

**RAISING BARRIERS TO THE ACQUISITION OF
WEAPONS OF MASS DESTRUCTION BY NON-STATE ACTORS**

**THE ROLE OF ARMS CONTROL TREATIES &
UNITED NATIONS SECURITY COUNCIL RESOLUTION 1540**

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INTRODUCTION

One of the most serious current international security concerns is that of a non-state actor or terrorist group acquiring so called 'Weapons of Mass Destruction' (WMD), which these days are usually understood to mean nuclear, biological and chemical weapons, and their means of delivery.¹

United Nations Secretary-General Kofi Annan recently stated that '[t]he international community remains deeply concerned about the dangers of WMD falling into the hands of terrorists, and is actively engaged in work to counter this threat.'² And closer to home, Defence Minister Hill recently referred to the 'salient features in our changing security environment: the emergence of new and more immediate threats from terrorism and increased concerns about the proliferation of WMD'.³

The three primary arms control treaties related to WMD, which may be referred to as the nuclear, biological and chemical arms control trilogy, are the 1968 Nuclear Non-Proliferation Treaty (NPT),⁴ the 1972 Biological Weapons Convention (BWC),⁵

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¹ For a discussion of the origins of the term 'Weapons of Mass Destruction', see Robert Mathews, and Timothy McCormack, 'Australian Security, Weapons of Mass Destruction and International Law' in A Bergin and S Scott (eds), *International Law and Australian Security* (1995).

² Message from the United Nations Secretary-General to the Eighth Conference of States Parties to the Chemical Weapons Convention (The Hague, 20 October 2003) available at <<http://www.opcw.org>>.

³ *Australia's National Security: A Defence Update 2003*, available at <<http://www.defence.gov.au>>.

⁴ *Treaty on the Non-Proliferation of Nuclear Weapons*, opened for signature 1 July 1968, 729 UNTS 161 (entered into force 5 March 1970).

⁵ *Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction*, opened for signature 10 April 1972, 1015 UNTS 163 (entered into force 26 March 1975).

and the 1993 Chemical Weapons Convention (CWC).⁶ These treaties were negotiated during the Cold War⁷ to limit the horizontal proliferation of nuclear weapons, and to achieve the prohibition and total elimination of biological weapons and chemical weapons respectively.

This paper discusses the potential roles of these three treaties, and other arms control measures including national export licensing of dual-use items relevant to nuclear, biological and chemical weapon proliferation programs, and the recently adopted United Nations Security Council resolution 1540,⁸ in raising barriers to the acquisition of WMD by non-state actors (including terrorist groups). This paper concludes by outlining some activities being undertaken by the Australian Government in order that these arms control treaties and other measures may better fulfil their potential roles.

‘WMD-TERRORISM’ — AN HISTORICAL PERSPECTIVE

It is interesting to reflect that ‘WMD-terrorism’ is not a new issue. For example, in April 1945, following the early ‘atomic bomb’ tests in New Mexico, the United States Secretary of War, Henry Stimson, wrote to President Truman:

The future may see a time when such a [nuclear] weapon may be constructed in secret and used suddenly and effectively with devastating power by a wilful nation or group against an unsuspecting nation or group of much greater size and material power.⁹

Likewise, the possibility of terrorists acquiring and using chemical or biological weapons is not a new concern either. For example, at least one terrorist group in Europe in the 1970s was attempting to produce nerve agents,¹⁰ well before the use of Sarin by the Aum Shinrikyo sect in Tokyo in March 1995.¹¹ And there has also been use of biological agents by terrorist groups (including Salmonella food poisoning in Oregon in 1984,¹² and unsuccessful attempts to release botulinum toxin and anthrax in

⁶ *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction*, opened for signature 13 January 1993, 1974 UNTS 45 (entered into force 29 April 1997).

⁷ The negotiation of the CWC commenced in 1972, and concluded in 1992, so was actually concluded following the Cold War. However, the majority of the provisions were negotiated during the latter stages of the Cold War.

