



**Verifying Missile Accords**  
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**Introduction**

Let me first say what a pleasure it is to be back at Wilton Park for another conference on arms control. I'd like to thank Mark Smith for his kind invitation, and of course the sponsors of the conference for making this discussion possible.

Mark has asked me to give my perspective as someone involved in a delicate government to government initiative, namely the UK-Norway Initiative on the verified dismantlement of nuclear weapons. However, I must say that the issue of missile verification is slightly outside my comfort zone.

So, I will address this topic from a perspective that I'm quite comfortable with. That is verification theory. In my mind, it is mostly meaningless to talk about effective verification without making a few assumptions:

Before you construct a verification regime, you would need to know what is supposed to be verified. Treaty verification fundamentally aims to do one thing: to figure out whether a party to an agreement is following its terms, or not. For instance, if the agreement says that the parties shall not equip a certain weapons system with nuclear warheads, as we discussed yesterday, the verification system should aim to provide some sort of assurance that all warheads are conventionally equipped.

This, of course, is easier said than done. You could think of ways to inspect a missile before it's deployed. To compare records with a baseline declaration, to check serial numbers, make and model. But what is to stop a potential cheater from kitting the missile with a warhead once inspectors are gone. And should one of these missiles take off, how will the other side know that it carries an explosive yield of 500 kilograms, and not 20 kilotons?

On the other hand, counting that no more than an agreed number of warheads are in existence is easier. If you know where the items are produced, where they are deployed, and how they are intended to be used, you can reach conclusions with high levels of certainty. Especially if the missiles, as we heard yesterday, might be deployed permanently at sites. The roads that once brought the missile there might deteriorate, a sure tell sign that nothing big is moving on it. You can also agree to show the missile to ever watchful satellites. This serves two purposes: to show that you're in compliance, but also to demonstrate that you're still in the game.

So if verification is to figure out whether a statement of compliance is true or not, what would 'effective' verification be?

**Effective verification: a near past perspective**

Some years ago, I spent a lot of time trying to figure out what the Bush administration meant with its new definition of verification. It seemed to me like it was loading the concept of verification with too much – making it almost impossible to think of situations where verification was deemed acceptable.

The administration was toying with the concept of 'degrees of verifiability'. The job for US negotiators was to determine whether this 'degree of verification' was heavier than the combined weight of:

1. The compliance history of the parties involved;
2. The risks associated with non-compliance;
3. The difficulty of response to deny violators the benefit of the violation;
4. The language and measures of the agreement itself; and
5. The United States own national means and methods.

Even if the 'degree of verification' would be heavier than the combined weight of all these factors, the system must be able to allow the United States to detect 'significant non-compliance' or 'a pattern of non-compliance' in 'sufficient time' to counter and deny a potential violator.

This is nothing but an attempt to merge two different concepts, and then add a legalistic twist to it. Namely verification theory brought forward by the US Arms Control and Disarmament Agency in the mid-1970s, of course, Paul Nitze's elegant and powerful definition of effective verification delivered to the Foreign Relations Committee in 1988.

### **Evolving the concept**

Building on the past, the Bush Administration attempted to add an almost legalistic requirement in its reference to "patterns of non-compliance". This is a major departure from traditional thinking in arms control verification. Paul Nitze, for instance, only discusses militarily significant violations of the treaty.

This legalistic view of treaty verification has reared its head before. It is often advocated by conservative, republican governments with little trust in international agreements.

Requiring a system to detect marginal patterns of violation, however, is very problematic. It places a very high burden on verification efforts and raises the verification standard to almost unachievable heights. It forces any verification system put in place to monitor activities very closely, and almost inevitably raises the false alarm rate.

Sadly, it is usually advocated by lawyers, such as myself, that often draws parallels to the fact that national courts tend to ascertain truths on the basis of evidence on a daily basis. This is true, of course.

However, what legalistic advocates often forget is that the legalistic school only works if there is a presumption of innocence, and strictly defined rules on the burden of proof. Without these safeguards, the courts cannot operate. And sadly, there is no burden of proof in international law. And the presumption of innocence is often replaced with a presumption of guilt.

