

**National measures to implement WMD treaties and norms:
the need for international standards and technical assistance**

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Agreements play a fundamental role in international relations. The principles underlying agreements between states—free consent, good faith and the notion that ‘agreements must be upheld’ (*pacta sunt servanda*)—are widely accepted. In order to give effect to agreements, states must bring their domestic law into conformity with their obligations under international law. A failure to do so is not only contrary to the principles of good faith and *pacta sunt servanda*: the state risks non-compliance, since it cannot invoke the provisions (or absence thereof) of its internal law as justification to perform a treaty obligation.¹

National implementation obligations, however, regularly receive less critical attention than the international conventions themselves and are rarely, if ever, verified. Anecdotal evidence suggests that some states consider national implementation to be a purely legal or technical matter of less importance than committing to the treaty. In particular, states have tended to pay less attention to provisions requiring national implementation measures in treaties concerning weapons of mass destruction (WMD)² than to equivalent provisions in treaties that impact states’ economies (such as those regulating trade, transport, migration and/or the environment). The implementation of nuclear, biological and chemical arms control and disarmament law is perceived by states as a sensitive issue because its primary focus is on the security of the state, rather than the individual. The absence of an international verification organization for certain WMD treaties contributes to this problem, while states parties’ reluctance, or unwillingness, to effectively address these matters in

¹ See article 27 of the Vienna Convention on the Law of Treaties.

² For the purposes of this paper ‘weapons of mass destruction’ means nuclear, biological and chemical weapons and related materials.

treaty meetings to date has compounded the problem of ineffective national implementation.

Even where treaties do not lay down specific obligations relating to national implementation, it is implicitly necessary to facilitate compliance with international law. In addition to adopting appropriate measures upon joining the treaty, states should regularly review these measures to ensure compliance with the evolution of international obligations. Treaty provisions are afforded greater clarification through states agreements at subsequent treaty conferences and, when ambiguities or uncertainties over treaty interpretation or operation arise, through recourse to the intentions of the treaty negotiators. States must also have regard to decisions handed down by courts and tribunals where these further clarify their international obligations. Unlike the European Convention of Human Rights, for instance, which through the practice of its court has evolved into a 'living legal instrument', applied in the light of present-day circumstances, arms control and disarmament law has no juridical overseer to propel the development of binding norms.

The terrorist attacks on the United States on 11 September 2001 catalyzed a significant shift by certain states away from efforts to strengthen the multilateral WMD treaty regimes (through improved verification arrangements) towards a rather less ambitious (or eminently successful) agenda to improve national implementation of these treaties. While national compliance is essential for the success of these treaties, the failure to strengthen the treaty verification systems has made it more difficult to assess the status of states' national implementation measures.

The shift in emphasis from international verification to national compliance is amplified by UN Security Council action since September 2001 to create and enforce legally binding rights and obligations, in particular, to create obligations for those states that remain outside these treaty regimes. UN Security Council resolution 1540, adopted on 28 April 2004 (UNSCR 1540), obliges states to enact and enforce effective laws and supporting measures to prevent the proliferation of nuclear, biological and chemical (NBC) weapons, related materials and their means of delivery to non-state actors, especially terrorists. However, UNSCR 1540 was not adopted without controversy. Many states raised their concerns during the Council's

consultations on 22 and 28 April 2004 that in specifying the form and scope of national measures required to give effect to the resolution, the UNSC was meddling with the very core of the state's domestic affairs (which are under state sovereignty), namely the independence and inviolability of state legislators. While most states, some cautiously and some wholeheartedly, endorsed the resolution, others considered it an extraordinary measure.

This paper describes international obligations to implement national measures governing nuclear, biological and chemical weapons, related materials and delivery systems. It outlines the status of best practice guidance for the adoption and enforcement of national measures and considers the difficulties in assessing the present state of implementation, enforcement and availability of technical assistance. It concludes by offering some thoughts on means to improve national implementation and compliance with WMD obligations.