⁸ SC Res 1540, UN Doc S/RES/1540 (28 April 2004).

⁹ Memorandum from US Secretary of War, Henry Stimson to President Truman, 25 April 1945, quoted in Jayantha Dhanapala, UN Under-Secretary-General for Disarmament Affairs, ‘Multilateral Approaches to WMD Threats after September 11’ (Speech delivered at the Annual Luncheon of the Arms Control Association, Washington DC, 22 January 2002).

¹⁰ In 1976, a terrorist group was reportedly attempting to sell one kilogram of a precursor of Sarin nerve agent, and another terrorist group was reported to have produced a litre of di-isopropylfluorophosphate (DFP) nerve agent. See J D Douglass Jr and N C Livingstone, *America the Vulnerable: The Threat of Chemical/Biological Warfare* (1987) 184.

¹¹ Indeed, I was in Tokyo at the time of the underground Sarin attacks, as a guest of the Japanese Government, to provide guidance on the establishment of a new laboratory to analyse chemicals like Sarin, and witnessed some of the challenges faced by government officials as they responded to that terrible event.

¹² In 1996, the US Federal Bureau of Investigation (FBI) detailed several bio-terrorism incidents, including an attack with Salmonella bacteria by two members of the Rajneesh religious sect, for

Japan in the early 1990s).¹³ Nor is chemical and biological terrorist mail a new problem.¹⁴

However, September 11 and the anthrax letter incidents in late 2001 certainly raised the awareness of the international community to the WMD-terrorist problem, and has resulted in determined attempts by the international community to reduce the possibility of a terrorist group initiating a WMD event.

ACQUISITION OF WMD BY TERRORISTS

At this stage, it is probably a good time to briefly reflect on how a terrorist group might acquire WMD by:

- (i) stealing WMD from an existing stockpile;
- (ii) buying WMD on the 'black market';
- (iii) having a WMD 'custom made' under contract;
- (iv) building an 'improvised' WMD device.

It is worth noting that because of the relatively difficult task of making a nuclear weapon compared with either biological or chemical weapons, the major danger for nuclear terrorism would be a terrorist group stealing a nuclear weapon or buying one on the 'black market' — although a terrorist group could try to build its own 'radiological weapon' or 'Radiological Dispersion Device' (RDD).¹⁵ However, for biological and chemical weapons, there is a danger of a terrorist group building its own chemical or biological device, using commercially available dual-use materials.

A ROLE FOR ARMS CONTROL?

How can arms control have a role? After all, arms control treaties are negotiated agreements between states. Terrorist groups which have demonstrated willingness and capability to inflict massive casualties on civilian targets are hardly going to respect, or comply with, the prohibitions and restraints contained within international arms control treaties.

A *Nuclear Weapons*

Looking first at nuclear weapons arms control, on 21 March 1963, not long after the Cuban missile crisis, US President John F Kennedy stated:

the purpose of influencing a local election, on restaurants in Oregon in 1984 in which 715 people were affected, none fatally. See 'News Chronology' (1997) 35 *CBW Conventions Bulletin* 19, 27.

¹³ There were apparently at least nine unsuccessful attempts at bio-terrorism by the Aum Shinrikyo sect in the early 1990s, including attempts to spray botulinum toxin from moving trucks and spraying slurries of anthrax from the top of a building in Tokyo: see *ibid*.

¹⁴ For example, I gave a presentation to an Australia Post Conference in 1980 about the means to detect and decontaminate letters that contain toxic chemical or pathogens (21 years before the US anthrax letters).

¹⁵ The 'Radiological Weapon' or RDD is also known as a 'dirty bomb'. These devices are designed to release an isotope such as Cobalt-60 or Caesium-137, both gamma emitters.

I see the possibility in the 1970s of the President of the United States having to face a world in which 15 or 20 or 25 nations may have [nuclear] weapons. I regard that as the greatest possible danger and hazard.

