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1

The Structure and Logic of the WMD Ban Regime

The issue of how to eliminate weapons of mass destruction was a major feature of international politics at the end of the twentieth century. It was also an essential part of the debate about international relations theory. The 'balance of terror', the possibilities loosed by technology of weapons that could destroy all human life on earth provided an incentive to find solutions. At the same time, it was the highest expression of the realist approach to international politics, dealing as it does with the ability of a State to defend itself.

The issue has gained much greater salience in the aftermath of the terrorist attacks on the World Trade Center and the Pentagon, for two reasons. First, it increased the fear that weapons of mass destruction could be used by a 'rogue' State or by a non-State actor. Second, the United States government took an increasingly unilateralist position and worked to reduce the scope of international agreements and institutions that were set up to eliminate the weapons of mass destruction (WMD). This position embodied a realist's cognitive set, with its assumption that only States could control the behaviour of other States and that the role of international organizations was minimal, if at all.

The WMD problem began with the one type of weapons that probably does not cause mass destruction: chemical weapons. The first disarmament efforts focused on banning these weapons, without, however, ignoring the potential of devastating germ warfare that had occasionally been crudely attempted in the past by spreading disease to the enemy without any technological refinements. Since the delivery of chemical weapons is localized, multiple bombs would be required to cause mass destruction. Chemical and biological weapons were considered abhorrent because they were indiscriminate. They could affect soldiers and civilians alike; they could not really be targeted in the same sense that

a conventional bomb or a mortar shell might be, for example as regards precision and control consistent with military objectives. Their prohibition in 1925 has largely been respected, notably during World War II, despite the precedents of chemical use set in the 1930s by Japan against China and Italy in Ethiopia and the use of chemical weapons half a century later by both sides in the Iran–Iraq War.

The real incentive for dealing with the unconventional weapons came with the nuclear age, since nuclear weapons are truly designed for mass destruction, on a major scale and with indiscriminate effects. While extensive and sustained conventional bombing can also wreak mass destruction, it cannot do as quite as effectively and efficiently as nuclear weapons. Indeed, the quantity of nuclear warheads assembled during the second half of the twentieth century could destroy human life several times over. The fear of these weapons is such that they have only been used twice during warfare, in Hiroshima and Nagasaki some sixty years ago.

The advances of biological science in the twentieth century led to the development of biological weapons, which are sometimes called ‘the poor man’s atom bomb’.¹ Deadly diseases like anthrax, botulism, the plague and even smallpox, rather than being eliminated, have been improved for weaponry. The reason that they are not a more public part of the arsenal is that the capacity to deliver or weaponize them effectively has lagged behind the technology to produce the agents. This partly explains why Iraq did not use them during the Gulf War (although the fear of their use meant that the military during Desert Storm were all vaccinated against anthrax).

An additional factor today is the concept of the ‘rogue State’, a government ruled by persons who are unwilling to abide by international norms and might even be so irrational as to use WMD against an enemy. Clearly, that is the position that was taken by the United States and some others on Iraq.

Add to this the idea that non-State actors, supported by various rogue States, might try to use these weapons for terrorism, as in the nerve-gas attack on the Tokyo subway by a quasi-religious group, the Aum Shinrikyo and, of course, potentially Al-Qaeda.

To deal with the threat of weapons of mass destruction, States have created an interlocking set of treaties providing for the elimination of WMD. At one level, the network of treaties is classic realism. The only way that the treaties can be enforced in the face of a State’s defiance is through the use of force by other nation-States, as foreseen in Chapter VII of the United Nations Charter. The response of the

United States and others to Iraq's defiance of Security Council resolutions is a clear case.

At the same time, the treaties provide for mechanisms to verify that provisions are being met by the State Parties. Most provide for an international verification mechanism. This recognizes the inherent limitations of realism in a complex, interdependent world. Without a credible, authoritative and independent means of assuring all concerned States that a treaty is being broken, the prospects of obtaining an agreement to use coercive enforcement are limited. A case in point is the initial effort of the United States to obtain the consent of the Security Council in 2003 for such action in Iraq, the failure of which was used as a pretext to pursue a unilateral course.

The assurance that deviation from the provisions of the treaties will be effectively detected and lead to coercive action on a multilateral basis by stronger States is perhaps the greatest deterrence to States who might consider developing or proliferating weapons of mass destruction.

Behind this simple idea is a much more complex structure, based on certain assumptions about the nature of international politics, power and organizations. An overview of these assumptions is a necessary starting point to understanding and appraising the verification mechanisms.

The regime to ban WMD

When governments agreed on the various treaties that provided for the elimination of weapons of mass destruction, they were constructing an edifice of law and practice that transcended national borders and capacities. They were constructing what is usually called an international regime. We argue that the WMD ban is really a regime. In his study of UNSCOM (United Nations Special Commission), Graham Pearson refers to 'the web of deterrence' that, *inter alia*, includes 'comprehensive and effective arms control that clearly establishes the norm and has intrusive verification regimes to build confidence in compliance'.² Is it a single regime or several? The answer depends on how one defines a regime.

The term 'regime' in common usage refers to a mode or system of rule or government. Its application at the international level is derived from international relations theory, as a response to the inadequacy of the dominant realist model to explain international behaviour.

