Verification of the FMCT: Lessons from IAEA, OPCW and CTBTO

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Verification mechanism of any future FMCT would have to "pick and choose" the useful practices and mechanisms existing across the IAEA, OPCW and the CTBTO. Three major issues are of significance to India in the FMCT. They are firstly, the definition of the term "fissile material"; secondly, the debate about the "scope" of the treaty with respect to production and stocks; and finally, the debate with regard to verification of the treaty.

The successful completion of a Fissile Material Cutoff Treaty (FMCT), some believe, would be an important step towards the ultimate goal of elimination of nuclear weapons. The FMCT will affect individual states differently due to the variance in their nuclear fuel cycles and pre-existing inventories of fissile material.[1] It is this difference which has led to divergent opinions among experts as to what the ultimate aim of the FMCT should be and how it fits into the broader arms control, disarmament and non-proliferation processes. This article seeks to study the current debate surrounding the verification of a future Fissile Material Cutoff Treaty (FMCT) and posit as to whether the Organisation for the Prohibition of Chemical Weapons (OPCW) could provide a verification mechanism for a future FMCT.

With the recent breaking of the deadlock at the Conference on Disarmament (CD) and the perceptible movement at the CD on the issue; studying the nature, scope as well as the implications of any future treaty has become very important.[2] For India, the issue assumes greater significance due to the fact that the Indian government under the July 18, 2005 Joint Statement has made a very clear cut commitment to work with the US for the conclusion of a multilateral FMCT.[3] More importantly, India will be most affected by the conclusion of at future FMCT regardless of the scope of the treaty. This is due to the fact that India possesses no hedge-stocks, unlike the case with most other nuclear-weapon-states (de facto or otherwise). This fact explains the rationale behind the importance that India ties to "effective verification" of a future treaty which is non-discriminatory, universal and credible.

There are three major issues that are of significance to India in the treaty. They are firstly, the definition of the term "fissile material"; secondly, the debate about the "scope" of the treaty with respect to production and stocks; and finally, the debate with regard to verification of the treaty. However, given the constraints of space as well as the focus of the issue, this essay will focus only on the issues surrounding the verification of a future FMCT.

Another point to be noted is that whatever the scope of the eventual FMCT, it will be the five nuclear-weapon states and the three states with nuclear weapons outside the NPT (namely India, Pakistan and Israel) which will be substantively affected. As the Non-Nuclear-Weapon states (NNWS) have undertaken not to produce or acquire nuclear weapons or other nuclear explosive devices, accept IAEA safeguards on all their nuclear material, and are parties to a comprehensive safeguards agreement, they already satisfy

the requirements of the FMCT. Given that India possesses no hedge-stocks, unlike the case with most other nuclear-weapon-states (de facto or otherwise), it is India that will be most affected by the conclusion of a FMCT.

Verification of a future FMCT

In the Shannon Mandate the task of verification is described as an "effectively verifiable treaty."[4] To achieve this end it is imperative that the verification mechanism be non-discriminatory, universal, and credible." To ensure that the principles are followed in letter as well as spirit it is necessary that all rights and obligations for verification must apply equally to all member states. In other words, no material, at least that being produced after entry into force, must be diverted to nuclear weapon use, equally for all treaty members. The measures to verify this ban therefore must be the same for everybody. India has already made a statement supporting such a move saying that "the treaty should incorporate a verification mechanism in order to provide the assurance that all States were complying with their obligations."[5]

However, the recent anti-verification stand taken by the United States has made matters very difficult. Dr. Christopher A. Ford, the US Special Representative for Nuclear Nonproliferation in a March 2007 statement ominously delivered at a conference on "Preparing for 2010: Getting the Process Right," said:

> "...it is the conclusion of the United States that effective verification of an FMCT cannot be achieved. The United States has concluded that there is no achievable combination of verification and monitoring means and measures that would enable the United States and other parties to the agreement to detect non-compliance in time to convince a violator to reverse its actions, or to take such steps as may be needed to reduce the threat presented and deny the violator the benefits of its wrongdoing."[6]

The US stand is that any verification scheme for an FMCT would have to address six fundamental verification issues: (1) detection of production of fissile material at clandestine facilities; (2) monitoring declared fissile material production facilities; (3) providing for the exclusion from verification of fissile material produced for non-proscribed but sensitive (e.g., military) uses after the Treaty's production cutoff date; (4) monitoring material declared as having been produced after the cutoff date, to verify that it is not diverted; (5) excluding from verification fissile material produced before the cutoff date; and (6) determination of acceptable end-use of material produced after the cutoff date.[7] Citing core national security concerns as well as the associated costs of implementing any such verification, the US has stated its opposition to any verification mechanism to be put in place for the treaty.

There are two important questions relating to the verification of an FMCT which require careful consideration. Firstly, who will verify the treaty? And secondly, what kind of verification regime will be implemented? Many experts are of the opinion that the easiest way forward would be to entrust the IAEA with the additional responsibility of verifying the FMCT. Though this does seem to be quite a logical step due to the fact that many of the existing IAEA safeguard techniques and procedures could be directly applied to the verification of the FMCT; the question that arises is whether the IAEA safeguards system is the optimum one for this purpose. It is important to take note of the fact that the OPCW and the CTBTO are two additional multilateral verification organisations which also possess similar capabilities and performs similar functions as the IAEA. Therefore, one must also assess the capabilities of these organisations to verify the FMCT rather than dismissing them off hand.