These concerns led to the negotiation of the NPT in the mid to late 1960s. This has resulted, some 35 years later, in the situation where we have five NPT States Parties which are permitted to possess nuclear weapons (the P5), another few states which have refused to join the NPT and have a nuclear weapons capability, and we have a few NPT 'non-nuclear weapon' States Parties which have not fully complied with their nuclear safeguards agreements.

The International Atomic Energy Agency (IAEA) is responsible for implementation of the NPT and oversight of other nuclear security issues (ie the 'UN nuclear weapons watch dog'). In recent years, the IAEA's role has included encouraging the nuclear weapon possessor states (particularly the nuclear capable states yet to join the NPT) to increase the security of their nuclear stockpiles to reduce the risk of theft of nuclear weapons by a terrorist group. This is obviously very important. But in addition, Article I of the NPT states:

Each nuclear weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosives devices directly or indirectly.

This was no fortuitous drafting accident. The US negotiating team insisted that this provision be included in the finally agreed text of the NPT.¹⁶ So even though the NPT was being drafted in the mid-1960s as an agreement between states, provisions reflecting the concerns expressed by Henry Stimson 20 years earlier were very much in the minds of some of the negotiators.

The obligations of non-nuclear weapon States Parties under Article II (to neither acquire nuclear weapons nor seek or receive assistance in the manufacture of nuclear weapons) and Article III (to conclude safeguards agreements with the IAEA to ensure no diversion of their nuclear materials or related equipment from peaceful purposes to nuclear weapons) also play a useful role in reducing the possibility of nuclear terrorism.

Following the 1991 Gulf War, there have been efforts to strengthen the safeguards system of the NPT through negotiation of an Additional Protocol, with an objective of verifying the absence of undeclared nuclear activities, as well as absence of diversion.¹⁷ Overall, the NPT is considered to have quite a good record in terms of restricting the horizontal proliferation of nuclear weapons.

Since September 11, the increasing concerns about terrorists attempting to acquire nuclear materials has resulted in greater efforts by the international community to increase the protection of nuclear materials and facilities. It has also led to renewed attention to increase the difficulty in acquiring weapon-usable fissile material on which the NPT is based, and at combating the possibility of 'leakage' of nuclear

¹⁶ M I Shaker, *The Nuclear Non-Proliferation Treaty: Origin and Implementation 1959–1979* (1980) vol 1, 238.

¹⁷ See, eg, John Carlson, 'Nuclear Safeguards: Developments and Challenges' in Verification Research, Training and Information Centre (VERTIC), *Verification Yearbook* (2001) ch 4, 61–78.

weapons and nuclear materials from the former Soviet Union and elsewhere.¹⁸ In March 2002, the IAEA Board of Governors approved an Action Plan designed to upgrade worldwide protection against acts of terrorism involving nuclear and other radioactive materials,¹⁹ including developing improved measures for the security of radioactive sources which could be used in the development of a ‘dirty bomb’.²⁰

B *Biological Weapons*

And what about biological weapons and the BWC? Article II of the BWC contains the disarmament provisions. In particular, all BWC States Parties possessing biological weapon stockpiles are under obligation to destroy their stockpiles within nine months of entry into force. If all States Parties fully comply with this provision, the risk of terrorists acquiring biological weapons is clearly reduced.

Equally important, along similar lines to Article I of the NPT, Article III of the BWC specifies that:

Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly, and not in any way assist, encourage or induce any State, group of States or international organisations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment or means of delivery specified in Article I of this Convention.

Further, the prohibitions contained within the BWC are not limited to those pathogens and toxins which have already been weaponised by states (eg anthrax, plague, botulinal toxin, etc), but are based on the ‘General Purpose Definition’ of biological weapons (Article I) which effectively includes a prohibition on development and use of any pathogen or toxin for hostile purposes. Thus, biological weapon attacks along the lines of the Salmonella outbreak in Oregon in 1984, even though not intended to kill anyone, are prohibited by the BWC.

