclear weapons. For India it was a non-proliferation measure rather than nuclear disarmament.

Of course this is only one aspect of India’s relationship to the CTBT. Indian leaders were also concerned about its future options for testing being restricted by the Treaty. It had only conducted one nuclear test when the Treaty was signed in 1996. A further five tests in 1998 provided India with more data to develop its new warheads, but they remain insignificant in terms of the number of tests conducted by the U.S. and other weapons states. There is no clear evidence that India has plans for future nuclear testing, however, Prime Minister Singh assured the Parliament in 2007 that "The agreement does not in any way affect India's right to undertake future nuclear tests if it is necessary in India's national interest." \(^{37}\)

What Prime Minister Singh is referring to is that the Agreement as drafted does not explicitly commit the U.S. to suspending nuclear trade in the event of Indian nuclear weapons tests. The United States Congress passed the Hyde Act that requires the U.S. to cut off supply in the event of a nuclear test by India. Further, the United States has written into the Agreement a commitment to provide India reliable access to nuclear fuel, even in the event of the U.S. suspending supply. However, Hyde requires the U.S. to discourage other NSG states to supply fuel after the U.S. has cut-off supplies. But the Agreement reassures India that this would not impact on their nuclear program. Article Five of the Agreement\(^{38}\) specifically commits that the U.S. will help India develop a

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\(^{35}\) Article XIV of the CTBT requires Annex II states to sign and ratify before entry into force of the CTBT. The U.S. Senate opposed ratification in 1990, see [http://www.armscontrol.org/pdf/20070918_ngo_statement-1.pdf](http://www.armscontrol.org/pdf/20070918_ngo_statement-1.pdf)

\(^{36}\) The others being, Indonesia, North Korea, Israel, Egypt and Iran. Prime Minister Nehru was the first leader to call for an end to nuclear weapons tests on April 8th 1954, see, India's Nuclear Program - From 1946 to 1998 M. V. Ramana , Network of Engineers and Scientists Against Proliferation

\(^{37}\) “India free to test nuclear weapons under U.S. deal” The Associated Press, August 13, 2007

strategic reserve of fuel. As well as in the event of disruption to U.S. supply, it would work with India to negotiate with other nations alternative fuel supply.

The U.S. India Agreement by securing future nuclear fuel supplies for India removes one major impediment for Indian planners when considering future nuclear testing. It is tacit endorsement by the United States of India’s nuclear weapons arsenal and its right to increase and enhance its warheads.

**FISSILE MATERIAL TREATY**

The United States claims that its proposed Agreement with India will further nuclear non-proliferation, including India’s support for the early negotiation of a Fissile Material Treaty. The problem is that the world has been waiting for 60 years for such a treaty and is still waiting.\(^{39}\) In the meantime, the U.S./India Agreement will permit the latter to significantly increase its stockpile of weapons material. One direct consequence is that Pakistan in response is likely to increase its own stocks of fissile material, thus further undermining non-proliferation and peace and stability in South Asia.

Its worth stating that all of this is in direct violation of United Nations Security Council resolution 1172 (1998), supported by the United States, which included a demand for India (and Pakistan) to cease production of fissile materials for weapons purposes.\(^{40}\)

India’s current stockpile of weapons usable fissile material has been estimated at\(^{41}\):

\[^{39}\text{The concept of a fissile material treaty was first suggested 55 years ago in the Baruch Plan. The Fissile Material Cut off Treaty (FMCT) concept was further advanced by President Dwight Eisenhower in his 'Atoms for Peace' speech at the UNGA, when he said: "The United States would seek more than the mere reduction or elimination of atomic materials for military purposes".}\]

\[^{40}\text{See, Resolution 1172 (1998) in the aftermath of Indian and Pakistan nuclear weapons tests, adopted by the Security Council at its 3890th meeting, on 6 June 1998 ~"7. Calls upon India and Pakistan immediately to stop their nuclear weapon development programmes, to refrain from weaponization or from the deployment of nuclear weapons, to cease development of ballistic missiles capable of delivering nuclear weapons and any further production of fissile material for nuclear weapons, to confirm their policies not to export equipment, materials or technology that could contribute to weapons of mass destruction or missiles capable of delivering them and to undertake appropriate commitments in that regard",}\]

• 500 kg of weapon grade plutonium from its CIRUS and Dhruva reactors, sufficient for roughly a hundred nuclear warheads;

• 11.5 tons of reactor grade plutonium in the spent fuel of its heavy water based power reactors;

• another 6.8 tons of reactor grade plutonium in the spent fuel produced so far in India’s currently safeguarded reactors;

Future production of Indian fissile material has been calculated as follows:

• the CIRUS reactor will be shut down in 2010, by which time it could yield another 45 kilograms of weapon grade plutonium;

• the Dhruva reactor will continue to operate and to add about 20-25kg/year;

• a new plutonium production reactor is planned at least as capable as Dhruva;

• Prototype Fast Breeder Reactor (PFBR) due to be completed in 2010, could produce up to 130 kg of weapon grade plutonium each year; this four-fold increase in India’s current production would amount to another 25 nuclear weapons a year;

• Between entry into force of the U.S./India Nuclear Cooperation Agreement and 2014, eight of its sixteen power reactors (to be declared civilian and open them for IAEA safeguarding) could yield another four tons of un-safeguarded plutonium;

• The eight power reactors outside IAEA inspection could add 1250 kg per year of reactor-grade plutonium;

• India will be able to import uranium for safeguarded reactors giving it a ‘surplus’ of 70-120 tons a year of domestic uranium that it can use, if it so chose, in its un-safeguarded weapons program – producing up to 200 kg a year of weapon grade plutonium in its ‘military’ power reactors.

All in all India stands to significantly increase its capacity and stocks of weapons-usable plutonium during the coming years, during a period in which there is likely to be no agreement on a Fissile Material Treaty. Due to India’s isolation from nuclear commerce, it developed its reprocessing technology largely independently. For this reason, its actual processing capacity has remained quite limited. The U.S./India Agreement as drafted by both governments intends to free up this restriction leading to significant increase in India’s capacity to reprocessing spent fuel leading to the production of separated plutonium.
Unlike Pakistan, India has not prioritized uranium enrichment during the past decades, pursuing the plutonium route to the atomic bomb rather than highly enriched uranium. It does however, have two gas-centrifuge uranium enrichment facilities at the Bhabha Atomic Research Center complex and at Rattehalli, near Mysore. From the 1980’s India was able to secure sensitive technology and materials from German Swiss, and French companies to assist in the construction of this plant, with reports suggesting that this international procurement continues today. The Rattehalli facility is believed to be focused on enrichment for fuelling India’s nuclear powered submarine, ATV. Its capacity is estimated at 20kg of HEU each year. Under the U.S./India Agreement, importation of low-enriched uranium will free up existing and any future domestic enrichment capacity for military use – to fuel submarines or thermonuclear weapons. In 2006 evidence was released of a clandestine procurement network operated by India to secure technology for uranium enrichment at Mysore. Under the future U.S./India Agreement accessing sensitive technology will be considerably easier.

In response to the U.S./India Agreement, Pakistan has stated its intention to respond. Pakistan’s National Command Authority (NCA), chaired by then President Pervez Musharraf, has declared that,

“In view of the fact the [U.S.-India] agreement would enable India to produce a significant quantity of fissile material and nuclear weapons from unsafeguarded nuclear reactors, the NCA expressed firm resolve that our credible minimum deterrence requirements will be met.”

In recent years evidence has emerged of increased fissile material production capacity in Pakistan, including construction of a new larger plutonium production reactor and reprocessing plant. The reactor at Khushab could produce over 200 kilograms of weapon-grade plutonium per year once fully operational, sufficient for 40-50 nuclear weapons.

If the U.S./India Agreement enters into force, Pakistan is not going to sit back and watch India’s increased capacity to produce fissile material without responding in kind.

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43 Opici, Mian et al, The ATV will operate with uranium enriched to 45% to 30%, thus Ratthalli will be capable of producing 40-70 kg each year.


45 See, “Chashma Nuclear Site in Pakistan with Possible Reprocessing Plant” David Albright and Paul Brannan January 18, 2007, Institute for Science and International Security (ISIS). Pakistan’s current reprocessing plant, New Labs facility at PINSTECH located near Islamabad, is capable of handling the spent nuclear fuel from the first Khushab heavy water reactor. Bringing into operation a reprocessing facility at Chashma would significantly increase Pakistan’s plutonium separation capability and account for what will soon be an expanded plutonium production capacity—as represented by the construction of a second heavy water reactor at Khushab.
Likewise Pakistan’s expanded fissile material production efforts, underway before the announcement in 2005 of the U.S./India Agreement, is a major factor in determining India’s future program. Policy makers in the United States may be deliberately supporting India to maintain its capacity to match Pakistan (and increase pressure on China) but it increases the risk of a nuclear arms race in South Asia. Those nations considering supporting the U.S./India Agreement need to be aware of their complicity in the further destruction of global efforts to control nuclear non-proliferation.

The cynical would be right to point out that one of the conditions required of India under the Agreement, support for early negotiation of a fissile material treaty, is as a consequence of the Agreement now even less likely to materialize in any meaningful form.46

NUCLEAR SAFEGUARDS AND U.S. INDIA AGREEMENT

Summary - Nuclear safeguards are the stated means by which commercial nuclear programs are operated with the confidence that they will not be diverted for military purposes. Applied globally by the International Atomic Energy Agency, IAEA, they unfortunately are incapable of meeting their stated objectives and remain flawed in application – significant amounts of nuclear material can be diverted from large nuclear plants – reprocessing and enrichment – without the IAEA even detecting its loss. The U.S./India Agreement further weakens this poor system further by exempting a large part of India’s program from international inspection, and only phasing in other parts. The importance of the Agreement is less on the actual application of safeguards in India but rather its global impact on other states within the NPT. The U.S./India Agreement endorses a two tiered non-proliferation regime – with those inside the NPT such as Iran and Japan operating under comprehensive and compulsory nuclear safeguards, while India picks and chooses which facilities to ‘open’ to inspection. All of this endorsed enthusiastically by the IAEA. This section details the safeguards regime and the additional risks from the U.S./India Agreement.

"No safeguards scheme, including that of the International Atomic Energy Agency IAEA, can be effective if such sensitive materials and facilities (plutonium and reprocessing plants) are widely available in Non-Nuclear Weapon States." U.S. National Defence Research Institute,

46 In 1995 Greenpeace International began the drafting of its own Comprehensive Fissile Material Treaty, the intention of which was to cover all weapons-useable material. In particular it would not exclude the commercial reprocessing programs operating in Japan, France, Russia and the UK. As a result of plutonium reprocessing, led by the UK and France, commercial stocks of this weapons-useable material now rival those within the military programs of all nuclear weapon states. Japan’s current stock for example is in excess of the combined stocks of Israel, Pakistan, India, North Korea and China. Germany, Switzerland, the Netherlands, Spain, Canada and even Sweden own stocks of plutonium sufficient for thousands of nuclear weapons. Today, no precise figure exists for the amount of weapons-useable material in global circulation, but it is nearly 2 million kilograms. The draft was submitted to the Conference on Disarmament in February 2006, see, www.greenpeace.org/international/press/reports/comprehensive-fissile-material

One possibility is that the U.S./India Agreement is terminated by a future U.S. President after January 2009, and renewed commitment by Washington to negotiate a fissile material treaty.
As a condition of the U.S./India Agreement, a new but limited safeguards arrangement is required to be negotiated between India and the International Atomic Energy Agency (IAEA). These negotiations began in autumn 2007, with agreement reached in early 2008, and approval by the IAEA Board of Governors in August.

Nuclear safeguards are a system of monitoring and control over nuclear material that can be used for both commercial nuclear power and to make nuclear weapons. They are applied globally by the Vienna-based IAEA. The two principle weapons materials covered by safeguards are plutonium and highly enriched uranium (HEU). The IAEA considers 8 kilograms of plutonium from a commercial power reactor sufficient to make one nuclear weapon. The figure is in fact considerably less – between 1 and 3kg depending upon the degree of sophistication of the weapons designer. Similarly for HEU, the IAEA figure is 25kg, whereas 5-10kg is sufficient.

As India has not signed the NPT, it is not required to apply safeguards to its nuclear material. A limited voluntary system does exist between the IAEA and India, as with other nuclear weapon states, covering some of its nuclear material at commercial nuclear power plants. But the bulk of India’s program remains outside safeguards. Under the U.S./India Agreement, India will enter into a new safeguards agreement with the IAEA. This will be more extensive than the present arrangement, but will significantly permit India to retain outside international monitoring large amounts of nuclear weapons material. India in this regard is acting no differently to the NPT recognized weapon states, which for example in the case of the UK claimed that it would place its civilian nuclear plants under safeguards, “subject to exclusions for national security reasons only”.

Importantly safeguards are in theory supposed to detect diversion within sufficient time to alert the IAEA, and by extension the international community, to the diversion of peaceful nuclear materials into possible military weapons use. At which point reports are reviewed by the IAEA Board of Governors, with possible sanction and reporting to the United Nations Security Council.