Realism posits that the international system is the consequence of the actions of individual States that weigh their national interest and use their power to promote that interest. For most of the twentieth century,

it was in its various forms the dominant explanatory model for international politics.³ It is a good theory to explain conflict, or justify the use of force in relations, but is not as good in explaining why States reach binding agreements and peaceful resolution of conflict.

The classic definition of a regime was given by Stephen Krasner in a seminal issue of the journal *International Organization* in 1983. He said:⁴

An international regime is a set of principles – explicit or implicit – norms, rules and decision-making procedures around which expectations of actors [States] converge in order to coordinate actors' behaviour with respect to a concern to them all.

The definition has four components:

- 'principles, norms, rules and decision-making procedures' represent elements of institutions, of regularity;
- 'expectations of actors' refers to cognitive and perceptual aspects rather than to actions;
- 'converge in order to coordinate' refers to the agreement to mutually affect possible behavior by indirect means rather than by authoritative means; and
- 'a concern to them all' refers to the fact that the collective pay-off is considered more important than the individual interest.

An international regime is an attempt to build an institutional structure of regulation without altering the basic institutional structure of the international system, based on State sovereignty. Within that context, international public institutions have a unique character.

The idea of regime theory was not originally related to the problem of regulating State behaviour in the WMD field, but was rather an attempt to explain what was happening in such areas as the Law of the Sea and the laws of outer space and the environment in general. The realist model did not have a place for such developments. The regime idea came at a point when neo-functionalists saw an increasing amount of 'supranationalism' in trade and the economy (e.g. the European Community), even though the main building blocks were still sovereign States. Regime theory, in a Hegelian sense, was indeed a synthesis between the realist thesis and the functionalist antithesis. As a theory of international relations, regime theory had limited uses, and had more or less gone out of fashion by the end of the 1980s and was replaced by new approaches focused on international political economy

and by concepts such as 'new institutionalism' and 'social constructivism'. Susan Strange's critique of regime theory in the 1983 volume of *International Organization*, 'Cave Hic Dragones!', was used by many as the definitive put-down.⁵

As scholars sought to use the concept, the real problem surfaced: it was difficult for theorists to apply it in practice. While treaty-based regimes, like the Law of the Sea, could fit, most international agreements were too amorphous to fit. There were some efforts to examine 'trade regimes' like the automobile industry, but they were particularly elusive. Regime theory fell from favour but still remains a useful source of concepts in regulating international organizations. As former international civil servants, regime theory resonates with us. We believe that it provides some useful explanatory tools for explaining the process of eliminating WMD, particularly the role of international secretariats.

Again, using Krasner's original definitions, the elements of a regime are the following:

- Principles are beliefs of fact, causation and rectitude;
- Norms are standards of behaviour defined in terms of rights and obligations;
- Rules are specific prescriptions and prohibitions with respect to actors' behaviour;
- Procedures are the prevailing practices for making and implementing collective choices.

To anyone who has participated, over a long period of time, in multilateral negotiations, this is exactly the order in which the negotiations proceed. There first has to be an agreement that a problem exists, a common understanding of its causal parameters and the need to resolve it through collective action ('rectitude'). States then have to define the normative parameters. Then States have to agree on rules, and finally they must set up institutions that will enable collective choices. A regime is not really complete until all four stages have been agreed, although things can begin to happen after stage two as soon as norms are established.

A complicating factor is that sometimes regimes overlap and often this overlapping makes the agreement process complex. In international negotiation this is called 'linkage', where an issue in one subject area is connected with an issue in another and both have to be resolved together if either is to be agreed.

At the international level, regimes are usually embodied in conventions, multilateral treaties that are binding on their parties. Moreover, there can be regimes that are formed somewhat less formally by less-binding kinds of agreements. However, fully articulated regimes inevitably have some form of treaty basis.

Applied to the issue of WMD, we can see that there was a consensus that the existence of WMD and the risk of proliferating them was destabilizing international relations and threatening to produce unacceptable outcomes. There was an agreement that the weapons could produce mass destruction. There was an agreement that eliminating these weapons would reduce the threat of conflict (causation) and was thus good.

There was also agreement that States that had WMD should not develop them further or give them, or their components, to States that did not have them, and that steps should be taken to eliminate and destroy the stocks of weapons. States had an obligation never to use them. States who lacked them had an obligation not to try to obtain them.

In significant recent publications, the Carnegie Endowment for International Peace has analyzed the problems and possibilities of 'repairing the regime' for preventing the spread of weapons of mass destruction and for tracking any signs of proliferation. The study is based on a useful definition: 'global non-proliferation regime is a network of interlocking treaties, organizations, unilateral and bilateral undertakings, and multi-lateral inspections aimed at halting the spread of nuclear, chemical and biological weapons'.⁶ As the objective of these instruments goes beyond preventing proliferation, we prefer broadening the concept in this study to apply to the broader objective of WMD ban or elimination.

The WMD ban regime is centred on the following four WMD conventions, as buttressed by several regional and bilateral arrangements, norms and arrangements:

- The 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which entered into force in 1970 and currently has over 190 parties, including the five nuclear-weapon States.
- The 1996 Comprehensive Nuclear Test-Ban Treaty (CTBT), which is not yet in force but has 172 signatories and 115 ratifications, including 33 of the 44 annex II countries.⁷
- The 1992 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their

Destruction (CWC), which entered into force in 1997 and has over 160 parties. And

- The 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons (BWC) and on their Destruction, which entered into force in 1975 and has over 150 parties.