Under Article IV, each State Party is required, in accordance with its constitutional processes, to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition or retention of biological weapons.

The BWC prohibitions clearly apply to terrorists’ use of biological weapons. For example, the relevance of the treaty provisions to countering bio-terrorism was reinforced in the Final Declarations of the 1996 BWC Review Conference, in particular, in the review of Articles III²¹ and IV.²²

¹⁸ Shannon N Kile, ‘Nuclear Arms Control, Non-Proliferation and Ballistic Missile Defence’ in Stockholm International Peace Research Institute (SIPRI), *SIPRI Yearbook 2003: Armaments, Disarmament and International Security* (2003) ch 15, 577–609.

¹⁹ IAEA, ‘IAEA Board of Governors Approves IAEA Action Plan to Combat Nuclear Terrorism’, Press Release 2002/04 (19 March 2002) available at <<http://www.iaea.org>>.

²⁰ K Barrow, ‘Dirty Deeds Done Dirt Cheap: Dealing with RDDs’ (2004) 115 *Trust and Verify* 1.

²¹ The Final Declaration stated that:

The Conference affirms that Article III is sufficiently comprehensive to cover any recipient whatsoever at international, national or sub-national levels. ... In the development of implementation of Article III, The Conference notes that States Parties should also consider ways and means to ensure that individuals or sub-national groups are effectively prevented from acquiring, through transfers, biological agents and toxins for other than peaceful purposes.

C Chemical Weapons

And what about chemical weapons and the CWC? As with the BWC, the CWC contains specific disarmament provisions — all CWC States Parties possessing chemical weapon stockpiles are under an obligation to destroy them within 10 years of entry into force, under strict verification by the Organisation for the Prohibition of Chemical Weapons (OPCW). While awaiting destruction, all chemical weapon stockpiles are secured, and monitored by the OPCW. This clearly reduces the risk of theft of chemical weapons by a terrorist group.

Further, facilities within States Parties that are producing nerve agents and blister agents (the so-called ‘Schedule 1’ chemicals) for chemical defence purposes, are required to declare these activities annually, and are subject to routine OPCW inspections. The OPCW inspectors also advise States Parties on improved security for the storage of their Schedule 1 chemicals. This also reduces the risk of theft of chemical warfare agents by a terrorist group.

And Article I(1)(d) of the CWC specifies that:

Each State Party to this Convention undertakes never in any circumstances to ... assist, encourage or induce in any way, anyone to engage in any activity prohibited to a State Party under this Convention.

And, as with the BWC, the prohibitions contained within the CWC are not limited to those chemical warfare agents which have previously been weaponised by states (eg Sulphur mustard, Sarin, VX etc), but are also based on a ‘general purpose’ definition of chemical weapons which effectively includes a prohibition on development and use of any toxic chemical for hostile purposes, including ‘toxic industrial chemicals’.²³ The relevance of the CWC provisions to countering chemical-terrorism has been reinforced in the Report of the First CWC Review Conference held in 2003.²⁴

Fourth Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, *Final Declaration*, BWC/CONF.IV/9 (Geneva, 25 November – 6 December 1996) Pt II, 17, available at <<http://www.opbw.org>>.

²² The Final Declaration, *ibid*, stated with respect to the review of Article IV:

The States Parties recognise the need to ensure, through the review and/or adoption of national measures, the effective fulfilment of their obligations under the Convention in order, *inter alia*, to exclude the use of biological and toxin weapons in terrorist or criminal activity.

²³ CWC, Article II(1)(a) states that:

‘Chemical Weapons’ means ... Toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes.

²⁴ First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (First Review Conference), *Report* (The Hague, 28 April – 9 May 2003) para 7.10, available at <<http://www.opcw.org>>. See also Robert Mathews, ‘Reviewing the Chemical Weapons Convention: Gently Does It’ in Verification Research, Training and Information Centre (VERTIC), *Verification Yearbook* (2003) ch 6, 103–24.

BUT IN THE REAL WORLD ...