It is important to stress that even if India was covered by IAEA full-scope safeguards there would remain a significant proliferation threat. Firstly, such safeguards do not verify the completeness of declarations by states, nor are they designed to uncover undeclared activities. But beyond this limitation is that nuclear safeguards as applied by the IAEA are incapable of meeting their own stated goals. Specifically, they are not

capable of detecting diversion from safeguarded material in nuclear plants, in particular reprocessing, fuel manufacturing and enrichment facilities.\textsuperscript{51} For obvious reasons, the IAEA and member states rarely if ever talk in public about the fundamental problems of nuclear safeguards as applied to large amounts of weapons material. However, those with precise knowledge of their limitations have over the years made it public that they are incapable of working as stated by the IAEA and member states.\textsuperscript{52}

This was known as far back as 1946, when in one of the most significant documents of the nuclear age, the Acheson-Lilienthal report stated,

\textit{“We have concluded unanimously that there is no prospect of security against atomic warfare in a system of international agreements to outlaw such weapons controlled only by a system which relies on inspection and similar police-like methods.”}\textsuperscript{53}

\textsuperscript{51} “Are IAEA Safeguards on Plutonium Bulk-Handling Facilities Effective?” Marvin M. Miller, Department of Nuclear Engineering Massachusetts Institute of Technology, in paper for Nuclear Control Institute, August 1990, available at: \url{www.nci.org/k-m/mmsgrds.htm}

\textsuperscript{52} Ibid.

Verifiable nuclear disarmament, according to the Acheson-Lilienthal panel, would require that countries be completely prohibited from producing fissile materials or conducting activities supporting a nuclear weapon program.

Sixty years after Acheson-Lilienthal the world has over 250 metric tons of separated plutonium in commercial nuclear programs, sufficient for fifty thousand nuclear weapons. While the IAEA has actively promoted this nuclear proliferation, it has overseen the application of a safeguards system incapable of meeting the required non-proliferation objectives.\(^\text{54}\)

Given flawed nuclear safeguards, the real significance of the U.S./India Agreement will be that it endorses a two tiered non-proliferation system. India is permitted to retain its military nuclear program outside international inspection and control, whereas other states such as Iran or Japan are required to operate under a full-scope all encompassing safeguards system. The effect will be at the political rather than technical level. Iran and Japan, along with the other 182 non-nuclear weapon states within the NPT do not have the option of a voluntary safeguards system it’s a mandatory requirement of being an NPT party.\(^\text{55}\) For Pakistan, aware that the safeguards to be applied by the IAEA will not in any way reduce India’s capacity to produce fissile material for nuclear weapons will itself have further incentive to enhance its nuclear program.

The irony is that India has long condemned the NPT as discriminatory, one principle reason for it not signing the Treaty. Noted analyst Praful Bidwai puts it this way,

> “The deal marks a major departure from New Delhi’s earlier insistence on international and universal non-discriminatory treaties on arms control/disarmament. But this bilateral agreement is now meant to be imposed upon the multilateral International Atomic Energy Agency and the plurilateral Nuclear Suppliers Group for their approval — a procedure that India would have strongly objected to in the past.”\(^\text{56}\)

The U.S./India Agreement puts India into the same camp as those it has long condemned.

By rewarding India with global access to nuclear technology and materials, while only applying limited safeguards, the United States (and any other state that endorses the Agreement) is further weakening an already teetering international non-proliferation regime. One obvious question that will arise during the run up to the 2010 NPT Review


\(^{55}\) All IAEA voluntary safeguards agreements with the five official nuclear weapons states – Russia, the United States, China, France and the United Kingdom are similar. In the 1960’s the U.S. and UK offered to put all their civilian plants under safeguards as an incentive to states to sign on to the emerging NPT. In practice only some of the plants offered are currently safeguarded – the IAEA safeguards budget precludes a comprehensive approach.

\(^{56}\) “Sanctifying mass destruction” Frontline, 8 September 2007.
Conference is why remain inside a nuclear regime with all its restrictions, when a nation that has never signed the NPT can attain the extensive benefits with no limits on what it determines necessary for national defense?

SAFEGUARD SPECIFICS OF U.S. INDIA AGREEMENT

“The U.S.-India deal …does not add to or detract from India’s nuclear weapons program” Mohamed ElBaradei, Director General of the International Atomic Energy Agency.

The IAEA Director is wrong – the U.S./India Agreement will add directly to India’s capacity to enhance its nuclear weapons program. ElBaradei has been actively promoting early conclusion of negotiations with India, a position at odds with concluding the best possible safeguards agreements. Given the pressure to reach agreement in 2008, it is now clear that IAEA negotiators have compromised far more than India.

India has 22 power reactors in operation or currently under construction, and under the Agreement with the United States it has offered to place eight additional reactors under IAEA safeguards between 2006 and 2014. Some of the facilities at the Nuclear Fuel Complex, Hyderabad, have been identified as civilian and are to be offered for safeguards by 2008. Other facilities to be declared civilian include three heavy water plants.

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57 Rethinking Nuclear Safeguards, Washington Post, 14 June 2006, El Baradei and the IAEA received the 2005 Nobel Peace Prize. While the majority of non-proliferation and arms control specialists have been critical of the U.S./India Agreement, a number have been advocates. Most prominent in this has been the Carnegie Endowment for International Peace Senior Associate, Ashley J. Tellis, who is considered a key player in initiating the agreement in the early Bush Presidency, see, Atoms for War? U.S.-Indian Civilian Nuclear Cooperation and India's Nuclear Arsenal Carnegie Endowment Carnegie Endowment Report, June 2006, http://www.carnegieendowment.org

58 Reported in Nuclear Fuel citing IAEA sources “because IAEA Director General Mohamed ElBaradei wants to bring the negotiation to a conclusion soon, to permit the IAEA Board of Governors and, thereafter, the NSG, to take action, the IAEA negotiators may have acceded to India on the issue of the timing of prenotification for nuclear activities prompting safeguards.” “Reprocessing rights resurface in US-India talks” Nuclear Fuel February 25th 2008.

59 Opit, Fissile Materials in South Asia, Mian et al. Two Rajasthan reactors still under construction, RAPS 5 and 6, which would be made available to IAEA monitoring when they commence operation in 2007 and 2008 respectively; RAPS 3 and 4, which are already operating but would only be available for safeguards in 2010, The two Kakrapar reactors, which would to be made available for safeguards in 2012, and two reactors at Narora would become available for safeguards in 2014. Implementation of the India-U.S. Joint Statement of July 18, 2005: India’s Separation Plan, www.mea.gov.in/treatiesagreement/2006/11a1105200601.pdf .Currently, India has four reactors under IAEA safeguards, the U.S.-built Tarapur 1 and 2, and the Canadian-built Rajasthan 1 and 2. The two Koodankulam reactors that are under construction by Russia will also be subject to safeguards under the associated India-Russian contract.

60 Ibid, Fuel cycle facilities to be safeguarded are Uranium Oxide Plant (Block A), Ceramic Fuel Fabrication Plant (Pelletizing) (Block A), Ceramic Fuel Fabrication Plant (Assembly) (Block A), Enriched Uranium Oxide Plant, Enriched Fuel Fabrication Plant, and Gadolinia Facility. There seem to be other fuel production facilities at the Nuclear Fuel Complex that will remain unsafeguarded, such as the New Uranium Oxide Fuel Plant;
(leaving at least two out of safeguards), and the two Away-from-Reactor spent fuel storage facilities that contain spent fuel from the safeguarded Tarapur and Rajasthan reactors. India would permanently shut down the Canadian-build CIRUS reactor in 2010, which has been used to make weapon grade plutonium. It would also shift the spent fuel from the APSARA reactor to a site outside the Bhabha Atomic Research Centre and make it available for safeguarding in 2010.

A significant proportion of India’s nuclear complex would remain outside IAEA safeguards and could, almost certainly will, have a “strategic” function. The Indian breeder reactor program will remain inside its military program and outside IAEA safeguards. Current plans, though unlikely to be realized in the timeframe claimed, are for completion of the Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, near Madras, followed by four additional breeder reactors by 2020. With five planned breeders India’s military, will be able to produce about 500-800 kg per year of weapon grade plutonium. Reprocessing and enrichment facilities also are to remain outside safeguards.

The nuclear deal does not constrain India’s use of the plutonium from the spent fuel discharged by any of its currently un-safeguarded reactors. The six currently operating reactors to be placed under safeguards will add to the current stock of 11.5 tons of reactor grade plutonium before they are opened to inspection. The total contribution from these six reactors will be about 4300 kg before they are all finally under safeguards. If this plutonium is not put under safeguards, the International Panel on Fissile Materials calculates that “it could provide an arsenal of over 1300 weapons.”

**IAEA COMPROMISE OVER SAFEGUARDS**

Far from being the United Nations nuclear watchdog, the IAEA as required by its statute is in the business of proliferating nuclear technology and materials worldwide. Given the high politics involved in the U.S./India Agreement, it is not surprising that reports are available at http://www.iaea.org/About/statute_text.html#A1.1

61 Ibid, This unsafeguarded nuclear complex would include the Tarapur 3 & 4 reactors, each of 540 MWe capacity, the Madras 1 & 2 reactors, and the four power reactors at Kaiga. Together, these unsafeguarded reactors have 2350 MWe of electricity generation capacity. India also will not accept safeguards on the Prototype Fast Breeder Reactor (PFBR) and the Fast Breeder Test Reactor (FBTR), both located at Kalpakkam. Facilities associated with the nuclear submarine propulsion program would not be offered for safeguards.

62 Ibid, The PREFRE reprocessing plant has had safeguards in place when running spent fuel from Rajasthan 1 & 2.

63 Ibid, India’s current stockpile of weapon grade plutonium from its CIRUS and Dhruva reactors and found it to be about 500 kg. Assuming a typical figure of 5 kg of plutonium for each nuclear warhead, this stockpile would be sufficient for roughly a hundred weapons. Under the deal, India will be able to produce another 45 kg of weapon grade plutonium from its CIRUS reactor before it is shut down in 2010. The Dhruva reactor will continue to operate and add about 20-25 kg/year. A second Dhruva sized reactor that is being considered would add a similar amount each year.

64 Statute of the IAEA, “ARTICLE II: Objectives - The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose.” It came into force on 29 July 1957, available at http://www.iaea.org/About/statute_text.html#A1.1

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suggesting major compromise on the part of IAEA negotiators. Issues that proved controversial included:

- Prenotification of nuclear activities to the IAEA; India has refused to accept this provision;\(^{65}\)

- Perpetuity - India has sought to exempt safeguards being applied to all nuclear installations and activities under the safeguards agreement.\(^{66}\) Perpetuity is a condition of the U.S. India Agreement according to U.S. officials, the Hyde Act and IAEA safeguards agreements;

- Identification of which facilities to be covered by safeguards – India had aimed to limit IAEA access to facilities identified by US and Indian negotiators as for peaceful use – the IAEA had wanted to include the spent fuel reprocessing plant at Kalpakkam within the scope of the safeguards pact.

One further area for which there was until recently no reported progress is the negotiation of a safeguards ‘Additional Protocol’\(^ {67}\). Such a protocol covering civilian nuclear

\(^{65}\) Before formal negotiations, it was reported that India had stated it would determine the timing of inspections, a position “not be acceptable to the IAEA,” according to IAEA officials as reported in “Singh coalition tries to finesse challenge to safeguards negotiation”, Sunil Saraf, New Delhi; Mark Hibbs, Bonn Nuclear Fuel Sept 10th 2007. Infcirc-153 requires the state to notify the IAEA of such activities, but a report in Nuclear Fuel suggested that “IAEA negotiators may have acceded to India on the issue” “Reprocessing rights resurface in US-India talks” Mark Hibbs, Daniel Horner, Nuclear Fuel February 25th 2008.

\(^{66}\) Infcirc-66 describes the standard agreement between the IAEA and non-weapon states that are not parties to the NPT. Parties to the NPT which are non-nuclear weapons states are required to have signed Infcirc-153, considered more challenging than the agreement that India will sign. The agreement being sought by India was reported to be a “new third category of safeguards…below the minimum standards” expected of non-nuclear weapons states, see, “Singh’s pullback sparks speculation on prospects of US-India deal” Daniel Horner, Nuclear Fuel, October 22nd 2007.

India has sought to have its IAEA safeguards agreement include reference to IAEA Board of Governors document GOV/1621, which informs the IAEA about how to interpret an Infcirc-66 safeguards agreement. GOV/1621 would inhibit the IAEA from applying safeguards in perpetuity to all nuclear installations and activities covered under the safeguards agreement.

\(^{67}\) Infcirc-540, a “model Additional Protocol for states having a safeguards agreement with [the IAEA], in order to strengthen the effectiveness and improve the efficiency of the safeguards system as a contribution to global nonproliferation objectives.” Since 1997, 124 states have negotiated such bilateral agreements with the IAEA on a voluntary basis. Additional Protocol to IAEA Safeguards Agreements designed to enhance significantly the credibility of the safeguards system. The main aim of the Additional Protocols is to enable the IAEA to provide assurance about both declared and possible undeclared activities by providing as complete a picture as possible of nuclear activities and not limit itself to the confines of nuclear activity. The Agency is allowed adequate rights of access and enables it to use the most advanced technology. Under the Additional Protocol, states are required to provide the Agency with an extra declaration containing information covering all aspects of their nuclear and nuclear fuel cycle activities. The Agency has the right to collect environmental samples anywhere it has the right of access. It plans to use remote monitoring technology extensively to improve the efficiency of the safeguards system.
facilities was a condition of the U.S./India Agreement “(India) sign and adhere to an Additional Protocol with respect to civilian nuclear facilities.” The 2006 Hyde Act, which was passed by the U.S. Congress to set some conditions for US-Indian nuclear cooperation in parallel with the bilateral cooperation agreement, sets forth in Section 104(b)(3) that one condition for Congress approving bilateral cooperation is that “India and the IAEA are making substantial progress toward concluding an Additional Protocol consistent with IAEA principles, practices, and policies that would apply to India’s civilian nuclear program.”