All of these were negotiated within the context of the United Nations Conference on Disarmament as building blocks for a potential all-encompassing disarmament regime, initially conceived as a single system of General and Complete Disarmament (GCD), implemented by an international disarmament organization. The dichotomy between conventional and unconventional weapons had crystallized the concept of weapons of mass destruction as a useful category of the most lethal weapons for verified elimination. The WMD ban regime was to advance on the basis of separately negotiated 'partial measures', focused on each type of weapon, but forming a network of treaties interrelated by pre-ambular cross references, common principles and norms, parallel mechanisms and procedures of recourse, ultimately to the UN Security Council.

Within each treaty system, the concept of regime is fully developed and we may clearly refer to the Nuclear Non-Proliferation Regime (including the NPT, the CTBT and regional arrangements), the CWC Regime and, to a lesser extent, the BWC Regime. However, the extent of progress towards an overarching WMD regime has been limited by political constraints undermining parallel development of all stages of a regime. While principles and norms for an obligatory ban of all WMD are fully agreed, rules and procedures as the third and fourth stages of regime-building are yet to be accepted across the board. That is particularly where the issue of verification comes into play.

In the early disarmament treaties of the twentieth century, following the realist model, it was assumed that the agreements would be self-policing. States, run by gentlemen, would simply honour their agreements. Unfortunately, many of the States, it seems, were not run by gentlemen.

In implementing disarmament treaties there are several dilemmas to be addressed, if compliance is to take place:

- States involved in the elimination of WMD confront almost a classic version of the Prisoner's Dilemma game. While the best outcome is

that both parties disarm, what happens if one does, in good faith, and the other does not? In that case the one that does not will dominate the one that did, thus increasing the cost of compliance.

- States may be run by leaders who are unscrupulous and irrational and who might not comply. If one of these ‘rogue States’ acquires WMD, they could wreak their irrational national interests on all States that had complied. Thus, there is a reason for non-rogue States not to eliminate their WMD.
- Non-State actors who, by definition, are not bound by international conventions, might obtain WMD from States that have them, or even develop some themselves to pose a threat.

The dilemmas have to be resolved by having clear and credible information about whether States are in compliance. The issue here is how to obtain that clear and credible information. If the information is flawed, as was the case with WMD and the invasion of Iraq, action to enforce compliance can be considered illegitimate. If the information is not credible – that is, not from a trusted source – it may not be believed.

In this, the importance of legitimacy, both of the actions and of the information on which it is based, is high. To understand why this is the case, we have to reflect on the nature of power in international politics today.

We can take power to be the ability to make someone else do something that they might not otherwise do. In the classic thinking of the Realist model of international relations, this is done by the threat of use of force or other sanctions. In an earlier time this would be done by alliances, would be reflected in a balance of power. Even in the contentious debates between the realists (or neo-realists) and the constructivists, there is a recognition that power is an essential factor in international politics.⁸

Max Weber reflected on the nature of power. In effect, he distinguished three types of power: coercive, utilitarian and legitimate. This has been well examined by Hurd:⁹

Consider three generic reasons why an actor might obey a rule: (1) because the actor fears the punishment of rule enforcers, (2) because the actor sees the rule as in its own self-interest, and (3) because the actor feels the rule is legitimate and ought to be obeyed. The trait distinguishing the superior from the subordinate is different in each case. In the first, it is asymmetry of physical capacity; in the second,

a particular distribution of incentives; and in the third, a normative structure of status and legitimacy.

Hurd's analysis, like those of others, notes that focus has always been on legitimate power. There are good reasons for this.

Coercive power, the ability to make someone do something by inflicting pain – or threatening to – of a physical or financial nature is the ultimate form, but also the costliest. What Hurd calls self-interest, but what we prefer to term utilitarian power, is making someone do something by providing them with material rewards (tax incentives, trade agreements, bribes) is a second type. This is also costly.

Legitimate power, or making someone do something simply because it is the right thing to do, is the least costly. It is also largely self-enforcing. There is an element of self-interest in this, in the sense that order in society, the economy and politics is in most persons' (or nations') interest, by removing uncertainty in transactions and expectations of behaviour.

Translated to the international level, as Franck says,¹⁰ 'A partial definition of legitimacy adapted to the international system could be formulated thus: *a property of a rule or rulemaking institution which itself exerts a pull towards compliance on those addressed normatively.*' [Emphasis in the original.]

In terms of WMD, States could use coercion to enforce compliance, but this would be very costly, particularly if it was based on an erroneous diagnosis of the situation, as was clearly the case for the United States and its coalition in Iraq. Using utilitarian incentives would also be costly, if the nature of the situation were to be incorrectly interpreted, as seems to have been the case between the United States and North Korea.

To look at sources of power in a multilateral system, it is obvious that we have to look to the third type of power, legitimate power.

There are several elements to legitimate power. The first is that the rule on which legitimacy is based has to have been agreed by all. Without this consensus, the rule will not be legitimate. This aspect was clearly set out in early regime theory, where a critical stage in regime formation was agreement on rules and procedures to implement agreed norms and principles. In this sense, legitimacy is affected by the nature of the principles (beliefs of fact and causality) and norms (beliefs about what is right behaviour). It is also affected by the operation of the rules and procedures. As Franck has put it:¹¹

The perception of those addressed by a rule or a rule-making institution that the rule or institution has come into being and operates in accordance with generally accepted principles of right process.