So, at least in theory, the various prohibitions and obligations contained in the NPT, BWC and CWC should play a substantial role in making it more difficult for a terrorist group to acquire WMD, or to obtain the raw materials, production equipment, technology and 'know-how' for the production of WMD from the States Parties of these treaties. But in practice, there are a few problems I would like to discuss: universality; national implementation measures; and the dual-use nature of materials and equipment associated with WMD, which results in the possibility of suppliers of dual-use items and technology providing inadvertent assistance to a terrorist WMD program.

A *Universality*

It is worth briefly considering the issue of universality and states not party to the NPT, BWC and CWC. In particular, what about those UN Member States which have not, and in some cases will not in the foreseeable future, join the NPT, BWC and CWC? Particular concerns are:

- (i) the four states that are not party to the NPT (that is, India, Pakistan, Israel and North Korea); and
- (ii) a number of states in the Middle East which have stated that they will not become party to the BWC or CWC until Israel accedes to the NPT.

The four states not party to the NPT are not obligated to comply with any prohibition contained in that treaty on assisting non-state actors in the acquisition of nuclear weapons and associated technology. Similarly, the 30 or so states that are not party to the BWC and CWC are not obligated to comply with any prohibition contained in those conventions on assisting non-state actors in the acquisition of biological weapons, chemical weapons and associated technologies.

B *National Implementation*

Another key issue is the domestic implementation of these arms control obligations by States Parties. Irrespective of political commitment to arms control treaties, in practice, enhanced security benefits from these treaties depend on whether States Parties have enacted the necessary domestic legislation to translate the treaties prohibitions into domestic law, and how effectively the domestic laws are implemented.

After 34 years, the domestic implementation of the NPT is now regarded as being in reasonably good shape for most States Parties, with the IAEA playing a major role in guiding and facilitating NPT States Parties as they undertake their national obligations, including those of the Additional Protocol.²⁵

But the national implementation situation with respect to the BWC and CWC is problematic. For example, based on a recent survey, 29 years after it entered into force less than half of the 153 BWC States Parties have enacted the necessary

²⁵ See, eg, Jill Cooley, 'Integrated Nuclear Safeguards: Genesis and Evolution' in Verification Research, Training and Information Centre (VERTIC), *Verification Yearbook* (2003) ch 2, 29–44.

domestic legislation under Article IV.²⁶ And the CWC situation is similar — less than half of the 163 CWC States Parties have enacted the legislation required under Article VII.²⁷ However, it is interesting to note that the United Kingdom, which does have effective CWC implementing legislation in place, used this legislation as the basis for the arrest of seven individuals, suspected of having terrorist links, who were alleged to be producing small quantities of the toxin Ricin (a Schedule 1 chemical in the CWC) in London in early 2003.²⁸

In my view, this is one of the two key challenges in the evolution of arms control to counter the current WMD-terrorism threat — the translation of the internationally agreed prohibitions into effective domestic enforcement. In the past, there has been a tendency for some states (particularly smaller states with a limited industrial base) to ‘sign and forget’ (or more correctly, ‘ratify and forget’) these treaties. The larger, more powerful, industrialised States Parties have tended to turn a blind eye to what has usually been regarded as a relatively minor oversight on the part of typically smaller, less powerful States Parties.

There is now recognition that a terrorist group seeking to develop a WMD capability may choose a location within the territory of either a small State Party which does not have the requisite laws in place, or a small state which is not a party to the WMD treaties (ie ‘safe havens’ for terrorists).²⁹

In the case of the CWC, this has led to the CWC Action Plan, flowing from the First CWC Review Conference in May 2003, and adopted by the Eighth Conference of States Parties held in October 2003, which encourages all remaining states to ratify or accede to the CWC, and encourages all States Parties to enact relevant domestic legislation (with the help from the OPCW and other States Parties).³⁰

In the case of the BWC, this situation has led — following failure to agree on the draft Protocol to strengthen the BWC in 2001 — to a series of annual Meetings of Experts and States Parties.³¹ The annual Meetings in 2003 focused on improving national legislation and security of pathogens and toxins. There were many Working Papers prepared by States Parties on both issues to provide guidance to other States Parties on their implementation of these aspects of the BWC.