Obligations to implement national measures against WMD

Treaties

Each of the major treaties relating to nuclear, biological and chemical weapons has different requirements for states parties' national implementation. These differences reflect the political appetite for addressing compliance and verification issues at the time these treaties were agreed.

Nuclear weapons agreements: The 1968 Nuclear Non-Proliferation Treaty (NPT) does not explicitly require states parties to adopt national implementation measures to give effect to the treaty. It does require states to enter into nuclear safeguards agreements with the International Atomic Energy Agency (IAEA), which has promulgated non-binding guidelines for national measures to protect nuclear materials and equipment from security breaches. The IAEA verifies state compliance with their safeguards agreements primarily through material accountancy measures.

The lack of provision for national implementation in the NPT (which governs non-proliferation of nuclear weapons) contrasts directly with the inclusion of provisions in the 1980 Convention on the Physical Protection of Nuclear Material (CPPNM) that

specifically requires states to adopt measures to prevent the illicit diversion of nuclear materials in international transport. However, many of the 189 states parties to the NPT have not yet joined the CPPNM.³ A diplomatic conference intended to amend and strengthen the CPPNM will be convened in July 2005. The objective is to expand the scope of the treaty to require the physical protection of nuclear material in national use, storage and transport and to require states parties to take steps to protect nuclear materials and facilities in their territory against sabotage.

The UN General Assembly (UNGA) adopted the International Convention for the Suppression of Acts of Nuclear Terrorism (CSNT) on 13 April 2005. This treaty defines the crime of nuclear terrorism and specifies criminal legislation as the appropriate form of national implementation. Under this treaty, which will open for signature on 14 September 2005, states are required to notify the UN Secretary General (UNSG) of the jurisdiction they have established under their national law to implement and enforce the treaty. Should any state change these arrangements, it is obliged to notify the UN Secretary-General immediately.

Biological and chemical weapons agreements: The 1972 Biological Weapons Convention (BWC) requires states parties to take ‘any necessary measures’⁴ in accordance with their constitutional processes to implement the treaty prohibitions which are specified in Article I using a ‘general purpose criterion’ (GPC). Other treaty provisions, however, must also be given effect through national implementation, such as the Article III prohibitions on the transfer of BW and the provision of assistance to develop BW. This necessitates states parties’ establishment of national export control regimes for potential bio-warfare agents, related materiel and delivery systems. While the treaty leaves the choice of the form of national implementation measures to states parties, the scope of obligations they must cover is clear: comprehensive measures are necessary to ensure compliance with the GPC throughout states parties’ territories. In addition, the term ‘measures to prohibit and prevent’ require credible national enforcement processes. States parties have reaffirmed the need to ensure effective

³ The listed figure of 189 states parties is without prejudice to North Korea’s disputed status under the convention.

⁴ Article IV, 1972 Biological Weapons Convention.

national implementation at the treaty Review Conferences. Indeed, the mandate of the 2003 BWC Experts Meeting and Meeting of States Parties specifically required states parties to consider ‘penal legislation’ (criminal offences and penalties) for violating treaty obligations.

The 1993 Chemical Weapons Convention (CWC) contains the most detailed national implementation provision of the agreements considered here. In contrast to the BWC, it explicitly requires states parties to adopt criminal (‘penal’) legislation⁵ for activities that violate the treaty and to extend these measures to offences committed by their citizens outside of their territory. National laws are also necessary to establish and operate the National Authority required under the CWC.

The prohibitions in the BWC and CWC apply equally to states and non-state actors, while the NPT allows nuclear-weapon states recognized by the treaty to maintain NW stockpiles during negotiations on nuclear disarmament. The use of nuclear weapons is not explicitly prohibited under the convention, although their use by non-state actors will be covered by the CSNT when it enters into force. While UNSCR 1540 should be seen as setting the minimum scope of legislation and other national measures, states parties to the major WMD treaties (NPT, CPPNM, CSNT, BWC and CWC) will require additional legislative measures to comply with their treaty obligations.