Legitimacy thus is affected by the institutions who either operate or oversee the rules. Since one of the characteristics of most international regimes is that the operation of the regime is usually – if not always – entrusted to an international organization, any inquiry about the use of the legitimation power must focus, at least in part, on these organizations.

For the unilateralists in the United States government, there is a rejection of this premise. The position was clearly stated by John Bolton, the United States' Under-Secretary of State for Arms Control and International Security:¹²

The question of legitimacy is frequently raised as a veiled attempt to restrain American discretion in undertaking unilateral action, or multilateral action taken outside the confines of an international organization, even when our actions are legitimated by the operation of that Constitutional system. The fact, however, is that this criticism would delegitimize the operation of our own Constitutional system, while doing nothing to confront the threats we are facing. Our actions, taken consistently with Constitutional principles, require no separate, external validation to make them legitimate. Whether it is removing a rogue Iraqi regime and replacing it, preventing WMD proliferation, or protecting Americans against an unaccountable Court, the United States will utilize its institutions of representative government, adhere to its Constitutional strictures, and follow its values when measuring the legitimacy of its actions. This is as it should be, in the continuing international struggle to protect our national interests and preserve our liberties.

Put succinctly, the United States will decide what is legitimate and what is not and can do so because of its coercive power. It is a philosophy based, at least in part, on 'might makes right'.

In exploring the role of legitimate power, several elements have to be examined. Clearly, the first is whether States will accept rules as legitimate and therefore as binding. Hurd (1999, p. 398; see note 9) notes that for some States, the reputation for 'rule-following' is an essential element in national identity. Certainly the Scandinavian States would be included in that. Other States, however, consciously refuse to comply with international norms. Often they are branded as 'rogue States' by other States.

Which rules are legitimate and therefore binding is clearly not a simple matter. At one level, there are clearly universal norms that all States are expected to observe. This would include the Charter of the United

Nations, where commitment to the provisions is a condition for membership in the community of nations. At another level, are the norms embodied in international treaties. Most international regimes are constructed around such international conventions. Adherence to the obligations of being a State party is a critical element in international order. Because adherence to a convention becomes a legal matter, the act of ratifying or acceding to a convention is a sober one for most States.

There are two types of conventions, in effect. Some conventions set out obligations for contracting States but have no enforcement or monitoring mechanism. An example is the Biological and Toxin Weapons Convention. These conventions are easier for States to become party to because there are no reporting requirements, but make it less easy to determine non-compliance.

Other conventions, particularly those in the area of human rights, have verification and monitoring mechanisms. The Nuclear Non-Proliferation Treaty and the Chemical Weapons Convention are examples of these, as is the set of conventions in the World Trade Organization.

Whether any of these international rules can be used for the purpose of legitimate power is a matter of degree. Franck in his work on the role of legitimacy in international law, states that:¹³

Specifically, four indicators of a rule's and a rule-making process's legitimacy will be hypothesized ... These indicators of rule-legitimacy in the community of states are: *determinacy*, *symbolic validation*, *coherence*, and *adherence* ... The hypothesis asserts that, to the extent a rule, or rule process, exhibits these four properties it will exert a strong pull on states to comply. To the extent these properties are not present, the institution will be easier to ignore and the rule easier to avoid by a state tempted to pursue its short-term self-interest.

Franck's analysis points in the direction of factors that will determine whether a State will accept the rule. Clearly, the State has to have accepted the rule in the first place, either by becoming a Party to the Convention or by having voted in favour of a resolution. That is one reason why so much time is taken in crafting resolutions and why, in many cases, ambiguous language is adopted. The more ambiguous the language, the less incentive there is to comply. In practice, a State that did not vote for a resolution, like a State that has not become a party to a convention, is not bound by the content of that text.

That States take these obligations seriously is shown by the fact that very few States have withdrawn from conventions to which they

had previously subscribed, even though most provide procedures for withdrawing. The action by North Korea is withdrawing from the Non-Proliferation Treaty was one example. The unusual action by the United States in trying to withdraw its signature from the convention establishing the International Criminal Court (even though by merely signing, the United States had not taken on a legal obligation) is another.

Once a negotiation is under way to address an issue with an international norm or rule, there is a clear incentive for States to participate. Unless the State has been involved in the agreement and is willing to accept the rule, it really has no standing in that area. Since in the United Nations no rule can really be adopted unless all States agree, there is little possibility of a rule being adopted without a State's implicit consent. However, once a norm moves from a moral to a legal plane, there is a further incentive to become a party. Most conventions insist that if a State is not a party to the convention, it cannot be a decision-maker about it.

One reason for accepting conventions is that, in practice, there are clear linkages among rules at the international level. For example, rules in one area, such as copyrights, have implications for rules in others, such as trade in services. Issues of linkage are often key facilitators or obstacles in multilateral negotiation. In many ways the agreed international rule structure is held together by overlapping and intermingled rules, so that there is an inherent incentive to maintain the coherence of the whole by avoiding non-compliance on parts. The degree to which this is important to a State is in direct proportion to the number and importance of issues in the whole. For the United States, there are few areas of international rule-making in which the country does not have an interest. As Franck puts it:¹⁴

A government's failure to comply with a legitimate rule usually arouses the concern of other states, even those not directly affected by the breach. A state's failure to discharge its normative obligation frequently is seen by such other states as threatening their interests indirectly: by undermining the legitimacy of a rule of which they approve and on which they rely, and by weakening the fabric of the community's rule system as a whole.