Unfortunately, there is no international organisation (ie an Organisation for the Prohibition of Biological Weapons) to encourage, facilitate and provide support to those smaller States Parties with limited resources to develop, adopt, and implement the requisite domestic legislation.

²⁶ Angela Woodward, ‘National Implementing Laws for Arms Control and Disarmament Treaties’ in Verification Research, Training and Information Centre (VERTIC), *Verification Yearbook* (2003) ch 9.

²⁷ Mathews, above n 24, 103–24.

²⁸ See ‘News Chronology’ (1997) 35 *CBW Conventions Bulletin* 19, 27.

²⁹ See, eg, K Wilson, ‘No “Safe Havens”: The Need to Strengthen International Control Regimes: Implications for National Implementation’ (2002) *Synthesis* 18–22.

³⁰ See ‘News Chronology’ (2003) 62 *CBW Convention Bulletin* 29, 53–4.

³¹ John Hart, Frida Kuhlau and Jacqueline Simon, ‘Chemical and Biological Weapon Developments and Arms Control’ in Stockholm International Peace Research Institute (SIPRI), *SIPRI Yearbook 2003: Armaments, Disarmament and International Security* (2003) ch 16, 645–82.

C The Dual-Use Dilemma & Inadvertent Assistance

Another major challenge is the possibility of inadvertent assistance being provided to a terrorist group which is seeking to build its own WMD.

The key issue here is the dual-use nature of much of the raw materials, production equipment, technology and ‘know-how’ required — particularly for the production of biological and chemical weapons — and the difficulty in recognising when an apparently innocent transaction may have a hostile intent.

A group of countries which has become known over the years as the ‘Australia Group’ has developed lists of dual-use items which the participating countries subject to national export licensing measures, with the objective of preventing assistance (inadvertent or otherwise) in the supply of dual-use items destined for hostile chemical and biological weapons activities.³²

Historically, a number of ‘developing’ countries in the Non-Aligned Movement (NAM) have opposed these types of informal export control arrangements between groups of ‘developed’ states. There has been a debate, dating back to the CWC negotiations in Geneva in the late 1980s, as to whether the export licensing system of the Australia Group represents a legitimate means of assisting CWC States Parties in fulfilling their non-proliferation obligations stemming from Article I(1)(d) of the CWC. This has also involved arguments that the Australia Group export licensing system should be abolished because it hinders ‘free trade’ in chemical commodities, which inconsistent with the provisions of the CWC.³³

However, post-September 11, a number of BWC and CWC States Parties which have previously been critical of the Australia Group, have adopted their own national export licensing systems, using lists similar to those developed by Australia Group participants. A number of these States Parties have also placed domestic monitoring procedures in place, again based on the dual-use items in the Australia Group lists. This has tended to take the sting out of the arguments for the abolition of the Australia Group.³⁴

UN SECURITY COUNCIL RESOLUTION 1540

Where does UN Security Council resolution 1540³⁵ fit into the arms control framework? UN Security Council resolution 1540 obliges all UN Member States to refrain from providing any support to non-state actors that attempt to acquire WMD. This effectively brings all UN Member States under the same obligation as the States Parties to the NPT, BWC and CWC not to assist non-states actors in acquiring nuclear, biological or chemical weapons respectively. This resolution therefore overcomes the problem of the lack of universality discussed above (at least as far as the prohibition on assistance goes).

³² For further information on the Australia Group, see <<http://www.australiagroup.net>>.

³³ M Letts, Robert Mathews, Timothy McCormack and C Moraitis, ‘The Conclusion of the Chemical Weapons Convention: An Australian Perspective’ (1993) 14 *Arms Control* 311.