Currently, there are three major multilateral verification organisations in place – the International Atomic Energy Agency (IAEA), the Organisation for the Prohibition of Chemical Weapons (OPCW) and the

Comprehensive Nuclear Test Ban Treaty Organisation (CTBTO). There is a great deal of similarities and convergences between the three organisations. Each of the above mentioned organisations gathers and processes information to help verify the compliance of states with their disarmament and non-proliferation commitments. Additionally, these organisations also conduct on-site inspections as an integral part of verification.

Therefore, the positives of using the OPCW verification mechanism for a future FMCT definitely needs to be studied carefully. The first advantage is that using the OPCW-type mechanism would immediately minimise differences in implementation in the three types of states involved: the nuclear weapon states (NWS); the de facto nuclear-weapon states (Israel, India, and Pakistan); and the non-nuclear weapon states (NNWS) under the NPT. This would automatically remove the biggest hurdle in the way of successful FMCT negotiations.

However, there definitely are drawbacks of taking such a course. Firstly, establishing a new organisation would extend and complicate (and possibly even stall) the negotiation of an FMCT. Secondly, such a verification system could be very expensive and create additional layers of unnecessary bureaucracy. Given the fact that the IAEA has been working for several years with *zero real growth* budgets and facing acute financial constraints; it remains to be seen where the international community would find the financial resources for a new international multilateral verification organisation.

Given the situation, another possible way out could be to encourage cooperation between international organisations. The CTBT for instance seeks to cooperate with the IAEA and makes use of the Agency's expertise and facilities.[8] However, attempts to put in place pan-treaty verification organisation, or cross-treaty verification mechanisms have not succeeded in the past. The failures have mainly been due to political hurdles. For example, during initial CTBT negotiations there were proposals to have the IAEA to verify the CTBT. However, as it became clear that not all IAEA members would sign the CTBT, the proposal was dropped. A similar situation could take place in the case of the FMCT too. Another problem in joint verification mechanisms is the rightful concern among states to sharing of confidential information across verification organisations. State parties are likely to object to any cooperation that could result in the release of such information to non-states parties or to the verification organisations of other regimes.

Therefore, it is quite clear that the verification mechanism of any future FMCT would have to "pick and choose" the useful practices and mechanisms existing across the IAEA, OPCW and the CTBTO. Given, the problems associated with each of these multilateral international verification mechanisms it does not seem likely that imposing the responsibilities of FMCT verification on any one of these bodies would serve the purpose. For example, in case of declared facilities in state parties, the existing IAEA system of inspections, containment and surveillance would do fairly well. However, the IAEA safeguards mechanism has had problems with detecting undeclared facilities. The Iraqi and the North Korean activities are cases in point. However, with the adoption of the Additional Protocol, the Agency has addressed this issue to a great extent. To overcome this challenge, the verification of FMCT could borrow from the challenge-inspection mechanism of the OPCW. Under this mechanism, CWC parties are expected to use national means for looking for undeclared facilities. If a party becomes aware of a suspect site, it can request that the OPCW undertake a challenge inspection. However, a challenge inspection can be blocked by a three-fourths vote of the CWC Executive Council.[9]

Therefore, it can be said that given the short-comings and the positives of various verification mechanisms, serious thought should be given to the idea of setting up a new international agency to verify the FMCT. However, The safeguards system that would be evolved by the new agency would, of course, use as much of the IAEA or the OPCW or the CTBTO system as is desirable and useful, and would add elements to make the system appropriate for verifying an FMCT.

However, there are several areas for possible cooperation between these different verification mechanisms keeping the confidentiality of state parties' information intact.

The first possible area of cooperation is infrastructure and equipment sharing. For the verification of the FMCT, the sharing of certified radionuclide laboratories might be explored. If confidentiality of information can be assured, such laboratories being maintained by the IAEA and the CTBTO Prepcom can be made use for the purpose of FMCT verification. Also, it might be possible to pool the use of global communication infrastructures.[10] Currently, both the IAEA and the CTBTO Prepcom are maintaining fairly independent global monitoring communications system. Use of these facilities could be explored for the purpose of FMCT verification thereby saving considerable costs and unnecessary duplication of facilities and equipment. However, it must be understood that certain inspection equipment is specific to an inspection organisation and might not be of use to other organisations. However, the reverse too is true. Certain inspection equipment is generic and when not in use, can be shared by other organisations.

Another possible area of cooperation is training of staff. Though confidentiality concerns would be a barrier for free exchange, sharing of staff between organisations; it would greatly help if for example, the IAEA could share its experiences of past years with fairly new verification organisations like the CTBTO Prepcom and the OPCW.

Conclusion

The FMCT is only going to gain more and more importance by the day. However, verification remains one of the major stumbling blocks before the successful negotiation of the treaty. Though, the anti-verification stance of the US is a major challenge; the decision on the actual verification 'model' to be adopted by the FMCT is as much a great a challenge. It does seem as if a large section of experts and decision makers support the verification duties of a future FMCT to be handed over to the IAEA. However, given the lacunae of the IAEA system and political concerns of several member states outlined above, this article makes a case for putting in place a verification mechanism that picks and chooses from the existing verification mechanisms of the OPCW, the IAEA and the CTBTO Prepcom.

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8. Article II of the CTBT states that: 'The Organization, as an independent body, shall seek to utilize existing expertise and facilities, as appropriate, and to maximize cost efficiencies, through cooperative arrangements with other international organizations such as the International Atomic Energy Agency'.

9. Chemical Weapons Convention, Part X – Challenge Inspections Pursuant to Article IX

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