During the cold war, advocates of the legalistic strand of thinking often insisted on intensive verification because the Soviet Union probably would attempt to cheat. Sometimes, this thinking went astray. The verification sceptics assumed that the Soviet Union would cheat on their obligations, and organised the litmus test of the verification system along those lines.

Consider for instance the paraphrase of Hamlet in a 1979 Heritage Foundation publication: 'There are more ways to hide ICBM's in heaven and earth than are dreamt of in your philosophy'.

Or, to quote, Senator Helms in the 1979 SALT II hearings, when addressing the use of the term 'adequate verification' by Secretary of Defence Harold Brown:

*'...the repeated use of the qualification "adequately" bothers me. And I guess Mrs. Brown would be a little suspicious of you if you were to come home tonight and tell her that you were adequately faithful to her, wouldn't she?'*

Harold Brown, of course, responded: 'In that case as in this, I suppose it would depend upon the alternative offered'. Witty. But what he meant was that the consequence of insisting on impossible verification benchmarks is that the arms control agreement itself often collapses. The best is the enemy of the good.

### **Requirements in constant flux**

How can one use these theories in practice? Well, the theory is that verification requirements is in constant flux:

First, let's assume a missile accord between two governments with large arsenals. They distrust each-other after a long period of hostility, but are now on relatively friendly terms. Since they both possess a large number of vehicles, the risks associated with a violation are very low. After all, it would require fairly extensive cheating to significantly alter the missile balance. It is only moderately difficult to mount an effective response to a violation, for instance through producing more missiles. Leaders in both countries assign very high political value to the agreement, as it will signal responsibility and a desire to disarm.

In a situation like this, theory stipulates that verification requirements will be low.

As numbers goes down, the risks associated with a violation will increase. The rationale here is that 50 undeclared missiles matter more when both states have a 100 missiles to play with rather than, say, 500. As the numbers reduce, the political benefit of the agreement also diminishes. The two countries start to discuss what force structure they would need to safeguard its deterrent, and to be able to mount an effective strike on its enemy.

In a situation like this, verification requirements will be moderate to high.

Should hostility between the two countries rise, politicians would see few benefits to a missile control regime, and the verification requirement would rise further. This is especially the case, theory tells us, in situations where the number of missiles in service is relatively low, and where a violation will be extremely difficult to redress. This might, perhaps, be the situation in the Indian subcontinent.

And theory would tell us that verification requirements in such situations will be high.

### **Conclusion**

What theory then would seem to indicate is that elaborate agreements fail in periods of high political tension, or in situations where the cost of non-compliance is too high. To try to build a system of verifying the operational status of a missile system, as we heard yesterday, would, if theory is right, probably end in failure.

I'm not going to pass judgement on the ideas we heard yesterday, however. I belong to the school that believes that all ideas should be tried and tested, in true laboratory spirit, so that the ones that does not work can be discarded.

Recall that arms control agreements are often prompted by, or crafted in, situations of less than perfect trust between its parties. You rarely have an arms control agreement between friends.

However, it would seem to me that a number of lessons can be learned. I'm going to raise three, but there are many others.

1. The prohibition that is verified must be simple and, above all, very clear. It is preferable for it to contain metrics, such as a defined number of treaty limited items, defined deployment zones or clearly defined activities such as troop movements in a certain direction.

2. Access must be given to someone, or something, to go in and observe or measure. This is easy if the treaty limited item is visible from space, or if you monitor a demarcation zone. It is not as easy if the item is small, easily transportable, or even fungible.

3. Demands on verification are limited by the expectation that the other side will insist on reciprocity.

But above everything else, you have to recall that it is the scope of the obligation that decides everything else. You have to figure out what you want to verify before you can address questions such as how to verify, when to verify, and who to verify.

It would seem to me that the question what to verify was answered before negotiators sat down and put together the INF treaty. This didn't make negotiations straightforward, but it was an essential precondition.

Our colleagues and friends from South Asia, however, still seem to have some differences to work out before they can answer this first, fundamental, question.

This doesn't make the effort of finding an answer less meaningful. It just makes it more challenging and hard. And humans like a good challenge.

That, I believe, is a case for optimism.