³⁴ For example, at the First CWC Review Conference in 2003, informal comments were made by a number of representatives from various regional groups suggesting that the arguments had become ‘ritualistic’ during the Review Conference: see Mathews, above n 24, 103–24.

³⁵ UN SC Res 1540, UN Doc S/RES/1540 (28 April 2004).

Resolution 1540 also makes clear the types of domestic measures that all UN Member States must adopt to ensure that they are not assisting a non-state actor to acquire WMD. These measures include:

- adopting and enforcing domestic laws that prohibit the manufacture, acquisition, possession, development, transportation or use of nuclear, biological or chemical weapons by individuals or groups;
- establishing appropriate controls over WMD-related materials;
- development and maintenance of effective measures to account for WMD-related materials in production, use, storage and transport;
- development and maintenance of effective border controls to detect and prevent illicit trafficking and brokering in WMD-related materials; and
- development of national control lists of relevant dual-use items.

Thus Security Council resolution 1540 provides a set of concrete measures to be taken by all UN Member States at the domestic level, in order that their obligations under the resolution may be implemented effectively. Resolution 1540 also refers to the importance of international cooperation to assist Member States with limited experience and resources to effectively adopt these measures.

To ensure that all UN Member States are implementing these domestic measures as required, Member States are required to report to the UN Security Council Committee, with the first progress report due in late 2004.

AUSTRALIAN GOVERNMENT ACTIVITIES

What has the Australian Government been doing with respect to arms control and the threat of WMD-terrorism? Australia was not involved in the actual negotiation of the NPT or the BWC, because these treaties were negotiated before Australia became a Member of the UN Conference on Disarmament in Geneva in 1979. However, since the mid-1970s, Australia has played an active 'middle power' role in the various Review Conferences associated with the NPT and BWC. In addition, Australia has played an important role over the years in negotiating measures to strengthen the NPT and BWC through the negotiation of the Additional Protocol to the NPT, and the efforts (unsuccessful, at least so far) in negotiating a Protocol to the BWC. In addition, Australia played a very active role in the negotiation of the CWC, and in the OPCW Preparatory Commission in early years of the Convention's operation.

Australia has also been very actively involved in the development of national export licensing arrangements for WMD-associated dual-use materials and equipment, most notably by convening and chairing the Australia Group meetings for the development, harmonisation and coordination of national export licensing measures on dual-use chemical and biological materials and equipment.

Australia has developed a reputation for taking its arms control obligations seriously, based on effective domestic implementation of its various obligations under the NPT, BWC and CWC, and its other arms control obligations. In light of the recent increase in terrorist-WMD concerns and the passage of resolution 1540 by the Security Council, Australia is reviewing and adjusting its current domestic laws and practices, including the monitoring of WMD-related materials, as appropriate.

Australia has also cooperated closely with its regional neighbours in the domestic implementation of the NPT, BWC and CWC through a range of activities, including the development of model domestic implementing legislation, and participation in bilateral consultations and regional workshops. Australia is also encouraging its neighbours to adopt national export controls based on the various export control lists, as well as other domestic measures, as a means of achieving the objectives of resolution 1540.

CONCLUDING COMMENTS

In concluding, I wish to emphasise the very important role of arms control treaties (in particular the NPT, BWC and CWC) in raising barriers to the acquisition of WMD by non-state actors. While the value of these instruments in the current security environment has been questioned, these conventions still have the potential to raise barriers to bio-terrorism despite the fact that they were negotiated during the Cold War in order to address quite different security concerns.³⁶

The key challenge in enabling the NPT, BWC and CWC (as well as UN Security Council resolution 1540) to fulfil this important role is the translation by all states of the obligations they impose into effective domestic measures. If such action is taken by all UN Member States, we can avoid creating safe havens for non-state actors who are seeking to acquire WMD, and reduce the possibility of inadvertently assisting such actors through the supply of dual-use items and technologies.

³⁶ See, eg, A Bohlen, 'The Rise and Fall of Arms Control' (2003) 45(3) *Survival* 7–34.