



Australian Government
Department of Foreign Affairs and Trade

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Mr Kelvin Thomson MP
Chair
Joint Standing Committee on Treaties
Parliament House
CANBERRA ACT 2600

Dear Mr Thomson

We are writing in response to the invitations extended to the Department of Foreign Affairs and Trade and to the Australian Safeguards and Non-Proliferation Office to make written submissions to the Joint Standing Committee on Treaties' inquiry into Nuclear Non-proliferation and Disarmament.

We attach a joint submission. We trust that the information contained in the submission will be of assistance to the Committee in completing its inquiry.

Yours sincerely

Handwritten signature of Jennifer Rawson in black ink.

Jennifer Rawson
First Assistant Secretary
International Security Division
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Handwritten signature of John Carlson in black ink.

John Carlson
Director General
Australian Safeguards & Non- Proliferation Office

**Joint Standing Committee on Treaties
Inquiry into Nuclear Non-proliferation and Disarmament**

**Joint Submission by the Department of Foreign Affairs and Trade
and the
Australian Safeguards and Non-Proliferation Office**

3 February 2009

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This submission deals with the treaties that relate to nuclear non-proliferation and disarmament which involve Australia (see Attachment A). The treaties provide the legal framework for international efforts to prevent nuclear proliferation and promote nuclear disarmament. They are an essential component of the global nuclear non-proliferation and disarmament architecture.

Non-treaty-based arrangements also make a contribution to non-proliferation and disarmament efforts - for example, the export control regimes of the Nuclear Suppliers Group (NSG), which implements guidelines for nuclear and nuclear-related exports and the Missile Technology Control Regime (MTCR), which regulates exports relevant to unmanned delivery systems capable of delivering weapons of mass destruction (WMD).

In addition, there are mechanisms such as the Proliferation Security Initiative (PSI) which facilitates practical action by participating states to disrupt WMD-related transfers to states of proliferation concern or to non-state actors, and the Global Initiative to Combat Nuclear Terrorism. Australia participates in both Initiatives.

The United Nations Security Council (UNSC) also has an important role. In 2004, the Security Council adopted Resolution 1540 which requires all states to refrain from providing support to non-state actors that attempt to develop or acquire WMD, to adopt effective laws prohibiting non-state actors from developing or acquiring WMD, and to develop effective national export and transshipment controls to prevent the proliferation of WMD. In 2006, the Security Council placed sanctions on the Democratic People's Republic of Korea (DPRK) after it carried out missile tests and a nuclear test. In 2007, the Security Council placed sanctions on Iran for non-compliance with its nuclear safeguards obligations.

1. The international treaties involving Australia which relate to nuclear non-proliferation and disarmament.

Multilateral non-proliferation and disarmament treaties

The principal multilateral treaty concerned with nuclear non-proliferation and disarmament is the 1968 **Treaty on the Non-Proliferation of Nuclear Weapons** (NPT), which entered into force in March 1970¹. With its near-universal membership - 191 states are party to the Treaty - the NPT has the widest adherence of any arms limitation or disarmament agreement. The Parties to the NPT are the nuclear-weapon states (defined as states that had manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967 – China, France, Russia, United Kingdom, United States) and non-nuclear-weapon states.

Under the NPT, the nuclear-weapon states undertake not to assist proliferation (Article I), and the non-nuclear-weapon states undertake not to develop nuclear weapons (Article II) and to accept safeguards applied by the International Atomic Energy Agency (IAEA) to verify that their nuclear activities are peaceful (Article III). All NPT Parties undertake to facilitate the exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy with special consideration for the needs of developing

¹ Australia signed the NPT in February 1970. It entered into force for Australia in January 1973.

countries (Article IV). All NPT Parties agree to pursue negotiations on nuclear disarmament and general and complete disarmament (Article VI).

The NPT is reviewed every five years. At the 1995 NPT Review and Extension Conference, Parties agreed to a package of decisions: the indefinite extension of the Treaty; an enhanced review mechanism; a set of principles and objectives for non-proliferation and disarmament; and a resolution on the Middle East. The 2000 Review Conference agreed to thirteen practical steps to progress nuclear disarmament. The 2005 Review Conference was unable to agree a substantive outcome, including because of disagreements about progress made in implementing the 1995 and 2000 Review Conference outcomes. The next NPT review conference is scheduled for 2010.