Given an agreed structure of norms, the next element of legitimacy is the process by which compliance or non-compliance is determined. One option is for individual States to decide whether other States are in

compliance. The danger in this, of course, is that no State in a system of sovereign States can be considered neutral and therefore able to credibly argue that another State is in violation of its obligations. For example, the United States claimed that North Korea was in breach of its obligations under the 1994 Framework Agreement, whereas North Korea claimed that it was the United States that was in breach.

One function of the Security Council is to avoid this problem by reaching, among a Membership that is diverse in interests, a consensus on whether States whose actions are referred to the Council are in breach or not, and this is not easy to obtain. Without this consensus, as the United States learned in Iraq, the legitimacy of State action is not assured.

While in a Westphalian system, legitimacy might be expected to be conveyed by States acting in concert, as the international system has evolved through the second half of the twentieth century the role of certifying the legitimacy of State actions and the detection of non-compliance has been assumed increasingly by international organizations and international civil society, sometimes separately, often working together.

It is a multifaceted role. It involves helping to set the basis for agreeing on a rule and trying to ensure that the rule's content is clear – what Franck calls *determinacy*.¹⁵ Once the rule is agreed, the role has to do with maintaining the process of verifying compliance. As Franck puts it:¹⁶

Whether the clarifying process is successful in transforming rule indeterminacy into determinacy depends on the legitimacy that the members of the international system ascribe to the specific process. This implicates such factors of legitimacy as *who* is doing the interpreting, their *pedigree* or authority to interpret, and the *coherence* of the principles the interpreters apply.

This element of verification has become a central role of international organizations, who must perform the role with authority and due regard to the political environment in which they operate.

Put another way, the regimes that States have created can only function effectively if the international mechanisms that were formed to facilitate their operation are competent and effective.

Returning to the dilemmas inherent in implementing the rules for the elimination of WMD and State compliance with them, the answer is to have rules and procedures that can credibly verify that everyone is complying with their obligations. How this is done is of critical importance.

On the one hand, since the international system is based on sovereign States, an intrusive verification system would threaten the wider issue of sovereignty. (For example, a verification system that required disclosure of trade secrets in the biochemical industry was considered unacceptable by the US in the case of the BWC.)

On the other hand, a system that relied on verification by one or the other of the States parties would not be trustworthy. (For example, Iraq argued that US inspectors in UNSCOM were actually spies, and it seems that some were.)

The three treaties that provide for verification all try to cope with the issues of access and intrusiveness which are central to the entire WMD ban regime. Major political obstacles would have to be removed before the BWC may also have a verification mechanism based on the precedents of the other three.

Verification in a broader context

According to the United Nations, 'verification is a process which establishes whether the States Parties are complying with their obligations under an agreement'.¹⁷ It is a process of gathering and analyzing information to make a judgment about parties' compliance or non-compliance. The multiple aim of verification is: to generate confidence among the parties; to deter non-compliance by threatening timely detection; and to provide early warning about non-compliance.¹⁸

Basically there are three categories of disarmament verification, based on combinations of two dimensions: the bilateral–multilateral dimension and the adversarial–cooperative dimension. They can be represented by three models:

Model 1. Bilateral adversarial verification between rival States, for example the US and the USSR during the Cold War. The guiding principle is reciprocity of obligations, which may permit consensual, cooperative measures for intrusive verification. The process is simply inter-State, with parallel or joint mechanisms for implementation. The main examples are the INF and the START bilateral treaties on nuclear disarmament.

Model 2. This involves multilateral adversarial verification, as in the case of the disarmament of Iraq under the Gulf War Cease Fire resolution of the UN Security Council (Resolution 687 (1991)). The guiding principle is verification as part of imposed enforcement action by the international community against a non-compliant State. The process has three stages and sets of interaction: (a) interaction between the suspected State and the inspectors or other investigators; (b) consultations

between that State and the community of States seeking to uphold the norm, with or without inspection reports; and (c) between the Security Council as an enforcement mechanism and the non-compliant State, if it continues, in its defiance, to pose a threat to international peace and security. The full process is available to the International Atomic Energy Agency (IAEA), the Comprehensive Test-Ban Treaty Organization (CTBTO) and the Organization for the Prohibition of Chemical Weapons (OPCW). However, only the third phase is available to the State parties of the Biological Weapons Convention, who have to rely on their own information to report non-compliance directly to the Council, The BWC has no mechanism to verify non-compliance.

Model 3. Multilateral cooperative verification which is based on an international agreement. The guiding principle is consensual arrangement among State parties for an international verification mechanism and compliance procedures linked to the UN Security Council. This process is the most comprehensive as it subsumes model 2 in extreme cases of non-compliance, such as Iraq and North Korea in the case of the IAEA and Iraq. It relies on an institutionalized system of implementation comprising four tiers: (a) consultative process among State Parties (general conferences and review conferences); (a) governance by elected boards and executive heads; (c) secretariat management and inspectorate; and (d) compliance process involving interaction between the organization's decision-making bodies and the security Council. Member States are both targets and beneficiaries of a consent-based verification system. The main examples of this model are verification organizations serving the NPT, the CTBT and the CWC but includes also the various verification arrangements for other multilateral disarmament treaties.