On the requirement that the IAEA and India make substantial progress on negotiation of an Additional Protocol, in late June, a U.S. official confirmed that there had been no negotiations between India and the IAEA.68

One month later on the day the IAEA Board approved the safeguards Agreement, chairman of Atomic Energy Commission, Anil Kakodkar, announced that negotiations had begun. However, a senior Indian nuclear official explained that the process of drafting an India-specific additional protocol, “may not be easy since this country stands between a weapon and a non-weapon state... Considering this there has to be a certain amount of give and take. An additional protocol is generally very intrusive, but it should not be with the case of India,” he said.69

The complexity of India’s nuclear program, including the separation of its hitherto inseparable civil and military programs, should have meant a long negotiating process over the safeguards agreement with the IAEA. Instead, in early 2008 it was reported that an agreed text was complete.

Despite early agreement in 2008, domestic factors in India prevented the final agreed safeguards text being submitted to the IAEA Board of Governors. This changed dramatically in early July, when the Indian Prime Minister attended the G8 Summit in Hokkaido Japan. The issuing of a communiqué70 by the G8 which supported efforts to expand nuclear trade with India, was matched by the IAEA announcing that India had submitted the final safeguards text for consideration by the IAEA Board of Governors.71 The official text intended for restricted access only was instead leaked July 7th 2008.72

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68 See “India still struggling to reach internal consensus on deal with U.S.” Nuclear Fuel June 30th 2008.

69 Certainly by the time of the NSG Plenary it is the case that no substantial progress has been made in the negotiation of an Additional Protocol. India’s 2nd round with IAEA will be tougher, The Times of India, August 3rd 2008, www.timesofindia.indiatimes.com/India/Indias_2nd_round_with_IAEA_will_be_tougher/articleshow/3319725.cms

70 G8 Leaders Stress Safe, Peaceful Nuclear Development - Key IAEA Roles Singled Out in Summit Statements, Civil Nuclear Cooperation with India: The Chairman’s summary stated: “We look forward to working with India, the International Atomic Energy Agency, the Nuclear Suppliers Group and other partners to advance India’s non-proliferation commitments and progress so as to facilitate a more robust approach to civil nuclear cooperation with India to help it meet its growing energy needs in a manner that enhances and reinforces the global non-proliferation regime.” See, http://www.iaea.org/NewsCenter/News/2008/g8leaders.html

71 Ibid, Draft India Safeguards Agreement Circulated to IAEA Board Members, 9 July 2008.
was clear from the text, it contained specific conditions that were uniquely favourable to India.

**BOARD OF GOVERNORS APPROVAL AND COUNTRY OPPOSITION**

Shortly after formal submission of the IAEA text, the date of August 1st was set for a specially convened IAEA Board of Governors meeting. Thus in a matter of weeks, the U.S. India Agreement had moved from being “nearly dead” to be on the verge of approval by the 35 nation IAEA Board. Narrowly surviving a vote of trust in the Indian Parliament, Singh’s decision forced IAEA member governments to take a final position on the safeguards text. Given the active endorsement of the IAEA Director ElBaredei, it was expected that the Board would approve the safeguards text.

However, in advance of the Board meeting, major issues of concern were raised by analysts critical of the Agreement. Underlying these concerns was the consistent position of India in seeking to reach agreement but without placing any restrictions on its future strategic nuclear weapons program. Since the 2005 original announcement of the Agreement, Indian domestic opposition to the Agreement had forced the Government to assert that no restrictions would be placed on its nuclear weapons program. In reaching agreement with the IAEA, India had insisted on pre-ambular language that it could cite as evidence of its ability to avoid future restrictions on its nuclear program, in the event of a nuclear weapons test for example.

While the IAEA Director ignored the proliferation realities of the U.S./India Agreement, and appeared to care little of the effect the agreement will have in undermining the credibility of the IAEA, it was hoped that member nations of the IAEA Board would challenge some of the glaring inconsistencies and ambiguities in the safeguards agreement, prior to any decision of approval.

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72 See [www.isis-online.org/publications/southasia/India_IAEA_safeguards.pdf](http://www.isis-online.org/publications/southasia/India_IAEA_safeguards.pdf)

73 IAEA to consider India atom inspections plan, Aug 1st, Reuters Vienna, July 14th 2008. The 35-nation IAEA Board of Governors usually meets five times a year, March, June and twice in September. Member States represented on the IAEA Board for 2007-2008 are Albania, Algeria, Argentina, Australia, Austria, Bolivia, Brazil, Canada, Chile, China, Croatia, Ecuador, Ethiopia, Finland, France, Germany, Ghana, India, Iraq, Ireland, Italy, Japan, Lithuania, Mexico, Morocco, Nigeria, Pakistan, Philippines, Russian Federation, Saudi Arabia, South Africa, Switzerland, Thailand, the United Kingdom, and United States of America.

74 New Life for the India Nuclear Pact, Washington Post, Bill Emmott, Monday, July 7, 2008. The decision by Singh and the ruling Congress Party to ignore opposition from leftist parties, led to a debate and vote of trust in the Indian Parliament on July 21st/22nd. The Singh government won the vote narrowly, 253 to 232; see, Trust vote in Lok Sabha to decide government's fate, July 16th 2008, [http://www.dailytimes.com.pk](http://www.dailytimes.com.pk), and Indian govt survives confidence vote: state TV. During the run up to the vote, PM Singh made clear to gain the support of the Samajwadi Party (an Indian political group previously opposed the deal), that "the 123 Agreement clearly overrides the Hyde Act" and that, as such, "there is nothing in the agreement which places an embargo on India's right to carry out a nuclear test if it thinks this is necessary in India's supreme national interest." NEW DELHI (AFP) July 22nd, 2008
The safeguards text contained preamble language that raised major concerns amongst nuclear specialists. Of particular note was,

“An essential basis of India’s concurrence to accept Agency safeguards under an India-specific safeguards agreement (hereinafter referred to as “this Agreement”) is the conclusion of international cooperation arrangements creating the necessary conditions for India to obtain access to the international fuel market, including reliable, uninterrupted and continuous access to fuel supplies from companies in several nations, as well as support for an Indian effort to develop a strategic reserve of nuclear fuel to guard against any disruption of supply over the lifetime of India’s reactors; and

• India may take corrective measures to ensure uninterrupted operation of its civilian nuclear reactors in the event of disruption of foreign fuel supplies;”75

In a critical analysis of the text Kimball, McGoldrick, and Scheinman,76 highlighted that,

• in relation to termination of safeguards “official clarification of the legal effect of the agreement, and that the Government of India publicly agrees to terms and conditions under which safeguards on nuclear material and nuclear facilities subject to the agreement may be terminated, before the Board takes a decision.” Together with an explanation from India to the Board as to what “corrective actions” it envisages to ensure an uninterrupted operation of its reactors in the event of disruption of foreign fuel supplies.”

And that

• the proposed India-IAEA safeguards agreement does not contain a declaration of the facilities, items, and materials it is agreeing to place under safeguards. This is unique in the fifty year history of IAEA negotiations of safeguards agreements. Highlighting further the utter failure of the IAEA Secretariat to take the proliferation risks seriously was India reserving “the right to amend or adjust the list or to delay the dates on which it promises to place facilities on the safeguards inventory, depending on India's "access to the international fuel market, including reliable, uninterrupted and continuous access to fuel supplies from companies in several nations..." The Board was recommended to seek a declaration from India in advance of a decision.


Other sections of the safeguards text also highlights the nature of India’s nuclear program and the degree to which the IAEA is recognizing its nuclear weapon’s status. On the issue of blending of nuclear material, specifically plutonium and uranium, (section E 95) the text appears to provide assurance that there would be no material gain India, given that the fissionable (weapons usable) isotopes should remain equivalent. Blending has traditionally been used by nuclear weapon states to increase its available weapons material. Put crudely, lower grade but larger volume ‘commercial’ nuclear material is mixed with lower volume but higher (weapons)-grade material. One example pertinent to India was the U.S. and French blending of supergrade plutonium produced in the breeder blankets from their fast breeder reactors. India as noted has an ambitious breeder program, to be kept out of safeguards for strategic purposes. However, as already noted the IAEA is unable to meet its existing safeguards detection goals, so nothing will be precise in this area. In addition, the possibility that India will be prepared to share detailed fissile content figures with the IAEA, for example the amount of weapons grade plutonium 239 contained in un-safeguarded material, seems remote. While no different other nuclear weapon states, codifying India’s right to blend safeguarded and un-safeguarded material illustrates further the dangerous precedent set by the IAEA. Understandably, Pakistan officials have noted this issue with concern given the advantage it will provide India in fissile materials production.77

While Board members were called on to clarify these and other issues, Indian officials were doing their best to explain the agreement to their domestic critics. Worth noting for example is the high level press conference held in New Delhi July 12th attended by Atomic Energy Commission Chairman Anil Kakodkar, National Security Adviser M.K. Narayanan and Foreign Secretary Shiv Shankar Menon. Explaining the advantages for India’s nuclear program and the layers of protection built into the Agreement, Kakodhar stated,

“We have always been saying we are talking about permanent safeguards on the basis of permanent supplies, and the question of corrective measures which have been built in essentially arises if this understanding is breached.”78

In the run up to the August 1st meeting, India and the United States briefed IAEA member states. With the exception of Mexico, states concerned about the Agreement refused to speak on the record. But reports suggest that Mexico’s views were widely shared.

“If you ask me, the one big thing which worries everyone is that this could be a precedent for other countries to come some day before the IAEA and ask for a similar agreement, including your neighbour,” said Mexican Ambassador Alejandro Diaz.79 “I think Pakistan will argue that the Secretariat should include similar provisions in any

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77 ‘India-IAEA Safeguards: Legal and Political Implications’ organised by the Strategic Technology Resource (STR), as reported in The International News, Noor Aftab, August 6th 2008 Islamabad


79 “Most IAEA members worried about precedent being set for Pakistan” Siddharth Varadarajan The Hindu Aug 1st 2008
safeguards agreement it negotiates with them.” Summing up the fundamental problem, Diaz stated,

“the problem with the draft was not its technical complexity but the fact that “some of the shades of the agreement are not so nice” because India was being accorded a status not in keeping with the strict categorizations of the NPT.

IAEA Board Approval but warnings of “the end of the current non-proliferation regime” Government of Switzerland.

On August 1st 2008, the IAEA Board of Governors convened in special session and approved by consensus the IAEA safeguards agreement with the Government of India. Director ElBaradei stated that,

"The Board of Governors this afternoon adopted by consensus the agreement to apply safeguards to civilian nuclear facilities in India. I believe the agreement is good for India, is good for the world, is good for non-proliferation, is good for our collective effort to move towards a world free from nuclear weapons. What the agreement does is bring India closer to the debate on our ultimate goal, which is the goal of the Nuclear Non-Proliferation Treaty (NPT) – to establish a world free from nuclear weapons.”

In contrast to the reality of India’s plans for increasing production of both fissile materials, and nuclear weapons, ElBaradei stated "I hope it will also lead to a moratorium on production of any nuclear material for weapons purposes, until we have the Fissile Material Cut-off Treaty in force.”

Its difficult to understand whether the Director of the IAEA is being deliberately disingenuous, knowing full well that one of the objectives held by the Indian nuclear establishment for the Agreement is the ability to free up domestic uranium for nuclear weapons production, or whether he really is woefully ignorant of India nuclear program. To give him the benefit of the doubt, let’s say it’s a combination of the two.

In conclusion he stated, "The India Safeguards Agreement could have, if properly implemented, a lot of positive implications, development implications, security implications, non-proliferation implications, and arms control implications. I have been supporting the agreement from day one and am very happy today that I see that my judgment has been certified by the Board in approving the agreement by consensus."

As detailed earlier the implications he talked about are almost entirely negative, and well understood by the very IAEA Board members that had earlier approved the agreement.

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Whereas there had been no expectation that the Board members would block approval, it would be a mistake to interpret the result as removing concerns and opposition. In the hours and days after the decision, details of strong views expressed at the meeting emerged. While the official transcript of the meeting remains confidential, it was confirmed that a range of countries gave “free vent”\(^1\) to their views on the wider context, stressing, variously, that India give up nuclear weapons, join the NPT, and sign the Comprehensive Test Ban Treaty. Nations expressing these views included Ireland, the Netherlands, Austria, Switzerland, Japan, Norway and Brazil.

Specific issues raised included:

- Austria, the Netherlands and Norway issued a joint statement warning that the consensus approval "does in no way prejudice the decision on a possible India-specific exemption in the Nuclear Suppliers Group which will be discussed in the appropriate forum."