UN Security Council resolutions

In accordance with Article 103 of the UN Charter, UN member states’ obligations under the UN Charter prevail over any other international agreement. Resolutions adopted under Chapter VII of the Charter are generally considered binding on all member states.⁶ Although the founding members of the UN may have intended the UNSC to be without ‘residual powers’, Chapter VII decisions have been taken on a variety of issues. Even when issues do not constitute transboundary conflicts or indeed even civil war, the UNSC has acted on gross violations of human rights by the authorization of economic sanctions or military measures. The UNSC has also

⁵ Article 7, 1993 Chemical Weapons Convention.

⁶ Article 41, UN Charter

exercised its residual powers to set up international tribunals and commissions to determine reparations.⁷

The provisions in UNSCR 1540 are clear: it is not to be interpreted as altering states' existing obligations under the NPT, BWC or CWC. It should therefore be emphasized that UNSCR 1540 was not adopted in order to amend or repeal existing international instruments. Rather, the intention was to encourage states parties to implement their obligations under WMD treaties (thereby upholding their authority) and extend obligations to prevent WMD proliferation to non-state actors in those states that remain outside the major WMD treaty regimes.

UNSCR 1540 gives little guidance on the form of national measure states should adopt to give effect to their obligations under the resolution. Information is available on the approaches states have taken to enforce the resolution in their reports to the 1540 Committee, which is tasked with monitoring and reporting on states' implementation to the UNSC, although not all states have provided their report and many lack substantive detail. The reports available to date indicate that some states consider their existing legislation to be sufficient to implement some or all their obligations under the resolution, such as those states that have already criminalized WMD in their national criminal codes or equivalent criminal legislation.⁸ Ideally, states parties to the WMD treaties should already have such provisions in place. Some states have adopted a single dedicated legal instrument⁹ or have amended existing legislation in order to comply with UNSCR 1540 while others have chosen to implement the prohibitions in general weapons control legislation. Some states have

⁷ The residual powers themselves are arguably based on article 41 of the UN Charter, which reads: 'The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures'. See also UNSCR 687 (1991), UNSCR 827 (1993), UNSCR 935 (1994) and 1244 (1999), all exemplifying the exercise of residual powers.

⁸ See for instance US Code, Title 43, Chapter 23, subchapters VIII and XVII in regards to illicit use of nuclear weapons. Compare this with the 2001 amendments to the Criminal Law of the Peoples Republic of China, which considerably widened the application of the law compared to the 1997 wording. See also Chapter 21, paragraphs 6 of the Swedish Criminal Code (1962:700).

⁹ See for instance the 1993 Weapons of Mass Destruction Act [South Africa].

specific nuclear, biological and/or chemical weapons acts, or have incorporated WMD regulations in anti-terrorism legislation.¹⁰

Striving to define ‘best practice’ of implementation

There are no guidelines or best practice models on the national implementation of international WMD arms control and disarmament law, apart from the guides developed by the Organization for the Prohibition of Chemical Weapons (OPCW) on national implementation of the CWC. Any best practice models should also take into account the need to effectively control dual-use nuclear, biological and chemical weapons materials. Multilateral efforts to harmonize national legislation have always proved difficult to achieve, perhaps most noticeably with respect to WMD treaty implementing legislation. There is also a lack of harmonization of national measures within states, where a patchwork of measures on various issues (some unrelated to the treaty) serve to implement it.