To give effect to its obligations under Article III of the NPT, Australia concluded in 1974 a **comprehensive safeguards agreement with the IAEA** whereby Australia accepted IAEA safeguards on all nuclear material and activities within its territory. IAEA safeguards provide technical verification that nuclear materials are not diverted from peaceful applications such as the generation of nuclear isotopes for medical purposes to use in military applications such as nuclear weapons.

Prior to this, Australia had concluded certain agreements that had provided for the application of safeguards to verify Australia's observance of peaceful use commitments: a bilateral agreement with the **United States** in 1956 and a trilateral agreement with **Japan and the IAEA** in 1972.

Australia had become a member of the IAEA in 1957 when the Agency was established under the **Statute of the International Atomic Energy Agency**².

The revelation in the early 1990s that Iraq had been developing a clandestine nuclear capability led to IAEA safeguards being enhanced. In 1997 the IAEA Board of Governors agreed the text of the model **Additional Protocol** (AP), which provides the IAEA with the legal authority to collect additional information, and gives its inspectors rights to access additional locations. Australia was the first state to sign and ratify an AP, also in 1997.

Although Australia's comprehensive safeguards agreement and Additional Protocol are bilateral agreements with the IAEA, they are part of the multilateral non-proliferation framework that applies to non-nuclear-weapon states.

Other significant multilateral non-proliferation treaties include the 1996 **Comprehensive Nuclear-Test-Ban Treaty** (CTBT), which bans all nuclear explosions. It also bans causing, encouraging or participating in the conduct of a nuclear explosion. The Treaty establishes a verification regime to detect and investigate possible non-compliance. The CTBT has been signed by 180 countries and ratified by 148. It will not enter into force until ratified by the 44 states listed in its Annex 2³. Thirty-five of those states have ratified. The remaining nine are: China, DPRK, Egypt, India, Indonesia, Iran, Israel, Pakistan and the United States.

² The Statute was approved on 23 October 1956 by the Conference on the Statute of the International Atomic Energy Agency, which was held at the United Nations in New York. It came into force on 29 July 1957, upon the fulfilment of the relevant provision of the paragraph E of Article XXI.

³ The Annex 2 States formally participated in the 1996 session of the Conference on Disarmament and possess nuclear power or research reactors.

Once in force, the CTBT will in effect replace the 1963 **Treaty banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water** (Partial Test Ban Treaty) which prohibits all test detonations of nuclear weapons except those conducted underground. Although this Treaty does not ban underground testing, it does prohibit nuclear explosions if these cause “radioactive debris to be present outside the territorial limits of the States under whose jurisdiction or control” the explosions were conducted. The Treaty was developed both to slow the arms race and to stop the excessive release of nuclear fallout into the planet’s atmosphere.

The need to protect nuclear material was recognised in the 1980 **Convention on the Physical Protection of Nuclear Material**, which sets out arrangements and standards for the security of nuclear material in international transport, and domestic storage incidental to international transport. A **2005 Amendment** to the Convention substantially strengthens security requirements for nuclear material and extends the existing provisions of the Convention to cover nuclear facilities and nuclear material in domestic use, storage and transport. It also requires states which are party to the Convention to criminalise the trafficking of nuclear material and the sabotage of nuclear facilities.

Article VII of the NPT affirms the right of states to conclude regional nuclear weapons free zones. The 1985 **South Pacific Nuclear Free Zone Treaty**⁴ (SPNFZ - Treaty of Rarotonga) renounces the manufacture, acquisition, possession or control over any nuclear explosive device in a defined area of the Pacific, and precludes, among other things, the testing of any nuclear explosive device in the Zone. Each Party to the Treaty undertakes to prevent in its territory the stationing of any nuclear explosive device. At the same time each Party remains free to decide for itself whether to allow visits by foreign ships and aircraft to its ports and airfields, transit of its airspace by foreign aircraft, and navigation by foreign ships in its territorial sea or archipelagic waters in a manner not covered by the rights of innocent passage, archipelagic sea lane passage or transit passage of straits. Protocol 2 to the Treaty also provides for the nuclear-weapon states to make a commitment not to use or threaten to use nuclear weapons against Parties to the Treaty.⁵

Other treaties with a similar aim include the 1961 **Antarctic Treaty**, which provides that Antarctica can be used only for peaceful purposes and prohibits any nuclear explosions and the disposal of radioactive waste on the Antarctic continent. The Treaty in effect designates Antarctica a nuclear weapon free zone. The Antarctic Treaty is significant as one of the earliest nuclear disarmament treaties. It has a comprehensive membership of all countries with interests in the region, including key nuclear states and regional powers. Australia is an original signatory to the Antarctic Treaty which continues to serve Australia’s strategic policy interests in the region by ensuring that the Australian Antarctic Territory, and the vast area to Australia’s south, remain demilitarised and free from conflict.