- Switzerland, told the Board that because of “fundamental reasons” it was “not satisfied” by the safeguards agreement for India, suggested it would play an active role in upcoming NSG deliberations. “In a little more than two weeks, the NSG will pose the question whether to uphold its directives banning exports to NPT non-parties,” the Swiss statement said. “If the [safeguards] agreement is approved today, and if an exception to the NSG directives is adopted [for India], it will be necessary to conclude that the non-proliferation regime that we know has reached its end. Switzerland continued, “In our view, from now on we will have to put in place a regime to replace it.” A decision by the board to approve the safeguards agreement, Switzerland said, “would discriminate against the rights of NPT non-nuclear weapons states by NPT non-parties.”\(^2\)

- Ireland put forward strong reservations at the IAEA meeting. Its ambassador at the IAEA is reported to have said that if the matter had been put to vote he would have been forced to abstain;\(^3\)

- Austria, strongly criticized the safeguards agreement, its Ambassador said he disagreed with those who argued the Indian text was simply an “umbrella agreement” based on the standard template. Describing the draft as “an empty shell,” he declared that it was only out of respect for the DG and the Secretariat that Austria had decided to join the consensus in favor of the draft\(^4\);

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\(^1\) See, “As Pakistan hails ‘precedent,’ other IAEA members express doubts, fears” Siddharth Varadarajan, The Hindu, August 2nd 2008.

\(^2\) See, “Some in NSG predict prolonged debate over conditions for Indian exemption” Nuclear Fuel, August 11th 2008

\(^3\) Delhi risks a stumble at the finish line, Sudha Ramachandran, August 5th 2008, ww.atimes.com/atimes/South_Asia/JH05Dh0.1.html

• Japan and Brazil, have said that their going along with the IAEA consensus should not be taken to mean that they will not object in the NSG, with Brazil expressing its reservations about the implications of the safeguards agreement for the NPT system;\textsuperscript{85}

• China noted that many countries had raised questions and concerns about the safeguards agreement and said these should be addressed, and that it was a reluctant supporter of the agreement. The Chinese Ambassador added that international non-proliferation norms should be respected and acknowledging a possible future request by Pakistan, stressed that the IAEA should not have a discriminatory approach towards other states which might come forward to negotiate a similar agreement.\textsuperscript{86}

• Egypt’s statement to the IAEA Board of Governors made it clear that if the plan aimed at justifying certain exceptions to established rules, then the IAEA governors’ approval of the safeguards agreement would most probably lead to further marginalization of the nuclear non-proliferation system. The Foreign Ministry warned of unforeseen consequences especially in the Middle East region where some nuclear facilities are not under IAEA safeguards (in reference to Israel.)\textsuperscript{87}

Following the decision to approve the safeguards text, Pakistan expressed the view that a ‘new’ precedent had been set\textsuperscript{88}. Ambassador Shahbaz, who took the floor after the Indian agreement was adopted, entered into the record the “considered position” of Pakistan’s National Command Authority (NCA) had taken on the India-U.S. nuclear deal. The Foreign Ministry warned of unforeseen consequences especially in the Middle East region where some nuclear facilities are not under IAEA safeguards (in reference to Israel.)\textsuperscript{87}

Iran, as an observer to the IAEA Board, while acknowledging India’s right not to join the NPT and to develop nuclear energy, blasted the U.S. for “double standards” and warned that the Indian agreement should not become a precedent for legitimizing Israel’s possession of nuclear weapons.\textsuperscript{89}

As expected France, holding the current Presidency of the European Union and on behalf of the EU said the agreement would "reinforce" the non-proliferation regime and sought

\textsuperscript{85} Ibid.

86 Ibid and “China supports reluctantly even as friend Iran opposes”, Indrani Bagchi The Times of India August 2nd 2008.

87 See, “Egypt urges studying UN nuclear watch dog inspection plan for India”,

88 Opcit, the Hindu, August 2nd 2008.

89 See, “Iran: Soltuniyeh warns Governors Council not to adopt double standards” IRNA August 2nd 2008
speedy finalization of the Additional Protocol with IAEA. This despite the views of EU members states, including Ireland and Austria.

German Foreign Minister Frank-Walter Steinmeier, welcomed the IAEA Board decision, emphasizing the importance of assurances from ElBaradei that the safeguards agreement "meets the standards of the IAEA and thus contributes to enhancing the international non-proliferation system." He said that for the Federal Government, "this assessment carries particular weight, as the IAEA is the 'guardian of the non-proliferation regime'. He added that Germany shared the IAEA’s expectation that facilities placed under its jurisdiction "will remain under permanent IAEA control."

IAEA Director ElBaradei, noting that safeguards would be applied from 2009, defended the agreement, rejecting the claim that it was an empty shell. In response to Board nations concerns he insisted there were no conditions for the discontinuation of safeguards other than those provided by the safeguards agreement itself.

“The termination provisions contained in the agreement are the same for other 66-type agreements,”

But then added

“Naturally, as with all safeguards agreements, this agreement is subject to the general rules of international law. Therefore, the agreement should be read as an integral whole. The preamble provides for contextual background and safeguards are implemented in accordance with the terms of the agreement.”

The latter is how India interprets its rights under the IAEA safeguards agreement, including its options for ‘corrective actions’, thus there remains no clarification in fundamental aspects of the safeguards Agreement.

One minor benefit of the safeguards saga, including the very personal advocacy role played by Elbaradei is that global perception of the true nature and role of the IAEA may change. The IAEA, for so long favorably reported by the international media as the United Nations watchdog, should instead be seen as working for the agenda of key nuclear states and their industrial backers, and not in the long-term interests of non-proliferation and disarmament. Not so much a nuclear watchdog but radioactive poodle.

With IAEA Board of Governors approval the last but one hurdle for the U.S./India Agreement is the 45 nation Nuclear Suppliers Group.


THE NUCLEAR SUPPLIERS GROUP

Summary - The role of the Nuclear Suppliers Group NSG, consisting of 45 nations, is crucial to the U.S./India Agreement. Without approval from all NSG nations, the Agreement cannot proceed. Set up in the aftermath of the 1974 nuclear test by India, it has come full circle, with suggestions that if it approves a U.S. request for India to be exempt from its export guidelines it will be voting itself out of existence. In reality the NSG has failed to stem nuclear proliferation over the decades, but rather has given them a seal of approval as commercial nuclear business. India, long opposed to the NSG as an industrial cartel operating discriminatory policies, now is dependent upon nations within the NSG to approve the Agreement. On the most controversial of issues to come before the NSG extraordinary sessions of the NSG have been held in August 2008 with further meetings planned for September. A group of nations led by Ireland, New Zealand, Norway, the Netherlands, Austria and Switzerland have put forward amendments to a U.S. submitted draft, amendments which India rejects as unacceptable. The pressure to approve the U.S. request is intense and a compromise that helps destroy further global nuclear non-proliferation efforts remains a possibility.

The Nuclear Suppliers Group (NSG) was created following the India 1974 nuclear weapons test. A set of Guidelines were drafted and published in 1978 covering nuclear transfers intended for peaceful use to help ensure that they would not be diverted to an un-safeguarded nuclear fuel cycle and or nuclear weapons use. These Guidelines contain a so-called Trigger List of nuclear technology and materials.

Following recommendations from the 1990 NPT Review Conference, in 1992, the NSG decided to establish Guidelines for transfers of nuclear-related dual-use equipment, material and technology (items which have both nuclear and non-nuclear applications) which could make a significant contribution to an un-safeguarded nuclear fuel cycle or nuclear explosive activity. The ‘stricter’ Guidelines adopted in 1992 were in direct

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93 The NSG is one of two arrangements established to set guidelines for multilateral nuclear export controls, the other being the NPT Exporters Committee (Zangger Committee). As of April 2008 there were 45 participating governments are: Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and United States. The European Commission is an observer. In 2007/08 the Chair was the Government of South Africa, in 2008/09 Germany is chair.

94 Guidelines for Nuclear Transfers (INFCIRC/254, Part 1) The first set of NSG Guidelines governs the export of items that are especially designed or prepared for nuclear use. These include: (i) nuclear material; (ii) nuclear reactors and equipment therefor; (iii) non-nuclear material for reactors; (iv) plant and equipment for the reprocessing, enrichment and conversion of nuclear material and for fuel; (iii) non-nuclear material for reactors; (iv) plant and equipment for the reprocessing, enrichment and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) technology associated with each of the above items for nuclear use

95 These Dual-Use Guidelines were published as Part 2 of INFCIRC/254, and the original Guidelines published in 1978 became Part 1 of INFCIRC/254. The second set of NSG Guidelines governs the export of nuclear related dual-use items and technologies, that is, items that can make a major contribution to an un-safeguarded nuclear fuel cycle or nuclear explosive activity, but which have non nuclear uses as well, for example in industry.
response to disclosures of Iraq’s nuclear program and in particular the scale of assistance provided by nuclear and other related companies operating in NSG countries. It was at this time that the NSG applied the requirement of full-scope safeguards (covering all of a country’s peaceful nuclear activities) as a condition of supply. This position was endorsed by the parties attending the 1995 NPT Review and Extension Conference.

The stated aim of the NSG Guidelines are “to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices which would not hinder international trade and cooperation in the nuclear field. The NSG Guidelines facilitate the development of trade in this area by providing the means whereby obligations to facilitate peaceful nuclear cooperation can be implemented in a manner consistent with international nuclear non-proliferation norms.”

The NSG holds a Plenary meeting once a year and operates on the basis of consensus. Overall responsibility for nuclear activities lies with the NSG Participating Governments.

The Plenary can decide to set up working groups, with recommendations by the Consultative Group, on matters such as the review of the NSG Guidelines.

A few realities of the NSG are important to highlight:

- the NSG Guidelines are informal and are not legally binding on the part of the members under international law;
- States parties have made a commitment to implement the Guidelines through their national laws but there is no legal requirement to comply;
- in nearly all cases of clandestine nuclear proliferation in the last three decades nuclear technology and materials exported from one or more of these same parties has been found to have been involved;
- the NSG was established by the large nuclear trading powers, in the first instance the UK and the United States, to seek to better control nuclear trade – not prevent it, but the very technology and materials covered by the NSG Guidelines provide a state with the option to develop nuclear weapons if they so choose.

96 See www.nuclearsuppliersgroup.org/

97 The NSG also has a Consultative Group which works as an intersessional working body, tasked to hold consultations on issues associated with the Guidelines on nuclear supply and the technical annexes. Again the CG takes its decisions by consensus. The NSG parties also hold an Information Exchange Meeting (IEM) immediately before the NSG Plenary and provides another opportunity for Participating Governments to share information and developments of relevance to the objectives and content of the NSG Guidelines.

98 The cases are numerous and extensive. Perhaps the most extensive being the network established by A Q Khan of Pakistan, formerly of British/German/Dutch uranium consortium URENCO, see, “A.Q. Khan, Urenco and the proliferation of nuclear weapons technology :- The symbiotic relation between nuclear energy and nuclear weapons”, Joop Boer, Henk van der Keur, Karel Koster and Frank Slijper, for Greenpeace International May 2004.
THE NUCLEAR SUPPLIERS GROUP AND THE U.S. INDIA AGREEMENT

The NSG annual plenary held in May 2008 in Berlin did not consider the U.S. India Agreement, as at that time the IAEA Board had yet to consider the safeguards text. With approval by the IAEA Board in August 2008, the U.S. moved quickly to convene a special NSG Plenary in late August, which will be followed by a further meetings in September with the objective of early approval for its proposed exemption from NSG controls. As mentioned, NSG Plenary’s agree by consensus. Any idea that the upcoming meetings could be put to a vote should factor in this historical reality, and the explicit requirement of the Hyde Act that NSG exemption be adopted by consensus.

When the NSG adopted full-scope safeguards as a condition of supply it was intended to ensure that only NPT parties and other states with full-scope safeguards were able to receive nuclear transfers. India will not meet that requirement and therefore it cannot meet NSG Guidelines. The solution proposed by the United States is to seek an exemption from NSG Guidelines.

The NPT does not prohibit nuclear exports to the states that are not party to the Treaty, but U.S. law effectively prohibits nuclear exports to non-NPT countries as they are required to have IAEA safeguards on all nuclear material in all of their peaceful nuclear -activities. The Nuclear Suppliers Group adopted the same requirement of full-scope safeguards in 1992 as a condition of nuclear exports. The Bush administration is therefore overturning U.S. law and seeking to bypass NSG guidelines. The request for an exemption to NSG Guidelines is in non-compliance with the conditions of the Act of Congress which required the Administration “to act in a manner consistent with the Guidelines for Nuclear Transfers and the Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology developed by the multilateral Nuclear Suppliers Group (NSG);”

On March 2006, President Bush submitted proposed legislation to Congress to create an exception for nuclear cooperation with India from relevant sections (Sections 123 a.(2) 128, 129) of the Atomic Energy Act.

On March 23rd 2006, the U.S. presented the text of a draft decision to create an exception to NSG Guidelines to the Consultative Group meeting of the NSG. U.S. officials proposed to have the issue on the agenda of the May 2006 NSG Plenary. This was turned down by NSG members.

99 “Indian official says government ready to ‘stake a lot’ on nuclear deal,” Dan Horner, Nucleonics Week April 24th 2008

100 INF CIRC/539/Rev.1 (Corrected) 29 November 2000 International Atomic Energy Agency Information circular general distr. Communication received from the Permanent Mission of the Netherlands on behalf of the member states of the Nuclear Suppliers Group.

101 11/16/2006—United States Senate Title I - United States-India Peaceful Atomic Energy Cooperation United States-India Peaceful Atomic Energy Cooperation Act - Section 103
The relevant section of draft decision proposed by the U.S. to the NSG, states:

“4. Notwithstanding paragraphs 4 (a), 4 (b) and 4 (c) of INFIRC/254/Part 1 as revised (the NSG Guidelines), Participating Governments may transfer trigger list items and or related technology for use in civil nuclear facilities in India, in accordance with paragraph 4 (d) as long as the Participating Government intending to make the transfer is satisfied that India is continuing to meet all of the aforementioned non-proliferation and safeguards commitments, and that the contemplated transfer complies with all of the other conditions of the NSG Guidelines.