As with the adoption of implementing measures, the harmonization of these measures both within and between states is more likely for issues not considered central to state security. However, there is now an increasing recognition of the need to ensure stronger national implementation of international arms control and disarmament law through standardisation of domestic measures at the national, regional and international level. This includes collating and assessing information on states’ national implementation of treaty obligations. Given the reluctance of certain states to strengthen multilateral verification arrangements for these treaties, however, such assessment falls short of constituting verification of compliance with national implementation obligations. Perhaps it is useful to discuss decisions like UNSCR 1540 in the context of the common-law doctrine of ‘due diligence’, whereby states are obliged to take all reasonable precautions, under the particular circumstances, to prevent WMD proliferation on their territories. Under such a norm, a country could prove compliance with relevant arms control and disarmament regimes if it is able to prove that all precautions, reasonable under the circumstances, were taken to prohibit

¹⁰ See for instance part 6 of the UK Anti-terrorism, Crime and Security Act 2001 (which amended the Biological Weapons Act 1974 and the Chemical Weapons Act 1996).

WMD or related materials falling into the hands of non-state actors and provide evidence of effective enforcement.

Appropriate and effective national implementation relies on several factors. In addition to ensuring that the treaty is enforceable in their domestic courts (in accordance with their constitutional arrangements), states must establish supporting civil and criminal laws and penalties as well as fiscal, administrative and customs rules. They must also put in place technical, administrative, investigative and military expertise to enforce the legal framework. Without skilled personnel, the laws would be worth little more than the paper on which they are printed. A state's review of the national legal framework to implement international obligations relating to WMD should take the following factors into account:¹¹

1. A national authority to coordinate implementation;
2. proliferation, safety and security risk assessments relating to nuclear, biological and chemical weapons;
3. criminal law enforcement powers and penal legislation;
4. site security;
5. materials control lists relating to nuclear, biological and chemical weapons;
6. export controls;
7. import controls;
8. secure transfers of nuclear, biological and chemical weapons and related materials;
9. consequence management; and
10. education and outreach.

Some key elements for *best practice in the implementation of legislation include:*

1) The means of implementation chosen must be adequate to ensure fulfilment of the treaties' obligations. A core State System of NBC Controls (SSC) should be set up, comprising the following parts:

¹¹ See Andrew Leask, 'Enhancing biosecurity', Australian Safeguards and Non-Proliferation Office, address given to Biosecure 2004, Canberra, 23 September 2004.

- A system of obligatory ‘licensing’ of allowed activities by an independent state regulatory body (SRB);
- A system of strict sanctions and penalties for activities that are carried out without a license;
- Individual and corporate site operator’s responsibilities for safety and non-proliferation with respect to potential dual-use nuclear, biological and chemical weapons activities.

2) Account should be taken of the regulatory means that have proved to be most effective in the country concerned in establishing WMD controls. Proper judicial safeguards should be applied to ensure against human rights abuses; in particular, derogation due to ‘public emergency’ should be allowed only under defined circumstances.

3) Punishments in criminal legislation should be appropriate to deter potential violators. A term of imprisonment for less than five years, for example, may be insufficient. Proper judicial safeguards must be applied, especially regarding imprisonment on remand.

4) Criminal legislation needs to be backed by strict liability laws to create an economic deterrent. While this may not stop determined proliferators, it may deter individuals from intentionally or culpably aiding and abetting individuals in their WMD activities.

5) Administrative laws must allow for appropriate police investigation and public prosecution. Procedural law should allow for a fair, speedy and, to the extent possible, public trial.

Creating credible law enforcement and physical WMD materials security

It is not sufficient for states to have legislation in place: they must rigorously enforce it through investigations and prosecutions of suspected violators. While this is implicit in treaty provisions requiring national implementation, UNSCR 1540 specifically requires states to enforce national measures that implement the resolution. This must

be interpreted as requiring states to properly fund, train, equip and operate law enforcement personnel (such as coastguards, customs, police, prosecutors, military and civil defence) in a manner that enables them to properly detect, prevent, investigate, prosecute, convict and punish individuals handling or seeking access to WMD. The establishment of a licensing system is essential, since it allows the SRB to ensure that nuclear, biological and chemical activities and practices are in accordance with laws and regulations. State legislation should further delegate responsibility for nuclear, biological and chemical security to operators, who have individual responsibility for internal control systems.

