Following Pokharan II tests, USA and India have been carrying on bilateral talks over a range of issues from non proliferation to security relating to India and Pakistan.

The two sides aside from general diplomatic expressions like "progress", "better understanding of each other" etc, have been cautious in not revealing the substantive portions of the talks. The problem being a sensitive one, it is understandable that little is being revealed to the public and in India even strategic analysts close to the establishment are surprisingly silent. We are told that the talks are in "semi final stage", but cancellation of Clinton’s projected visit to India and Pakistan speaks volumes about the result of the talks.

From India’s point of view the following points need to be highlighted.

* From a position that "India will never sign this unequal Treaty (CTBT), not now, nor later", India has formally declared in the United Nations that it will sign the CTBT before September 1999 and that it will not stand in the way of "entry in force" clause.

* India has already declared a moratorium.
* "No first use" of nuclear weapon has also been affirmed.

* Undertaking not to export nuclear weapon or nuclear weapon related material to other countries has been reiterated, unlike another nuclear weapon country which says something and does something else.

* Most important and little noticed, India no longer insists on time bound linkage on disarmament a source of embarrassment to the weapon powers..

On the other hand the US side maintains that India and Pakistan have not done enough to lift the sanctions and if there is any confirmation needed for the US position, the cancellation of visit of Clinton would validate one. India does not seem to have obtained any tangible concessions besides promise of lifting of sanctions in future. It is said that India has salvaged its Agni development and the necessity to have minimum deterrence has been acknowledged by the US side. These are intangibles and it is not clear why India should seek US approval on measures required for its own security. There is a suspicion that US is shifting the goal posts, a view which is also shared by Pakistan.

From the US point of view, one can understand that it was greatly piqued when India tested the nuclear devices at Pokhara this May. In one moment the entire edifice built by the nuclear weapon powers to prevent horizontal proliferation and a corner stone of Clinton’s foreign policy crashed. There was embarrassment too as the weapon powers had scant regard for article VI of the Non proliferation treaty where there is a commitment to disarmament. What greater embarrassment could there be when USA was unable to prevent another weapon power from aiding and abetting Pakistan’s quest for nuclear weapons and delivery systems.

It is also understood that USA must be seen to act decisively so that the would be proliferators would perceive that the steps taken by the weapon powers are seen to be hurting the countries which have "gate crashed" into the nuclear club. It is in this context that India should examine its position and make an assessment whether it would really be possible to get access to dual technologies which have been withheld from it even before Pokhara tests.

Basically India has two options. 1. To accept all the demands put forth by US soon after Pokhara tests and get the sanctions lifted. One aspect to be factored in is whether the sanctions are going to destroy India or whether India can live with it without making much noise about the sanction itself. 2. Follow the Chinese way- of proliferation by increments and keep up the strategy of "public denial and private admission", and thus have a leverage over USA. The latter is no option at all as India has but for a one time clandestine purchase of heavy water, has had a very clean record in the matter of proliferation although it is not a signatory to the NPT.

But there is a third option which India could and should actively pursue. If India declares itself to be a nuclear weapon power , it should
behave like one. The Pokharan II tests have given sufficient data for the computer codes and no further testing is necessary for weaponization. The CTBT by itself is non discriminatory. Why not accept the CTBT on its own merits and not look for quid pro quo from nuclear weapon powers? Thus India will be able to regain the moral heights necessary to work genuinely for nuclear disarmament. In the discussions that will inevitably ensue on the Fissile Missile Cut Off Treaty (FMCT), if care is taken to ensure that India keeps the fissile material produced in the past, that itself will be an indirect recognition of India as a nuclear weapon State.

It was sad to see a leading weekly magazine in India throwing doubts on the claims of AEC and DRDO that a thermo-nuclear device has been tested. While the columnist tries to make it appear as a "balanced view" with the opinions of both Indian and western analysts, the very caption "Is India’s H-bomb a Dud?" shows his bias. His evidence in throwing doubts on the yield of the tests is based purely on seismic recordings made all over the world. There are many factors affecting seismic results, not the least are the nature of rock formations in and around Pokharan test site and also the fact that on the first day, three tests were simultaneously conducted and the signatures of the tests could not be individually identified. While not going into the technical aspects of the question we wish to point out that according to Verification Technology Information Centre, Britain, the system could not identify the multiple events at all. Another global network of IRIS (Incorporated Research Institutions for Seismology) showed a single event with 20kT. The USGS which is an authority by itself for seismic methods, based on data received from 125 stations world wide, estimated the yield from 30 to 60 kT, a variation of 100 percent. On top of this, the USGS estimated the location of tests at a place 12 Km from the site itself! What IndiaToday has done is an insult to the Scientist community of the Atomic Energy Commission.

It is important to note that no finality can be reached on the basis of seismic data alone. This brings us to the CTBT organization which is fully aware of the limitations of the seismic data alone.

The CTBTO- Comprehensive Test Ban Treaty Organisation is now established in Vienna and the International Data Centre for collecting data has also started functioning in Vienna. It is well known that the "Entry into Force", clause in the CTBT Treaty requires ratification of all the 44 States (including India -thanks to friends like China and Great Britain).

The organisation consists of A. Conference of States parties, B. Executive Council of 51 members elected on a regional basis for routine running of the organisation and C. Technical Secretariat to assist the parties in A and B.
Four kinds of monitoring techniques are envisaged. 1. Seismic monitoring: This consists of a network of two tiers, comprising 50 online primary stations and 120 auxiliary stations which provide data on request. 2. Hydroacoustic: consisting of six hydrophone stations (fixed cable) and five island-seismic stations. These could detect explosions of 1kT and below but one drawback is that it cannot distinguish between nuclear and conventional explosions. 3. Radionucliede: Perhaps the surest method to detect a nuclear explosion. The technique rests on the detection of Xenon gas produced in nuclear explosions. 80 stations are envisaged with 40 of them equipped with Xenon samplers. 4. Infrasound Monitoring: This is capable of detecting explosions at altitudes ranging from sea-level to about 100Km.

These details are being given only to emphasise that all the four methods together would give near fool proof assessment of a nuclear explosion and such elaborate systems are and should be in place before CTBT comes into force. To come to a conclusion regarding yields and nature of the test device itself based on one aspect of monitoring will be wrong and misleading.

With India likely to be a late entry into the CTBT Organisation, it has a responsibility to ensure that it gets a fair share of monitoring systems.

Notes:
1. Statement in explanation of vote by Ms. Arundhati Ghose, Ambassador/Permanent Representative of India to the UN Offices at Geneva, on item 65: CTBT at the 50th Session of the United Nations General Assembly at New York on 10.9.96
2. There are references galore on persistent proliferation activities of a supposedly responsible nuclear weapon power- China. To get an idea, one should visit website http://cns.miis.edu/India/china/npakpos.html [1]. See article "China’s Nuclear Exports and Assistance to Pakistan."
3. Pakistan need not have tested its device as it was well tested and proved to be sound by the Chinese in the seventies.
4. One example would be the sale of 5000 specially designed ring magnets to Pakistan by China in late 1995. First, the Chinese denied the transaction and said that one should not act on rumours. Privately they conceded that the sale had taken place without the knowledge of the centre and to cap it all later said that the ring magnets were not upto the tolerance required for the enrichment plants. All these happened while China maintained a public posture of innocence and declaring itself to be a responsible State.
5. India Today, cover story, October 12, 1998, "Is India’s H-bomb a Dud?".