5. Participating Governments, in accordance with paragraph 4 (d), of the NSG Guidelines, will continue to strive for the earliest possible implementation of the policy referred to in paragraph 4 (a) with respect to transfers of trigger list items and related technology to India.”

Any U.S. assurances given to the Nuclear Suppliers Group nations that its Agreement with India will not undermine nuclear non-proliferation should be seen in the context of earlier controversy over India and the NSG, and CIA assessments of India’s nuclear program.

In 2000, NSG member nations called on the Russian Federation to suspend plans to deliver fresh uranium fuel for India’s Tarapur nuclear reactor. Russia’s supply of uranium to Tarapur, while criticized by other NSG member states (see below) was justified on the grounds that it was an emergency supply required to maintain the operation of the reactor for safety purposes, permitted in exceptional circumstance under the NSG Guidelines. The NSG has no enforcement mechanism for its guidelines and therefore Russia’s export went unpunished.

In a strongly worded statement the Bush State Department expressed regret that the shipment was made stressing that India does not have safeguards at all of its facilities and is indeed pursuing a nuclear weapons program. It further stated,

“As a member of the 39 nation Nuclear Suppliers Group, Russia is committed not to engage in nuclear cooperation with any country that does not have comprehensive International Atomic Energy Agency (IAEA) safeguards on all its nuclear facilities… We join other nuclear suppliers in calling on Russia to cancel this supply arrangement and live up to its nonproliferation obligations.

Russia’s disregard of its Nuclear Supplier Group commitments, together with its sensitive nuclear assistance to Iran, raises serious questions about Russia’s support for the goal of preventing nuclear proliferation.”


Further evidence of how far the Bush Administration has overturned long standing U.S. policy on India comes from Central Intelligence Agency unclassified briefings to Congress. Under the Clinton Administration in 1998 the CIA had warned Congress that,

“India also continued to seek nuclear-related equipment, materials, and technology during the first half of 1998, some of which could be used in nuclear weapons applications. The most sought-after goods were of Russian- and UK-origin. India continues to pursue the development of advanced nuclear weapons, as evidenced by the underground nuclear tests that it conducted in May 1998. The acquisition of foreign equipment could benefit India in its efforts to develop and produce more sophisticated nuclear weapons.”105

By 2000, the CIA was warning that, “The acquisition of foreign equipment will benefit New Delhi in its efforts to develop and produce more sophisticated nuclear weapons.”106

Even in the first year of the Bush Presidency in 2001, the CIA was repeating its warnings on India that foreign assistance “will” benefit its nuclear weapons development.107 However, in 2002, the CIA was no longer making the explicit connection between foreign assistance and India developing more sophisticated nuclear weapons,108 and by 2003 India was removed altogether from the bi-annual unclassified briefings to members of the U.S. Congress.

104 The chronology of a change in U.S/India nuclear trade relations under the current Bush administration can be dated to the lifting of the export sanctions in September 2001 imposed on India (and Pakistan) after the 1998 nuclear test. In 2002 the Next Steps Strategic Partnership were initiated between the two countries, including dialogue on nuclear export controls, leading in January 2004 to an agreement for expanded cooperation, including on commercial nuclear power. As SIPRI point out also in 2004 a senior U.S. State Department official called for all of India’s peaceful nuclear program to be placed under IAEA safeguards. The U.S. position until then had been for all India’s nuclear program – military and commercial - to be placed under safeguards. It was being suggested that the United States would be prepared to treat India the same as other nuclear weapons party to the NPT – without it joining the NPT.


At a November 2005 NSG Consultative meeting, it has been reported\(^\text{109}\), that some NSG members raised the issue of restricting exports of enrichment and reprocessing, heavy water, HEU and plutonium. Neither the U.S. draft to the NSG (nor the U.S. India Agreement) prohibits such exports. The NSG Guidelines approve such exports on the condition of full-scope safeguards.

**NSG AND PAKISTAN**

*“Pakistan has no objections if the Indian deal is approved as the basis of trade by the NSG,*"\(^\text{110}\) Shahbaz Shahbaz, Pakistan’s ambassador to Austria and the IAEA.

One immediate consequence of the U.S./India Agreement, and specifically the seeking of an exemption to NSG Guidelines, was that it raised the issue of nuclear trade with Pakistan. Like India, Pakistan conducted nuclear weapons tests in 1998, and has not signed the NPT or a full-scope safeguards agreement with the IAEA. Pakistan is continuing to modernize and expand its nuclear weapons program, and also like India, has plans for new commercial nuclear power plant operation.\(^\text{111}\) Although Pakistan is not covered by NSG Guidelines, it does have a limited safeguards Agreement with the IAEA and is in receipt of nuclear technology from an NSG party – China. In addition to providing direct assistance in its nuclear weapons program,\(^\text{112}\) Pakistan signed contracts with China for the supply of nuclear power technology before China signed up to the NSG.\(^\text{113}\) The most recent supply being the 325-MW Chasnupp-2 reactor.

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109 Ibid.

110 Pakistan’s Ambassador to Austria and the IAEA, Shahbaz Shahbaz, as reported in “Unique NSG exception for India would discriminate, Pakistan says”, Nuclear Fuel, November 20, 2006.

111 Ibid, Parvez Butt, former chairman of the Pakistan Atomic Energy Commission has said that Pakistan’s energy needs in the future will be “enormous,” requiring an addition of at least 8,800 MW of power reactors by 2030 to be able to generate just over 5% of the country’s electricity with nuclear energy.”

112 See, “Contribution to working group on China and Non-Proliferation”, Shaun Burnie, EU/China Symposium, Heinrich Boll Foundation, Berlin, September 7th 2007. China played the central role in the development of Pakistan’s nuclear weapons program. Current military cooperation between the two countries operates under the provisions of the June 1990, Sino-Pak Memorandum of Understanding (MoU) for ten-year cooperation in procurement, R & D, technology transfer and co-production, see [http://www.subcontinent.com/sapra/bulletin/96apr-may/sj960506.html](http://www.subcontinent.com/sapra/bulletin/96apr-may/sj960506.html). In 1995 China is reported to have made available to Pakistan a facility for the manufacture of the nuclear capable M-11 missile which triggered U.S. sanctions on China. Its reported exports included - tritium, heavy water (for plutonium production), ring magnets for advanced centrifuges, and Highly Enriched Uranium (HEU) sufficient for two nuclear warheads, and actual nuclear weapon design, all documented through 1980-1995, see Paul Leventhal, Nuclear Control Institute on China Trade Policy presented to Subcommittee on Telecommunications, Trade and Consumer Protection Committee on Commerce U.S. House of Representatives May 14, 1998, available at: [http://www.nci.org/t/t51498.htm](http://www.nci.org/t/t51498.htm). Also, ‘Outside Assistance to the Indian and Pakistani nuclear programs’ Steven Dolley, Nuclear Control Institute June 5, 1998. Far from being unique, however, China is joined by Belgium, Canada, France, Germany (west), Switzerland, the former Soviet Union, the UK, and the United States which have all assisted Pakistan and/or India’ nuclear weapons development.

Pakistan officials have made cogent if uncomfortable points on the U.S./India Agreement, not least that the NSG exists because of India’s 1974 nuclear weapon test.114 Their concerns over the impact the Agreement will have on India’s nuclear capability are identical to those in the U.S. Congress and elsewhere opposed on non-proliferation grounds,115 prompting one western official to state that, “Pakistan is correct that the solution to the problem of states like Pakistan and India which are outside the nuclear trade regime has to be non-discriminatory and global.”116

That nuclear trade under the NSG is supposed to be based upon non-discrimination, highlights the proliferation consequences of the U.S./India deal. While the U.S. Administration opposes any exemption for Pakistan, China will carefully await the outcome of the NSG debate on India’s exemption, before making a case for expanding its nuclear exports to Pakistan.117 The bare-faced double-standards of the U.S. position to, “not allow China to export any additional power reactors to Pakistan unless Pakistan implements full-scope safeguards”,118 is certainly not sustainable in the medium to long-term, and already under question.119 As one analyst succinctly put it, “Pakistan will play catch-up with India ’not only through expanded nuclear ties with China, but also by a more aggressive pursuit of nuclear technology from the global nuclear bazaar.”120

The consequences will be the further nuclearization of South Asia.

THE POSITION OF NSG MEMBER STATES

Given that all major nuclear trading nations are NSG members, there is an incentive for some of these states to actively support the U.S./India Agreement. Whereas other states


115 Ibid, Shahbaz said, “there is concern in some quarters in Pakistan that, if India obtains know-how through trade with NSG parties, that know-how will find its way from its civilian program into India’s military program because separating India’s civilian and military activities will be very difficult.”

116 Ibid.

117 Ibid, Mark Hibbs quotes one IAEA Vienna official “that China “in the long term wants to keep supplying reactors to Pakistan” and has made statements during NSG meetings suggesting that it would support the US-India deal provided it establishes criteria for making an exception to NSG trade guidelines and is “nondiscriminatory.”


119 Ibid, some NSG experts were mentioned as seeing the issue “as a grey area.”

120 Samina Ahmed, a nonproliferation expert at the International Crisis Group, as cited in “The Regional Implications of the U.S.-India Nuclear Agreement”, Shehzad Nadeem, | April 29, 2006, Foreign Policy in Focus Editor: Erik Leaver, IPS http://www.fpif.org/fpiftxt/3248
with no nuclear industry and a history of promoting nuclear non-proliferation see many risks with the proposal. Conflicting positions within member governments is guaranteed with trade, economy and industry ministries taking a pro-business view, while foreign ministries consider through both a bi-lateral relations and proliferation prism.

Given the very high geopolitics that lies behind the U.S./India Agreement, and the potential economic impacts for concerned parties, the position of nations within the NSG has been the subject of much reporting and even more speculation. NSG meetings are not the most transparent of political events further adding to the lack of clarity on individual country positions. However due to the high profile nature of the U.S./India Agreement, the deliberations of the NSG, including the August 21st-22nd meeting have provided more details than any previous meetings. Therefore some analysis is possible.

**Russia and France**

Russia and France are strong supporters of the U.S./India Agreement. Both are seeking major exports of nuclear technology following NSG exemption approval. In recent years both have been more successful than the U.S. in marketing their nuclear technology, particularly in Asia.

Russia has signed a memorandum of understanding with India, 121 and with reports that it is offering India more even more favorable terms than the U.S.

The French nuclear industry, led by AREVA, has global ambitions, not least in Asia. The opportunity offered by the 2005 Bush/Singh nuclear initiative was quickly exploited122. In 2006 then President Chirac signed a declaration for the ‘peaceful’ nuclear cooperation with India one consequence being it would support efforts to permit India access to worldwide nuclear technology and materials. Chirac declared,

"*India's access to civilian-nuclear technology... is indeed necessary in order to drive and fuel India's economic development*", 123

Further talks were held in July 2007, 124 and in January 2008 French President Nicolas Sarkozy when attending Republic Day celebrations in New Delhi declared,

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121 For analysis of Russian/India nuclear cooperation see, “Eager to Increase Nuclear Exports, Russia Awaits Nuclear Suppliers Group Exemption for India” February 2008 Issue, Anya Loukianova – Monterey Institute James Martin Center for Nonproliferation Studies, 

[http://www.wmdinsights.com/I22/I22_RU3_EagerToIncrease.htm](http://www.wmdinsights.com/I22/I22_RU3_EagerToIncrease.htm) A framework of a memorandum of understanding (MoU) in the nuclear sphere, was signed by head of Russia’s Federal Atomic Energy Agency (Rosatom) Sergey Kiriyenko and India’s Department of Atomic Energy (DAE) chief, Anil Kakodkar, on January 25, 2007.

122 France is reportedly ready to advance sales of as many as six reactors if and when the NSG restrictions are lifted, “India, France Working on N-Coop Agreement,” Hindu, December 24, 2007, [http://www.hindu.com/thehindu/holnus/001200712241621.htm](http://www.hindu.com/thehindu/holnus/001200712241621.htm)

123 see BBC February 20th 2006 [http://news.bbc.co.uk/1/hi/world/south_asia/4731244.stm](http://news.bbc.co.uk/1/hi/world/south_asia/4731244.stm)

“this agreement will form the basis of wide-ranging bilateral cooperation from basic and applied research to full civil nuclear cooperation including reactors, fuel supply and management.”

The latter term can be understood to apply to nuclear reactor spent fuel. French reprocessing technology has proliferated world-wide since the 1950’s, despite long standing opposition from the United States.

Both Russia and France are likely to benefit more from the U.S./India Agreement than the U.S. nuclear industry. This is due in part to more restrictive non-proliferation conditions set by U.S. law. For all the flaws in U.S. nuclear non-proliferation policy, the Atomic Energy Act (1954) and in particular the Nuclear Non-Proliferation Act of 1978, are unmatched in legislative terms in France or Russia.

“…once New Delhi secures the NSG’s approval to trade with the group’s members, India is more likely to turn to Russia or France for its nuclear needs, because those countries do not have national legislation that imposes all the requirements the US Atomic Energy Act does.”

This is known inside both Congress and the Bush Administration. If the U.S. is going to lose out to France and Russia on commercial nuclear sales to India, it only exposes further the underlying strategic reasons for the U.S./India deal.