Elements of the regime

The WMD ban regime consists of a series of rules about what States are expected to do and a series of procedures to show that they are complying with these expectations. Each treaty is a bit different, but they have common elements in the procedures to be followed. In most cases, the procedures have not been tested. However, the experience of both the IAEA and the United Nations Special Commission in Iraq has given very valuable lessons on the efficacy of the different elements.¹⁹

The main elements of the regime are: (a) legal undertakings to progressively ban weapons of mass destruction; (b) State declarations and periodic reports on all relevant items; (c) procurement accounting;

(d) ongoing technical monitoring; (e) inspections; (f) compliance procedures; and (g) specific institutions to consolidate all these elements. Together these elements are designed to allow for independent verification without, however, intruding too greatly on State sovereignty.

Legal undertakings

By becoming party to the international conventions, States take on a legal obligation to implement the agreed terms. Often this involves making subsidiary agreements that specify State responsibilities in more detail. The Safeguards agreements that are part of the NPT are an example of these. The extent of obligation is defined by the undertakings that States make and, in practice, not all States have made the same undertakings. For example, until 2004, Iran (along with a number of other countries) did not accept enhanced safeguards agreements.

Declarations and reports

The basic element is the declaration. Each State agrees to declare whether it has WMD, their components or any items relevant to their production, in what quantities and where they are located. The initial declarations set the baseline for determining the pace at which weapon destruction, relevant peaceful activities or other agreed action is taking place. There are international procedures to determine the criteria and format of reporting, and international organizations analyze the declarations according to common standards. The declarations are updated by periodic reports as part of an ongoing process of State accounting and control.

The difficulty, of course, is that States might lie on their declarations. Iraq, for example, provided the IAEA with correct information about its declared programme, but had a parallel, undeclared programme. Had a bit more time passed, the undeclared programme would have been able to produce fissile material that would have allowed Iraq to develop a usable nuclear weapon, even without using the declared material. As UNSCOM found out in the 1990s, Iraq simply told lies about biological weapons and half-lies about chemical.

Procurement accounting

The issue of verifying that there is no WMD proliferation is addressed by monitoring trade in certain commodities. For nuclear weapons, there is a system of reporting on all movement of nuclear material and related sensitive items from one country to another. Exporters are required to obtain licences and the quantities exported under these licences

are reported to the IAEA by voluntary arrangements. In the case of chemical weapons, so-called precursor chemicals are required to be licensed for export and these trades are to be reported to the OPCW. And there is an agreement among many States (the so-called Australia group) to report on precursors for both biological and chemical weapons.

The dilemma here is that there can be a time-lag in reporting and the material may have been shipped and received before this is noticed (as happened in the case of chemical and biological weapons in Iraq). Also, there is a problem if some states do not report or if material is sold clandestinely and smuggled across borders.

Technical monitoring

In order to verify compliance in ways that do not depend on either declarations or accounting, procedures of different kinds have been agreed that allow indirect monitoring (in the sense of remote systems that are automatic). The CTBT is almost entirely about indirect monitoring. The International Monitoring System is a complex of seismic, radionuclide and maritime remote sensors that can detect automatically whether a nuclear explosion has taken place by sending data via satellite to the International Data Centre in Vienna, where analysts can determine whether the pattern of the sound or the radionuclide signal came from a nuclear source. Technical monitoring is also extensively used in the nuclear non-proliferation area and in the chemical weapons field in support of human inspections. In the wake of the Iraq problem, the IAEA's new verification protocol for enhanced safeguards provides for remote environmental sensing and for more intrusive methods at nuclear sites as a supplement to declarations and inspections.

Inspections

The ultimate means of verification is inspections. The three treaties with verification components all provide for on-site inspections. In the case of the IAEA, there are both regular (routine) inspections at declared sites and special inspections at newly designated sites. This model is also foreseen in the CWC. In the case of the CTBT, the on-site inspection is triggered whenever one of the States alleges that another State has detonated a nuclear device. A similar challenge procedure exists in the CWC.

The problems with inspections have to do with the extent to which State sovereignty precludes surprises and the extent to which inspectors will have full access. The Iraqis were masters at trying to hide things from inspectors and a major change in the new IAEA protocol has to do

with giving inspectors multiple entry visas so that they can appear unannounced.

Compliance procedures

Finally, the results of the various prior stages have to lead to procedures that will encourage compliance, if that is not found. This can be procedures for adjudicating disagreements, for raising the stakes of non-compliance and for providing incentives for compliance.

The specific institutions of the regime

For each of the conventions that have verification elements, a public international organization has been given the responsibility for managing verification. As with any institutional development, the newer institutions have learned from the older ones. It should be emphasized, however, that each institution is independent of the others and, to some observers, this is a disadvantage. There are many reasons why this took place: different patterns of States parties, different professional and bureaucratic bases within States, and the desire to have organizations located in different countries.

For example, when the CTBT was adopted, one idea was for the organization to be located in the IAEA, which, after all, dealt with the NPT and things nuclear. The counter-argument was that the IAEA lacked a capacity in the seismic field. It was also said that until the treaty entered into force, the provisional secretariat was a temporary organization and should not be part of a permanent one.