The development of effective physical protection measures calls for intrusive auditing of state procedures for the handling and accounting of nuclear, biological and chemical weapons-useable materials at installations and in transit. In creating and maintaining capabilities for NBC detection and investigation, reference can be made to the German system, which has established the following principles:

- responsibilities and tasks assigned to each authority (under the SRB) must be clearly specified;
- rapid reporting of illicit trafficking events, and distribution of all relevant information to the concerned authorities and agencies must be ensured;
- law enforcement and NBC safety authorities and their experts must be available around the clock;
- law enforcement and NBC safety authorities need to have the proper detection and analysis equipment at their disposal;
- bodies coordinating separate branches of law enforcement and border security agencies should be formed to address serious cases; and
- national and transnational training and sharing of experience must be provided.

Status of national implementation

There is no publicly available collation of states' national measures to implement all obligations under the NPT, BWC or CWC. In 2003, VERTIC compiled a dataset of

states parties' national measures to implement the prohibitions in the BWC.¹² The best available comprehensive information to date on national implementation measures are provided by the state reports to the 1540 Committee, although these evidence an incomplete and patchy record of national implementation. As of 3 May 2005, 116 countries had submitted reports on the status of their legislative and other measures to implement UNSCR 1540, including those measures which give effect to the WMD treaties to which they are party to the 1540 Committee. A regional breakdown of reporting states reveals that non-reporting states are predominantly located in Africa and Central America. The best reporting statistic is provided by Europe, where all states but one have reported on their national legislation.¹³ The statistics are hardly surprising as many non-reporting states lack effective governance. Indeed, some non-reporting states may be characterized as failed states,¹⁴ failing states¹⁵ or states lacking the necessary human and financial resources to successfully implement the resolution, let alone produce a comprehensive report.

Moreover, the countries in sub-Saharan Africa have no dominant regional power able to assist them in the implementation of UNSCR 1540. For example, most North African states (with the notable exception of Libya) have reported, as has South Africa (somewhat reluctantly, since it has expressed concerns that the Security Council has assumed legislative and treaty-making powers in adopting this resolution). The problem, thus, lies with most of the sub-Saharan African states. Some of those states that have reported seem to misinterpret UNSCR 1540's scope. Namibia, for instance, did not submit a report to the committee. In its note verbale to the chair, it noted that the country was 'legally and politically not in a position' to support non-state actors due to its adherence to 'most international legal instruments' on WMD. This attitude towards international safeguards is not uncommon in Africa. In terms of IAEA nuclear safeguards for instance, many African states do not have a comprehensive nuclear safeguards agreement in force. As noted above, this may be

¹² <http://www.vertic.org/datasets/bwlegislation.html>

¹³ San Marino had not reported by 3 May 2005.

¹⁴ For example, Liberia, Rwanda and Somalia.

¹⁵ For example, Madagascar and Kenya.

due to unrelated issues: the state may perceive that it has other, more pressing, preoccupations (such as health-care and sanitation, HIV, poverty and civil war).

The quality of legislation in the western world is generally of a high standard. States in the European Union, for instance, have made good progress in harmonizing NBC material export controls, largely to comply with the plethora of EU norms on these issues which require specific national implementation measures. However, there are other areas related to non-proliferation in which there is no EU legislation and no common standard. The European Union has encountered difficulty harmonizing national legislation among its member states and has reportedly received very little information about what measures are in place.¹⁶ Harmonization of criminal law within the EU requires a council decision within the ‘third pillar’ of cooperation (justice and home affairs), to which some EU states are reluctant to commit. However the EU Strategy on Weapons of Mass Destruction requires states that sign agreements with the EU to include a ‘non-proliferation clause’, which obliges these states to enact and effectively implement national legislation on WMD.