The potential for NSG approval leading to India’s trade with Russia and France, before final approval of the U.S./India Agreement by the U.S. Congress surfaced again in early August 2008. In a warning to U.S. Secretary of State Rice, Howard Berman, chairman of the House of Representatives foreign affairs committee, said if the 45-nation Nuclear Suppliers Group (NSG) did not impose the condition that all nuclear commerce would be terminated if India conducted a nuclear weapons test, the deal could not be approved before President George W. Bush leaves office in January 2009. Any exemption of this provision by the NSG for India would be inconsistent with the requirements of the Hyde Act and "would be inconsistent with US law, place American firms at a severe competitive disadvantage, and undermine critical US nonproliferation objectives," he said. The Indian government continues to dismiss the Hyde Act as not relevant to approval.

House Chair Berman also made explicit that the NSG must commit to no transfer of reprocessing, uranium enrichment or heavy water production technology to India, and a

125 See, “France, India fire up military cooperation, nuclear energy ties”, January 24th, 2008 New Delhi (AFP)


128 See, “Key US lawmaker threatens to hold up India nuclear deal” Washington (AFP) Aug 6, 2008 and letter from Howard Berman, Chair House of Representatives Committee on Foreign Affairs, August 5th 2008, available at www.aca.org
no reprocessing requirement on any nuclear material transferred to India unless the facility is under full safeguards; and again the requirement that safeguards be applied in perpetuity.

China

China is a recent convert to the global nuclear non-proliferation regime, signing up to the Nuclear Suppliers Group only one year before Bush and Singh launched their nuclear initiative. Given its track record in proliferating nuclear technology it’s credibility in questioning the damage the U.S./India Agreement will do to the global regime is somewhat lacking. Setting this aside however China’s position on the Agreement, including NSG exemption for India, has fluctuated since 2005.

Criticism of the U.S./India Agreement first emerged from the Central Committee of the Communist Party in October 2005, with the warning that,

“now that the United States buys another country in with nuclear technologies in defiance of an international treaty, other nuclear suppliers also have their own partners of interest as well as good reasons to copy what the United States did…A domino effect of nuclear proliferation, once turned into reality, will definitely lead to global nuclear proliferation and competition.”

This was followed in 2006 with dire predictions that the Agreement would “destroy non-proliferation efforts”; with Foreign Ministry officials claiming that “international safeguards on nuclear weapons were the hard-won product of many countries’ efforts and should not be weakened by exceptions.”

The Chinese position has been summarized as based on three issues: double standards; U.S. containment of China by tilting toward India; and the negative effect on nuclear nonproliferation regime. All of these can be dismissed as merely self-serving hypocrisy. But just because China has no credible track record on non-proliferation, witness Pakistan, it does not mean that it is not correct in its analysis.

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130 Op cit, “Contribution to working group on China and Non-Proliferation”


"In fact, the purpose of the United States to sign civilian nuclear energy cooperation agreement with India is to enclose India into its global partners' camp, so as to balance the forces of Asia. This fits in exactly with India's wishes."

During 2007 however, a more nuanced approach emerged on the U.S./India Agreement. Rather than outright condemnation, China floated the idea of a criteria-based approach for NSG Guidelines. These would not be India specific, but based on non-proliferation goals that other states could aspire to. Pakistan has made the same case, and would be one of the first aspirants of the Chinese NSG solution.

As referred to earlier, in the China/Pakistan discussions on nuclear trade which overlapped the announcement of the U.S./India Agreement, Beijing was careful not to announce hard commitments. Sensitive to the politics around the U.S./India Agreement, China has held off on a public commitment to supplying Pakistan with further nuclear reactors. This sensitive approach is consistent with China’s support for a criteria based alternative to India exemption from NSG Guidelines.

By early 2008 China’s position remained opaque. Speaking on his return from Beijing, Prime Minister Singh was reported to have told journalists that on the U.S./India Agreement he did not think that Beijing would be an “obstacle,” given the new relations between the countries, but that requests for Chinese support for the Agreement and NSG exemption had received “no assurance”.

In the end the criteria-based approach does not appear to have been taken forward is probably unacceptable to other NSG parties and is unlikely to be presented at the NSG Plenary. While the official position remains unstated it is hard not to agree with analysts who conclude that China will in the end not block the Agreement in the NSG. However, if there is a group of states opposed within the NSG, as seems the case as of August 2008, China will be able to remain in the background.

"For China, the political costs of opposing it would be too high. It would drive a wedge between China and India"


134 See, “Principles and Proliferation: Reforming the India Nuclear Deal”, Carl Robichaud | 22nd Aug 2007 http://www.worldpoliticsreview.com


137 See The Hindu, Thursday, Jan 17, 2008, Singh stated, “I cannot say I have got a firm, definite answer but my own feeling is that the relationship of trust and confidence is now establishing, and we are succeeding in that. When the issue comes before relevant agencies, I do not think China will be an obstacle. I can’t say I have an assurance today.”.
If the Nuclear Suppliers Group does eventually agree to an exemption for India, China will be in a position to export its nuclear technology to India\textsuperscript{139}, as well as taking up the cause of exports to Pakistan.

UK

The UK is also an active supporter of the U.S./India deal and supports NSG exemption, witness a senior UK government official statement\textsuperscript{140} that it “\textit{opens opportunities for collaboration which do not exist at present},” and that, “\textit{real opportunity for major India-UK collaboration will require changes}” in the status of international rules which New Delhi ”is trying to do” with the IAEA and the 45-nation Nuclear Suppliers Group (NSG).

This is less to do with UK nuclear industry interests, which are in no position to secure business with India, but rather the bilateral relationships between the UK and the U.S. and India. There undoubtedly will be officials in the Foreign and Commonwealth Office aware of the damage it will do to global non-proliferation efforts, including the status of the NPT, but as ever with the UK misguided pragmatism will win out.

THE COMPLEXITIES OF NSG POSITIONS

With IAEA Board approval in August 2008, some clarity on the position of NSG member states in advance August 21\textsuperscript{st} – 22\textsuperscript{nd} meetings has emerged. As noted earlier nations on both the Board who will also attend the NSG Plenary, have stated that their endorsement of the safeguards agreement should not be viewed as leading to support for exemption at the NSG. As the decision time nears for NSG states it is worth reviewing the evolution of the issue over the past months.

\textit{“This is a very political issue in member state capitals”}\textsuperscript{\textit{ unnamed NSG diplomat, Nuclear Fuel, July 30\textsuperscript{th}, 2007}}

\textsuperscript{138} South Asian specialist Zhang Li at Sichuan University, opcit, “China likely to swallow anger over India nuclear deal” Reuters, Aug 29, 2007. Further, “The U.S. wants to use India to contain China… But out of its own strategic interests, India is most unlikely to form an alliance with the U.S. to contain China.” said a recent analysis of the agreement published by the China Arms Control and Disarmament Association.

\textsuperscript{139} When President Hu Jintao visited India in November in 2006, he and Prime Minister Singh agreed that they would cooperate on nuclear technology. “Hu’s Here: India, China sign 13 deals”, Press Trust of India / New Delhi November 21, 2006. It has also been suggested that China will seek concessions from the U.S. in exchange for not blocking consensus at the NSG, including an expectation “that the U.S. will lift the embargo on any high end, dual technology that is still denied to them. They will also expect American assurances that India’s nuclear status will not threaten China.” citing two papers from Chinese academics at the 2007 South Asian Conference, Chinese Academy of Social Sciences at Shenzhen University, in “But how will China vote?”\textsuperscript{Ravni Thukral} Honorary Director Euro-Asia Institute and Reader at the Department of East Asian Studies, University of Delhi August 4th 2007.

\textsuperscript{140} British High Commissioner Sir Richard Stagg, Press Trust of India Friday, January 18, 2008 New Delhi
In September 2007, the Indian Institute for Defence Studies and Analyses (IDSA), published an analysis (see table below) of the position of NSG member states, which gives an insight into the thinking in India of the present situation.\textsuperscript{141} The position of states as described are however more complicated, with many still reluctant to declare their position either way. For good reason there are clear sensitivities over declaring outright support for the Agreement and the NSG exemptions. Given the need for consensus on NSG decisions, India was aware that even on their own analysis that there was no consensus as of end of 2007.

**IDSA analysis of possible sub-groupings within the Nuclear Suppliers Group on the Indo-US deal**

<table>
<thead>
<tr>
<th>NSG Grouping</th>
<th>Member States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries that support the Nuclear Deal</td>
<td>Australia, Brazil, Canada, Cyprus, France, Germany, Russia, South Africa, South Korea, United Kingdom, United States</td>
</tr>
<tr>
<td>Countries likely to support the deal under American or Russian influence</td>
<td>Argentina, Belarus, Bulgaria, Estonia, Croatia, Czech Republic, Greece, Hungary, Italy, Portugal, Spain, Japan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malta, Romania, Slovak Republic, Slovenia, Turkey, Ukraine</td>
</tr>
<tr>
<td>States with significant non-proliferation concerns</td>
<td>Austria, Belgium, Denmark, Finland, Netherlands, Norway, Poland</td>
</tr>
<tr>
<td>Non-committal States</td>
<td>Switzerland\textsuperscript{3}</td>
</tr>
<tr>
<td>Possible Spoiler</td>
<td>China</td>
</tr>
<tr>
<td>New Agenda Coalition</td>
<td>Ireland, New Zealand, Sweden.\textsuperscript{4}</td>
</tr>
</tbody>
</table>

**Notes**


2. The table is not definitive. It is meant to serve as a pointer to the positions of various countries on the India specific exception based either on statements made on the issue or on their national policies.

3. Switzerland has not come out with any reaction to the US proposal on granting a permanent exception to India. However, it is possible that domestic nuclear industry might convince the government citing the enormous economic potential that a waiver in favour of India would open up.

\textsuperscript{141} The IDSA is independent but funded by the Ministry of Defence. See, “The Nuclear Suppliers Group and the Indo-US nuclear deal” Arun Vishwanathan Institute for Defence Studies and Analyses September 26, 2007

http://www.idsa.in/publications/stratcomments/ArunVishwanathan260907.htm
4. Ireland and Sweden were critical of the deal at the Rio Plenary held in May 2006.

Canada - Worth noting is Canada’s reported support for the Agreement. It was Canada that had supplied the reactor that India used for plutonium production for its first nuclear weapons test in 1974, prompting the setting up of the NSG. Canada at the time accused India of violating its peaceful use agreement, and terminated nuclear cooperation with India. Three and half decades on, the Canadian Department of Foreign Affairs & International Trade, Dfait, said earlier in 2008 that it was in principle prepared to support the exemption to NSG Guidelines.\textsuperscript{142} However, given Canada’s role in providing India with the means to nuclear weapons status, the issue is obviously sensitive. Canada, like others by supporting the Agreement and NSG exemption will be putting prospective nuclear material (uranium) and technology sales ahead of their long-claimed, but in reality discredited, commitment to nuclear non-proliferation. Canada did not raise concerns at the IAEA Board meeting on August 1\textsuperscript{st}, and while an active supporter of NSG exemption, did raise concerns at the August meeting.

Australia - In 2007, India considered that Australia would support its bid for NSG exemption. It has the world’s largest known uranium reserves, and is a member of the U.S. led Global Nuclear Energy Partnership, GNEP. By early 2008 this was less clear. Australia’s position had become more complicated, as a result of the election of a Labor Government in Australia. The previous John Howard government had fully supported the Agreement, going as far as to announce plans for uranium sales to India. The new Kevin Rudd Labor Government in January 2008 announced that it "will not occur under the new government because we have a long-standing commitment of not exporting uranium, Australian uranium, to nations who are not party to the nuclear Non-Proliferation Treaty [NPT]."\textsuperscript{143}

However, as with all things diplomatic, Australia may still sell uranium to India following the completion of conditions set in the original uranium agreement with India under Howard – completion of safeguards agreement with the IAEA, approval by the NSG, and entry into force of the U.S./India Agreement. While announcing its cancellation of uranium exports to India, it was suggested by Foreign Ministry officials that,

\textsuperscript{142} See, “Canada may support NSG exemption for India” Mark Hibbs, Nuclear Fuel, March 10th 2008.

\textsuperscript{143} See, “Australia offers India hope on uranium,”, Stephen de Tarczynski Feb 29, 2008 http://www.atimes.com/atimes/South_Asia/JB29Df02.html

In August 2007 Rudd had stated that "It is a very bad development indeed when we have the possibility of the Government of Australia stepping outside the Nuclear Non-Proliferation Treaty and saying it's OK to sell uranium [to a country] which isn't a signatory," Mr Rudd said. "But now we have a government of Australia pulling the rug from under the NNPT and saying we don't need to observe it anymore." Rudd slams Indian uranium decision, Australian Broadcasting Corporation, August 15th, 2007

“that the Government has not yet made a decision on whether to block uranium sales to India by other countries… Australia appreciated the significance of the US-India deal and would take that into account in the Government's response.”

Indian officials may have been premature in believing as they do that Australia’s comments indicate that it will not obstruct the U.S. India Agreement. However, Australia’s track record on nuclear non-proliferation, despite their rhetoric has historically been poor. Whereas the U.S./India Agreement reverses long standing U.S. and global non-proliferation policy, a decision by Prime Minister Rudd to actively oppose the Agreement would have been a welcome reversal of Australian complicity in a decade’s long expansion of global nuclear commerce. In reality, by August 2008, and no doubt as a result of major lobbying on the part of the U.S. and India, Australia had removed any hopes that it would retain non-proliferation credibility. Prime Minister Rudd announced August 12th that “We have already indicated to the most recent meeting of the International Atomic Energy Agency board of governors that the government of Australia would not stand in the way of such an agreement…Canberra had communicated its decision "diplomatically to our friends in Washington and to our friends in New Delhi."