IAEA

The IAEA was established in order to facilitate (and, to an extent, regulate) the use of nuclear energy. In terms of WMD, its charge was to ensure that nuclear material for peaceful purposes was not diverted for other purposes. It did not, at the time, have a mandate to deal with existing nuclear weapons (that were, then, in the hands of the US, the then USSR and the UK, followed later by France and China, the other Permanent Members of the Security Council). Under the NPT, it was charged with monitoring nuclear facilities to verify that no diversion was taking place. The programme to do this was called, appropriately, Safeguards. Each party to the IAEA Statute was expected to reach a safeguards agreement that would specify how the Agency would monitor and inspect nuclear facilities. In the wake of the Gulf War and the

discovery of the clandestine Iraqi nuclear programme, the safeguards procedures were thoroughly reviewed and strengthened.

As nuclear energy has, for the time being, become reduced in importance, the IAEA has increasingly become the focus for intellectual and scientific work on things nuclear. It is the classical technical agency and one of its activities consists of research on new methods of monitoring, including the development of equipment and software.

CTBTO

The CTBTO in Vienna is the most technologically dependent verification organization. Its Provisional Technical Secretariat (of the Preparatory Commission for the CTBTO) is in the process of putting into place what one of their staff called 'the world's first international burglar alarm'. The premise is that if States cannot test nuclear weapons, they will not be able to convince anyone that (a) they have weapons and (b) that if they claim to have them, that they work. This in itself will help prevent the proliferation of these weapons. The International Monitoring System, designed by seismologists, will be able to detect when a small earthquake occurs in Siberia or when a building is dynamited in downtown Syracuse and, from the patterns, be sure that the explosion was not nuclear.

The treaty will only come into force, however, when all of the States who were deemed to have the potential to develop nuclear weapons have ratified. Some of them are waiting on the United States, which, of course, has the most weapons and did the most testing, although it had a moratorium throughout the Clinton presidency and still does today. There are fears, however, that the Bush administration actually wants to be able to test nuclear weapons and that is why they are not ratifying the treaty.

OPCW

The Organization for the Prohibition of Chemical Weapons at The Hague has the task of monitoring the CWC. There are two types of chemicals that were subject to the CWC's prohibitions: those used for chemical warfare (toxic chemicals and their precursors) and those used by the police and others for law enforcement, including RIOT control (tear gas, for example). But the production of the same toxic and precursor chemicals either for weapons or for a variety of peaceful uses is problematic. The focus of verification is thus on dual-use chemicals, the chemical factories and other chemical facilities in the country. The task

of the OPCW is to look at the data, and inspect the facilities, to be sure that the purpose is legitimate and that the activities at the facility are consistent with the obligations assumed under the CWC. They also have to oversee the destruction of existing weapons, not an easy process in the best of times. The organization has had major problems (including having its executive head fired).

Biological weapons

In contrast to the other conventions, the BWC has no verification institution. The original treaty essentially gave the verification responsibility to the UN Security Council. Article VI of the Convention authorizes any State Party to lodge a complaint with the UN Security Council accompanied by possible evidence that another party is violating the provisions of the Convention. Each State Party has undertaken to cooperate in carrying out any investigation that the Council may initiate in response to the complaint.

Given the problems of the Security Council, it is not clear what this would mean. Part of the problem with verification of this treaty is a belief on the part of the United States that verification is, in fact, impossible. An article in the 26 July 2001 issue of the *Financial Times* enumerates a number of seemingly insurmountable problems and suggests as an observance of a voluntary code of conduct as a preferable alternative to a permanent verification mechanism.²⁰

What does management have to do with all of this?

So now we finally come to the question, to what extent does the viability of the WMD ban regime depend on public management?

The first point is that management of international public organizations is qualitatively different from the management of national public sector institutions or the private sector. What is learned from that experience is only partially applicable to international management. Management of non-sovereign international public organizations means that the direct enforcement of decisions is impossible, revenue cannot be collected, national political processes cannot be tapped and, most significantly, managers cannot appear to be basically in charge of managing the system. If one applies the open systems approach to international public administration, one will learn that internal management is far, far less important than dealing with the external environment. In fact, the external environment is virtually the only space for management.

A second point is that who the managers are is not completely clear. On the one hand, they would seem to be the civil servants who staff the secretariats of the international organizations. Yet, constitutionally, it is the boards of governors and executive boards who are formally responsible for decision-making. In practice, as we will see, it is usually the civil servants, visibly the executive head, working with the elected government representatives (in the form of the chairperson of the executive board) who are the real decision-makers.

A third factor is that the organizations have to ensure geographic balance, in order to ensure credibility. The senior positions are distributed among different countries. For example, the IAEA recently had a Director General from Egypt (Africa) – the DG is always from a country with nuclear knowledge, but not a nuclear-weapon State – the Deputy Director General (DDG) for technical cooperation was from China, the DDG for nuclear power is from the Russian Federation, the DDG for safety was from Canada, the DDG for safeguards was from Belgium and the DDG for management was from the United States. Keeping these different nationalities working on a common basis is not easy.

The success of any organization, and especially of the verification organizations, depends on the ability of those managers to run their institutions in such a way that the tasks are carried out successfully.

We now turn to the main management issues that will be dealt with in detail later.