Status of enforcement

It is difficult to acquire reliable and accurate information on court cases in which an individual is accused of breaking a non-proliferation norm. Cases that have come to the attention of national and international press are often coloured by other, related, national security concerns (ranging from anti-terrorism to espionage and treason). Moreover, criminal and customs investigations tend to be shrouded in secrecy. The analysis of individual published cases is further complicated by the fact that, in most countries, the legislation itself does not represent a coherent whole but rather a patchwork of export control, customs and criminal legislation. This makes it difficult to draw a clear distinction between prosecutions based on non-proliferation legislation and prosecution based on broader national concerns. This difficulty is evident in cases where the alleged proliferators are accused of treason or espionage. Judicial investigations into the A.Q. Kahn nuclear smuggling network are ongoing in

¹⁶ See oral evidence to the UK House of Lords by Dr Annalisa Giannella, Permanent Representative of the Secretary General/High Representative, General Secretariat of the Council of the EU, 18 January 2005, House of Lords, European Union Committee, 13th report of session 2004-05, at pp. 33.

Germany and South Africa but details of the investigations have been sketchy at best. The charges that may be brought forward reportedly involve not only export control violations but also espionage.¹⁷

Status of technical legislative cooperation and assistance

There are some sources of legislative cooperation and assistance. However, this assistance is divided between several international organizations with little or no common ground.

The IAEA has assisted its members, on a voluntary basis, in developing national legislation in the nuclear field. Beginning in 1997, the Agency redefined its process of legislative assistance with a view toward helping Member States develop comprehensive, harmonized and up to date nuclear safety frameworks. However, the legislative assistance programme has, to date, focussed primarily on nuclear safety and safeguards issues, with less emphasis on nuclear security. This, however, is about to change as the Agency is increasingly involved in awareness-raising and promotion of national laws relating to nuclear security issues.

Eight years after the CWC entered into force, many states parties are yet to adopt the required national legislation or establish a National Authority. The OPCW has developed an ambitious national implementation programme, complete with national implementation packages, checklists and model legislation. It has also set up a roster of legal experts with in-depth knowledge of the national implementing legislation called for by the Convention.¹⁸ The OPCW action plan on implementation of CWC obligations is divided into four parts: identification and analysis of problems and needs; resources for implementation support; the overall timeframe, intermediate steps and target dates for implementation; and oversight by the Conference of state parties and the Executive Council. The OPCW is receiving requests for implementation support; this alone is cause for guarded optimism.

¹⁷ The 'Helmut R' case in Germany and the case of Gerhard Wisser *et al* in South Africa.

¹⁸ See Lisa Tabassi and Scott Spence, 'Improving CWC implementation: the OPCW Action Plan', *Verification Yearbook 2004*, VERTIC, London (2004)

The CTBTO advises national authorities in signatory states on necessary national implementation measures. The organization also holds seminars and workshops promoting the adoption of national implementation measures. It provides legal technical assistance upon request and maintains a database of implementation measures taken by signatories.

Within the BW field, there are no similar institutions. States parties to the BWC agreed a modest confidence building measure data exchange procedure and shared information on national implementation measures at the 2003 BWC intercessional meetings. A few states offer assistance through bilateral cooperation. The lack of more effectively coordinated support is unsatisfactory, however, given the wide range of measures necessary to implement and enforce the WMD treaties and UNSCR 1540. These measures also need to be regularly reviewed and updated when obligations are clarified through treaty meetings, court cases (national and/or international) and to take account of related scientific developments.

Many states seem willing to contribute financially to technical assistance efforts. It is encouraging that western states, such as the US and Canada as well as those in the EU, are devoting financial resources and expertise in order to assist implementation around the world.

Problems in adopting effective national implementation measures

Each international organization has a different mandate and set of member states. For these reasons, some international organizations may, at least initially, be wary of involvement in UNSC imposed arms control and disarmament obligations. They may also be unable or reluctant to cooperate with other organizations in a similar field. This lack of coordination internationally is often mirrored by a lack of coordination at the national level, where government departments, for various reasons, often do not talk to or cooperate with each other.