Germany – Controversy was caused by German Foreign Minister Frank-Walter Steinmeier in 2006 when he criticized the U.S./India Agreement. Describing the timing of the accord as "not helpful" in light of the Iranian nuclear dispute, he said Germany could come to support it if it were the "start of a process" that eventually integrated India into the Nuclear Non-Proliferation Treaty, which it has refused to sign.

The German Ambassador to India seeking to downplay his Foreign Minister’s statement referred to relates to efforts to stop Iran developing its uranium enrichment program, “we are just trying now to get Iran to renounce the enrichment of uranium in Iran while at the same time we are allowing India, which is not a member of the NPT [Nuclear Non-Proliferation Treaty], to continue enriching nuclear fuel and so forth.”

144 “Australia may not block uranium sales to India”, The Age, Melbourne, Daniel Flitton January 17th, 2008; also see Mr. Rudd Says No to India on Uranium, Mr. Sokolski, Executive Director of the Nonproliferation Policy Education Center, Washington, D.C analysis in Far Eastern Economic Review, February 2008 http://www.feer.com/board-of-contributors/2008/february/Mr.-Rudd-Says-No-to-India-on-Uranium

145 “Indian officials now interpret Canberra's public hints that it won't obstruct the US-India deal in the Nuclear Suppliers' Group as meaning that Australia will also come round to allowing its own uranium sales,” Rory Medcalf Lowy Institute for International Policy, in Asia Times, Stephen de Tarczynski.February 29, 2008 http://www.atimes.com/atimes/South_Asia/JB29Df02.html Australia offers India hope on uranium.


147 Australia to back US-India nuclear pact with suppliers: Rudd*AFP, Singapore, August 12th 2008.

148 Germany Calls for Direct US-Iran Talks on Nuclear Program Deutche Welle Germany | 05.04.2006 http://www.dw-world.de/dw/article/0,2144,1954170,00.html
The German Ambassador’s ‘clarified’ further by saying that you cannot compare India and Iran, “because one is [a] partner to the NPT and the other one is not, but also because India has a proven record of being a reliable and responsible state as far as [non-] proliferation is concerned.” This is indeed convoluted thinking. Another way of putting it would be that we support a non-NPT party getting access to enrichment technology but not an NPT state.

The Indian reaction to German criticism must have been considerable, as over the following months, the German Government went out of its way to calm relations. Following a meeting between Prime Minister Singh and Minister Steinmeier in Hannover, the Indian media were given an extensive briefing on the discussions. Steinmeier, was reported to have explained that there was confusion over his comments, and that,

“on the substance…they saw a great advantage in the deal as it will bring India closer to the IAEA…Germany sees this advantage and as Germany is in the Nuclear Suppliers Group (it) would ask constructive questions and was hoping to receive constructive answers”. 150

Finally Chancellor Merkel stated that “If this process continues as it has so far, I think that our cooperation in the development of nuclear energy for civilian purposes could continue as well,” Merkel said.151 Striking yet another positive note, Merkel said that Germany found it,

“very important that the IAEA’s El Baradei considered the deal a clear step forward”. “Germany will be willing to co-operate with India in civilian nuclear energy,” she said, if the US Congress and the NSG approved the deal.152

Continuing the ambiguity on the real German Governments position, asked if it would translate into German support at the NSG, Ambassador Mutzelburgis stated, “we appreciate the positive steps involved in this nuclear deal. But, of course, we would hope that India would continue to grow into a revised, repaired, an adjusted NPT regime.”153

150 Briefing by Official Spokesperson on the call on Prime Minister Dr. Manmohan Singh by German Foreign Minister in Hannover, April 24 2006 http://www.meaindia.nic.in/pressbriefing/2006/04/24pb01.htm
152 “Germany mixes hope with caution on N-deal” April 24th 2006 http://www.newindpress.com
Indicating the frustration with the mixed signals from Germany, a senior Indian academic with close ties to Government warned that,

“Germany has to sort out where its priorities and emphasis (in Asia) will be -- China or India,” 154

Reports of splits in the German Government155 on this matter are probably replicated around the world. Those responsible for disarmament and non-proliferation at the Auswärtiges Amt consider the Agreement to have negative consequences, whereas the Asia department in the Foreign Ministry is more favorable. Fortunately for Germany the delays in implementation of the Agreement have put off the day they will have to confront it at the Nuclear Suppliers Group. But that day has now arrived, and given the welcome statements from Germany at the IAEA Board, there is little expectation that they will play a critical role in the NSG Plenary. The exception being that they do hold the Chair of the NSG during 2008, and therefore how they manage the meeting, without doubt the most contentious ever to be discussed at an NSG meeting is important.

Japan is also considered by India to be a likely supporter of the U.S./India Agreement and the NSG exemption. Under questioning from critical members of the Japanese Upper House, Foreign Minister Aso and officials explained Japanese thinking156. As is the practice on this matter in most NSG capitals, stating what position they would take on the Agreement at the NSG was never likely. “Our concern is if the deal would truly be limited to civilian programs. That point should be very clear and consistent with the NPT. It is good that they are talking about the division of military and civilian facilities: we cannot accept if the deal assists any military programs. However, at the same time, we should consider the global warming issue and the growing energy demand of India as it is making a great economic development.”

There will certainly be those in the Foreign Ministry in Tokyo who are deeply opposed to India being granted special status outside the NPT. Their own negotiation for entry to the Treaty lasted five years until 1975, due in part to concerns over their nuclear program being subjected to intrusive safeguards. Having signed up to the NPT, and its commitment not to develop nuclear weapons, it is now witness to a nuclear weapon state

154 Uday Bhaskar, deputy director of the New Delhi-based Institute of Defence Studies and Analyses, ultimately he thinks Germany will support India, see “India to seek German support for US nuclear deal” AFX News Limited Forbes http://www.forbes.com/finance/feeds/afx/2006/04/21/afx2686342.html


156 See, “Debate on US-India nuclear technology deal” Upper House Japan Parliament 14 June 2007 Questions asked by Tadashi Inuzuka, a Democratic Party (opposition) member from Nagasaki and member of the Parliamentary Network for Nuclear Disarmament (PNND) http://www.gsinstute.org/pnnd/docs/14_06_07_Japan.html
getting priority access to sensitive nuclear technology but with only limited safeguards. There will also be some concern in Japan that the U.S./India Agreement also lowers the threshold for states developing nuclear weapons – not least Japan. If India ten years after detonating five nuclear weapons can be welcomed into the international non-proliferation system, what price Japan going nuclear at some point in the future, is a logical question.  

The position of Japan’s nuclear industry, the largest in Asia, will be a factor in support of the agreement.

Not by accident, Japan’s likely final position was given by an unnamed government spokesman August 19th when it was reported that "Japan will not stand in the way of revising the guidelines at the upcoming NSG extraordinary plenary meeting,"

Japan is reported to be one of the states to have raised concerns at the August 2008 NSG Plenary though no details are publicly available.

In the end its relations with the United States, including support for containing China and its growing economic, strategic and military relations with India will see Japan sign up to NSG exemption, but it won’t be necessarily enthusiastic.

**NSG CRITICAL STATES**

Understandably, non-nuclear weapons states party to the NPT and NSG are behind the scenes and in some cases openly critical of the U.S./India Agreement. Many of them considered nuclear weapons development in the past, but opted instead to sign the NPT as non-nuclear weapons parties. The U.S./India Agreement is certainly rewarding a state that has refused consistently to sign the NPT and will be deeply resented for that reason.

Shortly after the announcement of the U.S./India Agreement, NSG member states led by Norway, Ireland, and Sweden, began asking critical questions about the non-proliferation implications. By 2007 this group had expanded to “about 12 or 15 of NSG’s 45 members…This is not a little choir of outspoken dissenters… There no single EU position,” according to one European Union (EU) official.


161 See, “NSG not prepared to quickly respond to US pressure on exemption for India” Mark Hibbs Nuclear Fuel July 30th 2007.
Indicative that the major issues of concern remained three years after the announcement of the U.S./India Agreement, it was reported in the initial day’s after the August 2008 Plenary, that around one third of NSG members had raised significant concerns.

The critical views of NSG member states were also voiced at an NPT Preparatory Conference in 2007. These include:

**Switzerland** - “Switzerland takes the view that the project of cooperation in the field of civilian nuclear energy between India and the USA will not be without consequences for the non-proliferation regime based on the NPT. If this project is carried out it will call into question the validity of the compromise which enabled a consensus to be found on the extension of the NPT at the 1995 Review Conference.”

As reported from the IAEA Board August 1st, Switzerland adopted even more explicit language in the implications of the U.S./India Agreement. But highlighting the confused nature of country positions, a senior Swiss politician was reported mid-August as stating that the government would support NSG exemption.

**Ireland**, speaking on behalf of the New Agenda Coalition (Egypt, Ireland, Mexico, New Zealand, South Africa, Sweden and Brazil) - “At the Review Conference in 2000 States Parties also reaffirmed the unanimous agreement at the Review and Extension Conference in 1995 not to enter into new nuclear supply arrangements with parties that did not accept IAEA full-scope safeguards on their nuclear facilities. Recent developments have given us grounds for serious concern about the implications for the Treaty of such arrangements being entered into with States not Party to the NPT.”

Ireland’s continued reported concerns from the IAEA Board meeting should see it play a critical role at the NSG meetings. Whether it can withstand sustained diplomatic pressure remains to be seen.

**Brazil** - The universalization of the NPT is a fundamental element in our quest to create a more stable and predictable international security environment. Complacency with proliferation outside the NPT is inconsistent with efforts to strengthen the Treaty’s regime and may contribute to defeating the purpose of eliminating nuclear weapons. We should not solely address ‘non-compliance' problems. The adherence to the NPT, as non-nuclear weapon States, by countries which have remained outside the

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163 Ambassador Jorg Streuli Permanent Representative of Switzerland to the Conference on Disarmament Vienna, April 30th 2007.


165 Paul Kavanagh Permanent Representative of Ireland to the conference on disarmament in Geneva on behalf of the new agenda coalition May 1st 2007.
Treaty is crucial. Any attempt to accommodate a 'de facto' nuclear status for those States will contradict the letter and spirit of the NPT.166

During 2007, Indian media reported that in bi-lateral talks they had received support from Brazil and South Africa. However, like many NSG states neither Brazil nor South Africa confirmed this in public. It would also run counter to the position taken collectively by the New Agenda Coalition, of which they are two members. South Africa did make its position public following the IAEA Board in expressing support for India.

In 2008 New Zealand, a long term leader on nuclear disarmament and non-proliferation was reported to have made a proposal to NSG members over the U.S./India Agreement.167 Specifically, New Zealand wants India to conclude additional protocol (Infcirc-540) as a condition for exemption. Since 1997, 124 states have negotiated such bilateral agreements with the IAEA on a voluntary basis. The New Zealand proposal should not be interpreted as support for the U.S./India Agreement. As the issue of IAEA safeguards is controversial in India, it is not likely that it would agree to enhanced safeguards under an additional protocol. If such a condition was imposed by NSG parties, it would certainly delay if not terminate the U.S./India Agreement coming into force.

New Zealand’s government in mid-August came forward with an unusually forthright explanation of NSG issues as they saw it in advance of the Plenary.168 Disarmament Minister Phil Goff explaining that the government had yet to make a final decision would be exploring some of the following issues at the meeting:

- Whether conditions could be built into an exemption that meant the agreement would cease to exist if there were a testing of nuclear weaponry - as was already the case in the US legislation on the deal, the Hyde Act;

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166 Ambassador Sergio de queiroz Duarte, Head of the Brazilian delegation Preparatory Committee for the 2010 NPT review Conference First session 30th April -11 May 2007.

Another NPT state, Malaysia, while not an NSG party, is influential within the Group of 77 developing nations, also criticized the U.S./India Agreement, “Along similar lines, Malaysia is also concerned that access by certain States not party to the NPT to nuclear materials, technology and know-how that could be diverted to the development of nuclear weapons, is being facilitated by certain nuclear weapon States. In this regard, if States Parties are serious in achieving the goal of universalising the Treaty, they would join Malaysia in calling for a total and complete prohibition on the transfer of all nuclear related materials, resources, assistance and cooperation in nuclear scientific or technological fields to States non-parties to the Treaty, without exception.” Ambassador Hamidon all head of the delegation of Malaysia to the first session of the preparatory committee for the 2010 review conference of parties to the treaty on the non-proliferation of nuclear weapons May 1st 2007


168 See “NZ ponders stance on nuclear deal”, New Zealand Herald, Audrey Young, August 14th, www.nzherald.co.nz/section/1/story.cfm?c_id=1&objectid=10526979
• Whether India would sign up to the "Additional Protocol" of the International Atomic Energy Agency, which gave greater powers of inspection for India's nuclear facilities;
• Questions of how to prevent transfer of sensitive technology such as enrichment and re-processing;
• Questions of confidence and transparency-building measures in any exemption;
• A question of what would happen if the safeguards agreement that India had entered into with the International Atomic Energy Agency were to be terminated.

Goff admitted that the Government was trying to work out the balance between two propositions, "Is granting an exemption something that would weaken the Non-Proliferation Treaty and are the advantages of having greater control over India's nuclear industry outweighed by the disadvantage of weakening the NPT?" The Government had explained to visiting Indian deputy Secretary for Foreign Affairs, Hardeep Singh Puri, was working with likeminded NSG states, Austria, Sweden, Ireland and the Netherlands. Puri was in New Zealand to make the case for granting exemption.