The 1970 **Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor** (Seabed Treaty)

⁴ Other significant regional nuclear weapons-free zone treaties include the Southeast Asia Nuclear-Weapons-Free Zone Treaty (Bangkok Treaty); the African Nuclear-Weapons-Free Zone Treaty (Pelindaba Treaty); the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Tlatelolco Treaty).

⁵ The nuclear-weapon states that have become Parties to Protocol 2 to the SPNFZ are China, France, United Kingdom and USSR (now Russian Federation).

prohibits parties from emplacing nuclear weapons or weapons of mass destruction on the seabed and the ocean floor beyond a 12-mile coastal zone.

Non-proliferation in outer space is dealt with by the 1967 **Treaty on Principles Governing the Activities of States in the Exploration and use of Outer Space, including the Moon and Other Celestial Bodies**. The Outer Space Treaty is premised on the principle that the use of outer space “shall be carried out for the benefit and in the interests of all countries”. Article IV contains an undertaking not to place in orbit around the Earth, install on the Moon or any other celestial body, or otherwise station in outer space, nuclear or any other WMD. Article IV also limits the use of the Moon and other celestial bodies exclusively to peaceful purposes and expressly prohibits their use for: establishing military bases, installation, or fortifications; testing weapons of any kind; or conducting military manoeuvres.

The 1986 **Agreement Governing the Activities of States on the Moon and other Celestial Bodies** (Moon Treaty) reaffirms and elaborates on many of the provisions of the Outer Space Treaty as applied to the Moon and other celestial bodies, providing that those bodies should be used exclusively for peaceful purposes, that their environments should not be disrupted, and that the United Nations should be informed of the location and purpose of any station established on those bodies. In addition, the Agreement provides that the Moon and its natural resources are the common heritage of mankind and that an international regime should be established to govern the exploitation of such resources when such exploitation is about to become feasible.

In 2005, the **International Convention for the Suppression of Acts of Nuclear Terrorism** (Nuclear Terrorism Convention) was negotiated in the context of perceptions of a higher risk of use by terrorists of devices causing mass destruction. It calls for states to develop legal frameworks to criminalize nuclear terrorism-related offences. It also calls for international cooperation with nuclear terrorism investigations and prosecutions. Australia signed the Convention on 14 September 2005 and is working towards its ratification⁶.

Australia is also involved with several international treaties dealing with nuclear safety which are not strictly within the terms of reference of this inquiry. For example: the **Convention on the Early Notification of a Nuclear Accident**, the **Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency**, the **Convention on Nuclear Safety**, the **Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management**, the **Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter** and the **Convention on Supplementary Compensation for Nuclear Damage**. The Australian Nuclear Science and Technology Organisation (ANSTO) will address these treaties as well as the **Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology** in a separate submission.

⁶ The Attorney General’s Department is in the process of reviewing existing legislation to determine what legislative action is required to implement the Nuclear Terrorism Convention. The legislation is expected to go before Parliament in 2009.

Bilateral agreements

Long-standing Australian policy is not to permit the export of uranium without the conclusion of a bilateral nuclear safeguards agreement and the recipient country must be a member of the NPT. In 2005 Australia adopted an extra condition that any non-nuclear-weapon state recipient must have an Additional Protocol with the IAEA in force, which gives the IAEA greater access and inspection rights.

In connection with exporting Australian uranium and nuclear material derived therefrom (this is referred to as Australian obligated nuclear material – AONM), Australia has bilateral safeguards agreements in force with EURATOM⁷, the Republic of Korea, the United Kingdom, Finland, the United States, Canada, Sweden, France, the Philippines, Japan, Switzerland, Egypt, Russia (1990), Mexico, New Zealand, the Czech Republic, the United States covering supply to Taiwan, Hungary, Argentina and China. The 1990 agreement with Russia covers the processing (conversion, enrichment or fuel fabrication) of AONM in Russia on behalf of other bilateral partner countries, but does not permit the use of AONM by Russia. In 2007 an agreement was signed with Russia for safeguards on the supply of uranium for use in Russia but this has not yet been ratified.