Leadership

Leadership in an international organization is very different from that in a national government, a private sector corporation or a non-governmental organization (NGO). Leaders of international organizations have to lead without appearing to. If they take too many positions, they risk becoming part of the problem rather than be catalysts for a solution.

An example of effective leadership is taking an initiative to reform an organization. The success of the effort may depend not only on good ideas but also on how leadership is exercised by the executive head of an organization.

A case in point is former UN Secretary-General Boutros Boutros Ghali, who tried to exercise his powers overtly and ended up alienating some of the major powers to such an extent that they prevented his re-election. Another is Mary Robinson, who, reflecting a moralist's view of human rights, also managed to offend some influential quarters. In leadership, style matters as well as substance.

In the case of verification, we have two quite different approaches: Mohamed ElBaradei of the IAEA (like his predecessor, who now heads the UN's Iraq verification organization) is low-key and correct. The first head of the OPCW, Bustani, who was direct, became controversial and was fired, the first elected head of an international organization to be so.

Strategic planning in the face of uncertainty

The WMD ban regime is one that is in many ways incomplete and evolving. Moreover, the funding of the system is not assured at all. And yet, the evolution of the system is one that is expected to take a long time (indeed, unlike national administration, where the time horizon is constrained by the electoral process, international administration can and must use a longer time horizon).

Each of the managers of the three verification institutions has to find a way to do real strategic planning in the face of uncertainty. The uncertainty has to do with issues of political support finance and technological developments. Strategic planning means looking at a future desirable state and working back to the present by setting out things that need to happen.

A good example is the CTBT. The uncertainty lies in the date when the convention will come into force. As things now stand, this cannot happen before 2005, assuming that George W. Bush, who seems to have little faith in WMD multilateral treaties, were not to be re-elected. One of the strange elements of the CTBT is that the monitoring system is expected to be in place on the date that the convention enters into force, so the estimated date for this is very important. A dilemma is that, as part of the compromise on staffing, governments stated that no staff could work longer than seven years. If correct, the day the convention comes into force, all of the experienced staff will have left. So, the Executive Director has been working on a plan to phase in the system on the basis of an expected date.

Finance and budget

Much of the intellectual work is actually constrained by mundane details of finance and budget. Unlike a national administration that can levy taxes and receive revenue, or a private sector entity that can raise capital by selling shares, an international organization is dependent on the funds that the national legislatures of its members are willing to appropriate. Only one UN organization, the World Intellectual Property Organization (WIPO), has to date been allowed to charge user fees, and do so well financially, and only the Bretton Woods institutions are able

to raise funds from bonds in the financial markets – and to finance administrative costs out of interest income from their loans to Member States. These are somewhat of an anomaly. In effect the Member States determine how much they are willing to give to the organization and, within that envelope, a budget can be drawn. Usually it is expressed as a kind of zero growth (real or nominal).

Convincing the Member States that the budget needs are real, that adequate financial probity exists and that the money is well spent is a major management imperative. So too is coping with the problems of late payment. All UN organizations use a calendar year budget, but few Member States do. (The US fiscal year begins in October, whereas the UN systems begin in January, which means that the US payment is always late.) The Financial Crisis of the United Nations has been an agenda item since the 1950s, which probably makes it the longest-running crisis in history. It is essentially a cash-flow crisis.

IAEA's Director General ElBaradei is considered fortunate in that for the last couple of years he has been given a zero real growth budget (others got zero nominal, which means a reduction in real terms). As even this was deemed insufficient, he had to institute results-based budgeting, which the major contributors wanted against the preferences of the developing countries (Group of 77), before asking for additional funds.

Personnel

A main reason for having an international organization responsible for verification is that it is more credible than a national organization. Credibility is dependent on a combination of political neutrality and technical competence. This means hiring and socializing technically competent persons who will acquire some of the characteristics of neutral diplomats. Finding a way to achieve both is a major problem of personnel administration. It is a particularly acute problem in the verification organizations. Two stories illustrate this.

The IAEA has a strong policy of rotation. The assumption is that a staff member is only there temporarily. However, for many jobs, you do need career people. Apparently the original reason for the rotation policy was a desire to ensure that the safeguards department remained neutral and that rotation was expected to ensure it. At the beginning of the Agency only the US and the USSR had technicians who could be inspectors, and many of these were in the intelligence services. Rotation was expected to prevent the Safeguards Department from becoming mini-CIAs or mini-KGBs. The irony is that the Agency is the only place in the world

where inspectors can be hired; the Agency trains the inspectors and as a result the Safeguards Department has a very high percentage of staff on long-term (i.e. greater than seven years) contracts.

When the CTBTO was started on a provisional basis, almost all of the staff was new to international service. They tried to bring their national approaches to bear, and the result was not pretty. One solution was to have an outside consultant facilitate management retreats where they could learn how international management was different. Over time, we have noticed that the senior managers are becoming more adept at navigating the international external environment. The irony is that the rotation policy, if not changed, will force many of these to leave, just as they are becoming adept.

The rotation problem has also been reported regarding the OPCW. This regime, with its structure, institutions and management issues, is the result of an evolution over time – a long process during which the international political system itself evolved. This historical context has shaped the regime as it is today and will constrain the directions in which it can evolve further. We must therefore turn to the historical context of the regime in Chapter 2.

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