Austria, Norway and Netherlands joint statement at the August 2008 IAEA Board meeting indicates likely even stronger opposition inside the NSG Plenary.

As of August 20th, no NSG member state had stated its categorical opposition to the U.S. request for exemption. However, instead of the ‘clean’ or no strings attached exemption sought by India and the United States, it was anticipated that NSG nations would seek to apply conditions similar to those of the Hyde Act. In contrast to pre-conditions – such as signature of the CTBT, NSG members are reported to have prepared post-conditions to come into effect following an Indian nuclear weapons test for example. Indian opposition to such conditions, with little obvious way for the Singh government to explicitly reverse its no conditions position suggests that there will be no early agreement for exemption. But the history of this convoluted process since July 2005 would suggest that anything is possible and the spin and interpretation of what is actually agreed to be each party can be very presented very differently depending upon the audience.

Diplomatic sources informed trade journal Nuclear Fuel August 11th that the discussions could “bog down” for weeks or longer. If so, then even with eventual approval later in 2008, the U.S. Congress is running out of time to adopt the U.S./India Agreement before a new Presidential term. That is also to assume that the U.S./India Agreement is seen by Congress as meeting the conditions of the Hyde Act, which at present it clearly does not.


170 Opicit, Nuclear Fuel August 11th 2008.
‘EXTRAORDINARY’ NSG PLENARY AUGUST 2008

“Taken aback by the avalanche of amendments” – The Times of India August 23rd 2008.\textsuperscript{171}

In the tradition of the NSG, its public statement at the end of what was its most contentious meeting in over three decades was totally worthless, apart from acknowledging that the meeting actually took place.\textsuperscript{172}

Despite the NSG providing no formal details of the discussions of August 21\textsuperscript{st}-22\textsuperscript{nd} what emerged from briefings to media and actual documentation – specifically amendments proposed by critical states – was that between one dozen and up to a half of the 45 attending countries remained deeply concerned over the implications of the U.S./India Agreement.

Leading the opposition to the current draft proposed by the U.S., were the grouping of Ireland, Switzerland, Austria and New Zealand as well as the Netherlands and Norway.

In their opening statement, obtained by the Indian national newspaper the Hindu, the six warned that they would move “substantive amendments ... with a view to increasing the level of comfort with the proposed exemption.” All of these amendments, they said, “are based on concepts already enshrined in U.N. Security Council Resolutions, in domestic legislation of NSG Participating Governments, and in bilateral nuclear supply agreements which NSG [states] have concluded over the years.”\textsuperscript{173}

The UN resolution, as detailed earlier requires India (and Pakistan) to sign the NPT and the CTBT, with the domestic legislation understood to refer to the U.S. Hyde Act.

Twenty-five amendments were tabled by around a dozen countries during the two day meeting. Some reports suggested that the fell into two general areas – the demands for NPT and CTBT signature; and the more technical and procedural. The former are viewed as being largely for domestic consumption in the home capitals of the objecting states, and will not survive further negotiations.\textsuperscript{174} India is not going to sign either. The latter are considered by the U.S. and India as more difficult to negotiate around.


\textsuperscript{172} See, Nuclear Suppliers Group statement, August Plenary at: http://www.nuclearsuppliersgroup.org/PRESS/2008-AUG-Press-Vienna.pdf in its entirety it read:

“The Nuclear Suppliers Group (NSG) met in Vienna on 21 and 22 August to discuss a U.S. draft proposal on a statement on civil nuclear cooperation with India. Participating Governments, exchanged views in a constructive manner, and agreed to meet again in the near future to continue their deliberations.”


\textsuperscript{174} Op cit, The Times of India, August 23rd, 2008.
Of the issues discussed at the August Plenary the following seemed to be prominent.

- Nuclear testing – as stated calls for CTBT signature, were made, but India and U.S. officials were hopeful they would not survive the next round – though they should. On demands that any resumption of nuclear testing should see automatic suspension of supplies to India, Canada proposed a so-called compromise acceptable to India, which would see in the event of a nuclear test by India, a requirement for an NSG consensus on whether to end nuclear trade. This of course should be unacceptable to those states without direct nuclear interests with India, because it would mean that the U.S., France, Russia and others could block that consensus;

- Compliance with NSG Guidelines – critical states suggested that the NSG formally review the status of India’s compliance with the terms of its exemption. This was suggested as breaking new ground for non-proliferation, leading to a possible amendment of the NPT. NSG member states were reported to view this amendment as critical to the future credibility of the NSG. Apart from this being unacceptable to India as it is a precedent and therefore is clearly discriminatory, it raises the question of how the NSG would actually conduct a review of India’s compliance, in particular the issue of separation of civil and military operations;

- Preventing the transfer of uranium enrichment and plutonium reprocessing to India were also raised by the principal objectors. India rejects the possible restriction, as the they argue the U.S. Agreement permits the transfer of such technology. An NSG restriction would go some way to limited India’s capacity to increase its production of fissile material – so it is understandable why India opposes such a restriction. It also exemplifies the discriminatory nature of international nuclear non-proliferation, which in the past was cited by India as the reason it remained outside the NPT. Both Switzerland and the Netherlands, critical of the U.S. India exemption from NSG Guidelines have been active exporters of enrichment technology and both have contracted for spent fuel reprocessing leading to the production, stockpiling and transport of plutonium;

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176 See, “NSG states raise compliance issues on India exemption” Mark Hibbs, Nuclear Fuel August 25, 2008, Hibbs reported “An official from one NSG delegation said NSG might set up an intervallic review of India’s compliance. “This could be annually, or it could be every ten years,” he said. Were the NSG to require a review and compliance mechanism as a condition for the exemption, sources said, that would break new ground for the nuclear trade body and, according to some observers, inaugurate a process that in the long term could result in the NPT being amended, or eclipsed as the benchmark for international nuclear commerce.”

India’s immediate reaction to the suggested NSG amendments was to reiterate that it would reject conditions on its nuclear agreement with the U.S.

Foreign Minister Mukherjee was quoted on August 23\textsuperscript{rd} as stating, "We have to see what kind of amendments come. Then only we can decide. But we cannot accept prescriptive conditionalities.\"\textsuperscript{178}

The U.S. Ambassador to India reiterated after the NSG meeting that,

\textit{“The U.S. and India stand shoulder-to-shoulder in their desire for a clean exception and we will continue to work with our Indian partners to persuade the NSG countries that such an exemption is in the international community’s best interest,”.}\textsuperscript{179}

A redraft of the U.S. submission to the NSG was reported to be already underway by the last week of August, seeking to achieve what should be impossible – addressing the opposition of the critical nations without any conditions being attached. A further Extraordinary NSG Plenary is to be held on September 4\textsuperscript{th} and 5\textsuperscript{th} again in Vienna, Austria.

Not since the 1995 NPT Review and Extension Conference have so many nations with little or no nuclear industry been in a position to determine the future of the global nuclear non-proliferation regime. Echoing the words of the Government of Switzerland a vote to exempt India will mark the end of the existing global non-proliferation regime. That regime, enshrined in the NPT, has many failings, dangerous contradictions and double standards not least the promotion by the IAEA of access to the very technology usable in a nuclear weapons program, and the fundamental flaws in its safeguards system. But without a blueprint for a replacement a decision by nations such as Ireland, New Zealand, Switzerland, Austria, Norway and the Netherlands, to approve an exemption for India from NSG guidelines will unleash a new more dangerous age of global nuclear proliferation.

Given the nature of international diplomacy, its impossible to say that the NSG will reject the U.S. exemption. There is every possibility that the strong views of nations concerned with the proliferation risks of the Agreement, will be satisfied with more robust language and reassurances of the commitment by India to non-proliferation. If the NSG does


\textsuperscript{179} Opcit, The Hindu, August 26\textsuperscript{th}, 2008
approve the U.S. request to exempt India, their words of concern in recent weeks will come to be seen as international posturing and utterly hollow. The NSG will return to its obscure little known and ineffective backwater, but in the words of leading disarmament and non-proliferation U.S. Congressman Markey,

“If these countries do not demand real non-proliferation conditions on the proposed nuclear agreement with India, the NSG may as well be voting itself out of existence.” 180

CONCLUSION

To many a nuclear cooperation agreement between India and United States appears too technical, too detailed and remote to actually mean very much. What this report has tried to do is to highlight the scale of the threat posed by the U.S./India Agreement and why it is relevant to all those concerned with nuclear disarmament and peace in Asia and wider world, as well all those for whom such issues are a luxury they can ill afford – ordinary people who are and will be the ultimate victims. The U.S./India announcement in July 2005, has led to an almost unprecedented alliance of arms control organizations, anti-nuclear and peace groups, academics and former senior officials and politicians – the analysis of which has been much cited in this paper. To unite such a disparate group the threat must clearly be significant. For many it has been the disregard for, and impact on, the current non-proliferation regime, enshrined in the NPT. For others it has been the risk of increased nuclear trade, what this means for nuclear proliferation and the failure to address India’s real energy needs without nuclear power. What they have all recognized is that the Agreement marks a profound change in the status quo and that its effects will be profound and lasting.

The dangers of the Agreement have also been recognized by many governments inside the NPT/IAEA and Nuclear Suppliers Group – though rarely if ever communicated in public. The secretive nuclear diplomacy that traditionally takes place behind very tight closed doors, has been exposed to unprecedented scrutiny. How many have even heard of a NSG Plenary session, never mind an extraordinary one! While the governments have kept their criticism to the meeting rooms of Vienna, their concerns have filtered out and they reflect the widespread views of the international non-governmental organization community – the impact on the NPT, CTBT, the weak safeguards, compliance. Having failed to seriously challenge the Agreement, the International Atomic Energy Agency, should be now be seen for what it has been the past fifty years - a UN related agency with a wholly contradictory mandate to proliferate nuclear technology while applying weak and inadequate safeguards. The reputation of its Director, Mohammed ElBaradei should be in shreds following his inexplicable enthusiasm and endorsement.

180 See, 'Why should India's N-deal get free pass from NSG?' The Times of India August 22nd, 2008.
The future of the U.S./India Agreement, now rests in the first instance on the resilience of member states of the Nuclear Suppliers Group and then members of the United States Congress. If the member states can retain their primary opposition then the Agreement will stumble into a new U.S. Administration hopefully less disposed to throw out decades of U.S. non-proliferation policy. At the same time, the policies of these critical states have in part led to this crisis. By viewing nuclear trade as something that can be effectively regulated, they have deceived themselves and their public into the current global nuclear proliferation dynamic. If the U.S./India Agreement is the most extreme example of the dangers of nuclear trade – there are many others endorsed over the years by the NSG - that after all is what was set up to do. The voting record of many of these states inside the NSG remains confidential – but if they are so concerned with nuclear proliferation why have they actively participated in nuclear trade over three decades – trade that has provided the technical and material means for states to develop nuclear weapons? The U.S./India Agreement should force these governments and their wider body politic to question the fundamental rationale of the NSG and the wider promotion of nuclear power under the NPT and the IAEA.

All of these concerns relate to the existing nuclear trading regime, but perhaps for this author the most disturbing aspect of the U.S./India Agreement is the wider impact on relations with China. While international attention has rightly focused on U.S. led wars in Iraq and Afghanistan, and its confrontation with Iran, the Pentagon endorsed by Congress is refocusing its large strategic nuclear systems into a confrontation with China. The U.S./India Agreement is consistent with the U.S. Nuclear Posture Review issued in 2001 which placed China centre stage in future threats. Pentagon claims that China is moving away from its traditional minimum nuclear deterrent (countervalue) to an increased limited deterrent (counterforce), as well ambiguity over its no-first use policy are increasingly cited as justification for U.S. war plans. There is no evidence Chinese policy is changing, but one sure fired way for it to be considered is as a consequence of U.S. policy. The U.S./India Agreement is another piece of the puzzle as far as the misguided and dangerous policy of containing and confronting China and a new Cold War in Asia.

None of this is inevitable, and India’s traditional non-aligned role in international affairs is not yet lost completely. What Pentagon planners work out in Washington DC does not always work out as originally conceived. But the dangers are clear – the Bush administration is discarding the global nuclear non-proliferation regime because it believes its interests - commercial and strategic - are best served through nuclear cooperation with India. The consequences will be disastrous.

To avert this and in stark contrast to the position of U.S. and large nuclear trading states – led by France and Russia, those critical nations inside the NSG must reject any weakening of already flawed nuclear export guidelines. Ultimately, there is no comfortable middle ground for regulating nuclear trade – trying to control nuclear proliferation through export guidelines and police type inspection systems – as

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181 In other words, the ability to strike military targets in the U.S. as opposed to a nuclear strategy that simply seeks to provide a secure second-strike capability.
acknowledged sixty years ago by Acheson and Lilienthal\textsuperscript{182} is doomed to failure. The immediate priority is to end the prospects for a U.S./India Nuclear Cooperation Agreement, to be followed by a range of measures from renewed and aggressive nuclear disarmament, a comprehensive production ban on fissile material production, and the revision of the IAEA and NPT promotion of nuclear power. For decades India was justified in attacking the nuclear policies of the nuclear weapons states and their allies – the abandonment of this position should act as a spur to push for truly effective nuclear non-proliferation, global nuclear disarmament and sustainable energy policies.