The objectives of Australia's bilateral safeguards agreements are to ensure that:

- AONM is used for exclusively peaceful purposes and does not contribute to any military purpose; and
- AONM is appropriately accounted for as it moves through the nuclear fuel cycle.

The principal provisions of Australia's bilateral agreements are:

- AONM will be used only for peaceful purposes and will not be used for any explosive or military purpose – the latter includes nuclear weapons, nuclear explosives, military propulsion systems and depleted uranium munitions, and the production of tritium for nuclear weapons;
- AONM is to be subject to the state's safeguards agreement with the IAEA;
- actions requiring Australia's prior written consent are identified:
 - transfers to third parties
 - high enrichment (20 per cent or more U-235)
 - reprocessing
- fallback safeguards are to be utilised if IAEA safeguards cease to apply in the state concerned. If necessary, this could involve safeguards procedures implemented by Australia;
- internationally agreed standards of physical security are to apply to nuclear material in the state concerned;
- detailed administrative arrangements are to be concluded between the implementing authority, the Australian Safeguards and Non-Proliferation Office (ASNO), and its

⁷ EURATOM - Atomic Energy Agency of the European Union – is responsible for the application of safeguards to all nuclear material in Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden, and to all nuclear material in non-military use in France and the UK.

counterpart, setting out the procedures to apply in accounting for, and reporting on, AONM; and

- provision for the cessation of supply and the removal of AONM in the event of a breach of the agreement.

To confirm that undertakings in the safeguards agreements are met, Australia makes use of several measures. It relies on the IAEA safeguards system which comprises an extensive set of technical measures by which the IAEA Secretariat independently verifies the correctness and the completeness of declarations made by states about their nuclear material and activities. In addition, ASNO maintains a tracking system for all AONM, based on:

- information provided by, and through consultations with, bilateral partners;
- IAEA safeguards findings, transit matching data, etc; and
- other information on and analysis of nuclear activities in each country.

Australia also has bilateral agreements with: the United States covering safeguards requirements for SILEX technology (SILEX Agreement); Singapore concerning physical protection measures for uranium ore concentrates when transhipped in Singapore; and Indonesia (Lombok Treaty) which includes provisions by which Australia and Indonesia undertake to cooperate on nuclear non-proliferation and on peaceful uses of nuclear energy.

2. How these treaties advance Australia's objectives in this field.

The Australian Government has a very strong commitment to nuclear non-proliferation and nuclear disarmament and to the ultimate objective of a nuclear weapons free world. This is reflected in the decision to establish the International Commission on Nuclear Non-proliferation and Disarmament, the aim of which is to reinvigorate the global efforts against the proliferation of nuclear weapons and strengthen the NPT. An immediate priority objective is achieving the entry into force of the Comprehensive Nuclear Test Ban Treaty (CTBT). In addition, the Government is working for the negotiation of a Fissile Material Cut-Off Treaty (FMCT) which would ban the production of fissile material for nuclear weapons. Australia is a strong proponent of and plays a constructive role in strengthening the IAEA safeguards system. Australia is also active in addressing the key proliferation challenges of Iran and the DPRK.

Multilateral Treaties

The **Treaty on the Non-proliferation of Nuclear Weapons** (NPT) is the cornerstone of international efforts to counter the spread of nuclear weapons and promote nuclear disarmament. It is the only multilateral treaty that prohibits the proliferation of nuclear weapons and by which the five nuclear-weapon states – the United States, Russia, the United Kingdom, France and China – commit to nuclear disarmament.

Prior to the NPT coming into force, it was predicted there would be some 25-30 nuclear-armed states by the 1990s. The fact that today there are eight or nine states with nuclear weapons (the five recognised nuclear-weapon states, plus India, Pakistan and the DPRK, and Israel, which neither confirms nor denies its nuclear weapon status) is testimony to the important contribution the NPT has made to global security. The NPT is premised on three equally important and mutually reinforcing pillars: non-proliferation; disarmament; and

peaceful uses of nuclear energy.