States' reports to the 1540 Committee, while an important tool in surveying the global state of legislation relating to NBC weapons and related materials, provide an incomplete picture. The reports are *prima facie* not intended to describe legislative action to restrict state activities relating to WMD (although such an obligation could

arguably be deduced from the text). Significantly, there remains a lack of transparency over the adoption of national measures required under the major WMD treaties, especially in regard to how laws already in place are enforced. More practical work needs to be done, since this lack of transparency makes it difficult to identify gaps and recommend improvements. In regions where technical assistance and cooperation are available (such as within the EU), states may be encouraged to be more proactive in providing information on their national measures and in seeking, offering and receiving help where necessary.

Finally, it is unfortunate that there are inadequate resources available to effect national legal cooperation and that those efforts being undertaken are not effectively coordinated. While the IAEA, the CTBTO and the OPCW have technical experts at their disposal, they are often overstretched and underfunded.

Encouraging the adoption of WMD legislation

States can be encouraged to adopt and harmonize WMD legislation in several ways. As required by the resolution, international organizations, particularly those named in the resolution itself, are expected to be proactive in providing advice to the 1540 committee within their respective work area. The naming in the resolution of those organizations that can provide assistance for its implementation only highlights more starkly the continued absence of a multilateral organization for the BWC to provide assistance for implementation of that treaty, let alone the BW-related aspects of the resolution.

National implementation workshops are occasionally organized by the IAEA, the OPCW and the CTBTO. However, there still exists a need to facilitate the broad engagement of technical expertise resident in international organizations, state parties and civil society. Impartial and informed civil society organizations can play a very important role, by functioning as a clearinghouse of information for states and treaty-relevant international organizations and a pool of expertise for states to draw on.

Ensuring that national legislation is properly enforced

As noted above, WMD conventions do not specifically require enforcement in the way that UNSCR 1540 does. The CTBT, BWC and the CWC require states to enact

effective measures or legislation relating to nuclear, biological, toxin and chemical weapons, which is reinforced by the resolution. Moreover, the resolution obliges states to enact much needed national legislation pertaining to nuclear weapons wherever such legislation is not prompted by the state's participation in a nuclear-weapon free zone. As noted above, the status of enforcement of existing legislation is uncertain, mainly because the relevant WMD legislation has been subsumed under anti-terrorism legislation or due to competing grounds of prosecution (such as the charges brought forward being related to terrorism, treason or espionage). The absence of reported court cases in some states may be because the state has not passed appropriate legislation, the legislation is not being rigorously enforced or no violations of these laws are being committed.

There clearly exists a need for international and national coordination amongst prosecutors, police, intelligence agencies, border control authorities and customs. To some extent, this kind of cooperation is already in progress. For example, Interpol has been proactive in identifying its responsibilities and coordinating its response, especially on bioterrorism. Understandably this has proved to be a large and complex task. In many cases, police and customs officers do not know what to look for and may not be able to recognize nuclear, biological or chemical weapons equipment or related materials. Even in technologically and economically advanced regions of the world (such as the EU), much more effort needs to be invested in ensuring that enforcement itself is an effective, efficient and credible deterrent. There is even more work to do in less developed regions of the world.

Ad hoc based initiatives such as the Container Security Initiative (CSI) or the Proliferation Security Initiative (PSI) may play an important role in enhancing the legal, technical and administrative basis for sound and effective national implementation. Ninety per cent of world cargo movements are by container and in many nations, such as Japan, South Korea and the United Kingdom, over 90 per cent of trade volume arrives or leaves by sea. The CSI has brought together customs and port security officials from around the world to review best practices in container security and propose improvements. Presently, PSI participants work together to evaluate and improve legal and technical grounds and techniques for interdiction of international transports (by air, land or sea) suspected of carrying weapons of mass

destruction, related materiel or delivery systems. While the effectiveness, or even usefulness, of these coercive measures has been questioned by prominent minds, they have encouraged cooperation amongst customs, border control and military authorities in participant states which may subsequently lead to increased harmonization of WMD legislation.