The non-proliferation pillar of the NPT is implemented primarily through the system of safeguards applied by the IAEA. Two model agreements have been developed for the application of safeguards under the NPT. The **comprehensive safeguards agreement**⁸ was introduced in 1971 and is the model for safeguards agreements between the IAEA and non-nuclear-weapon states party to the NPT. The agreement requires states to account for and control nuclear material, verified through reports to, and on-site inspections and other measures by, the IAEA. These arrangements underpin the ongoing effectiveness of the NPT:

- the risk of early detection by the IAEA of any diversion of nuclear material from peaceful use deters non-compliance and reinforces the norms of behaviour set out in the NPT;
- by constraining the misuse of declared facilities, verification increases the difficulties confronting proliferators; and
- verification provides an objective mechanism for identifying non-compliance, so that, if necessary, enforcement action can be taken through the UN Security Council.

As part of international action to strengthen the IAEA safeguards system, the 1997 model **Additional Protocol (AP)**⁹ was developed. Australia played a major role in negotiating the model Additional Protocol, and was the first state to sign and to ratify an AP. By providing for additional reporting and inspector access, the AP enhances the IAEA's ability to more accurately assess whether a state has undeclared nuclear activities, and thus to provide credible assurance about the peaceful purpose of the state's nuclear activities. This level of assurance is an important part of building the international confidence necessary to progress global nuclear non-proliferation and disarmament.

Given the importance of the AP to the IAEA safeguards regime, universalisation of the Additional Protocol is a key Australian non-proliferation policy objective. Australia considers that the combination of a comprehensive safeguards agreement and an Additional Protocol is the contemporary verification standard for NPT non-nuclear-weapon states. As of 31 December 2008, 128 states had signed an AP with the IAEA or had an AP approved by the IAEA's Board, and 89 of these are in force.

The NPT's disarmament and non-proliferation objectives are supported by treaties that constrain the development of nuclear weapons. The most significant such treaty is the **Comprehensive Nuclear-Test-Ban Treaty (CTBT)**. The CTBT would substantially raise the threshold for the development of nuclear weapons. If the CTBT were in force this could encourage nuclear-armed states to enter into negotiations on the reduction of their arsenals by providing confidence that their strategic competitors are not developing new and better nuclear weapons.

Australia ratified the CTBT on 9 July 1998 and strongly supports its entry into force. From 2005 to 2007 Australia served as coordinator of international efforts to promote this objective. Australia continues to encourage ratification of the CTBT, especially by the remaining nine Annex 2 states.

⁸ Known as (IAEA document) INFCIRC/153.

⁹ Known as (IAEA document) INFCIRC/540.

Work to establish the CTBT's verification regime began in 1997, and its International Monitoring System is now around 80% complete. Australia will host 20 monitoring stations. This will be the third largest number of stations in the CTBT's monitoring system after the US and Russia. As of 30 June 2008, 16 Australian stations were operational and certified to CTBT standards. Australian stations build on a nuclear monitoring program that Australia has had in place since the late 1980s. Australia is also chairing work to develop procedures for on-site inspections under the Treaty. If entry into force of the CTBT were in prospect, efforts to complete the verification system would need to accelerate, although the system was able to detect the October 2006 nuclear test by the DPRK. Verification of the CTBT is unlike other treaties in that states Parties have an active role in analysing events of concern.

In recognition of the important contribution **nuclear weapon-free zone (NWFZ) treaties** can make, Article VII of the NPT affirms the right of Parties to "conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories". The conclusion of nuclear weapons free zone treaties such as the **South Pacific Nuclear Free Zone (SPNFZ)** makes a substantive contribution towards nuclear non-proliferation and disarmament by banning nuclear weapons from specific areas, thereby reducing the geographic area in which weapons can be stationed or used.

Preventing the acquisition of nuclear weapons or materials by non-state actors is an important element of non-proliferation efforts. Australia actively promotes strong international standards for the security of nuclear material and facilities. Australia played a leading role in negotiating the 2005 Amendment to the **Convention on the Physical Protection of Nuclear Material**, which requires Parties to the Convention to apply thorough and systematic measures to protect their domestic nuclear activities against criminal or terrorist threat and to cooperate to locate and recover stolen or smuggled nuclear material. Australia has for some years protected nuclear material and facilities in line with the higher standards set out in the 2005 Amendment.

Bilateral safeguards treaties

Australia's **bilateral safeguards treaties** also help to reinforce nuclear non-proliferation regime. As the world's second largest exporter of uranium (after Canada), these treaties result in a significant proportion of nuclear material in international use being covered by legally-binding commitments for exclusively peaceful use. The treaties also require prior consent for retransfer to third states, high enrichment or reprocessing. The non-proliferation regime is also strengthened through Australia's requirement that recipients of Australian obligated nuclear material adhere to the Additional Protocol.

3. How the treaties might be made more comprehensive or effective.

Australia has played a major role in addressing the issues involved here, including through:

- Australia's seat on the IAEA Board of Governors;
- active diplomacy in multilateral fora, including NPT Review Conferences and the UN Conference on Disarmament, and bilaterally, including through consultation under Australia's safeguards agreements;

- technical engagement, including through participation in the IAEA's Standing Advisory Group on Safeguards Implementation (chaired by the Director General of ASNO 2001 – 2006), the Australian Safeguards Support Program, and consultancies to the IAEA.

In considering how treaties might be made more comprehensive or effective, it is necessary to bear in mind that it is rare for any treaty to allow for any party to amend that treaty by unilateral declaration. Traditionally a treaty is amended by another treaty which is binding only on those parties that sign it. There are often substantial practical and political problems in achieving wide agreement for amendments that will be legally binding on all the original parties to the treaty, particularly in the case of multilateral treaties. Efforts to strengthen multilateral treaties are usually therefore concentrated on review conferences achieving changes to the treaty that are able to be widely agreed upon at a political level, or optional legally binding protocols.

The foremost challenge to the effectiveness of the **NPT** is **treaty violations or acts of non-compliance** by State Parties. There have been five cases of non-compliance with NPT safeguards which have been reported by the IAEA Board of Governors to the Security Council – Iraq (1991), Romania (1992), DPRK (1993 and again in 2003), Libya (2004) and Iran (2006). The cases of the DPRK and Iran are ongoing. In addition, Syria is currently the subject of an IAEA investigation, following indications it has been engaged for some time in clandestine nuclear activities.

NPT Parties need to take steps to strengthen the Treaty by ensuring the IAEA has adequate verification powers and capacity to take measures to prevent countries from developing clandestine nuclear weapons programs. Securing the endorsement of NPT Parties that a **comprehensive safeguards agreement** and an **Additional Protocol** are the contemporary NPT verification standard – a position strongly promoted by Australia – would be an important step towards addressing non-compliance risks.

Preventing States Party from being able to **withdraw from the NPT** with impunity, particularly if treaty violations are uncovered, is a longstanding concern. The DPRK's announcements in 1993 and in 2003 that it had withdrawn from the NPT, and the ensuing uncertainty about its status, has served to highlight the need for NPT Parties to develop and agree on measures to deal with states that withdraw from the NPT after violating their treaty commitments. At the 2005 NPT Review Conference Australia, with New Zealand, presented a working paper on NPT withdrawal which suggested, inter alia, that any notice of withdrawal warranted immediate, automatic consideration by the United Nations Security Council and the convening of an extraordinary meeting of NPT Parties. Australia has sought to advance debate on this issue at the 2007 and 2008 NPT Review Conference Preparatory Committee meetings.

Securing the membership of those states which remain outside the **NPT** – India, Pakistan and Israel – as non-nuclear-weapon states would be a significant achievement. There is currently, however, no indication that these states would be prepared to join.

Addressing the potential **spread of sensitive nuclear technologies** (i.e. for uranium enrichment and reprocessing of spent nuclear fuel) is a pressing challenge. This necessitates finding a balance between the right recognised under Article IV of the NPT for all Parties to

enjoy the benefits of nuclear energy and the proliferation implications if the means to produce fissile material – enrichment and reprocessing – become widespread. The existing NPT Article IV text does not elaborate on the issue of sensitive nuclear technology (SNT). An international response is needed to address:

- how to reduce the availability of SNT for misuse now or in the future;
- how to ensure that states with nuclear power programs have a secure and reliable supply of fuel, so they have a viable alternative to developing national enrichment or reprocessing capabilities; and
- the development of proliferation-resistant fuel cycle technologies.

These issues are currently being discussed by the Nuclear Suppliers Group¹⁰ and other fora.

One of the principal criticisms of the NPT has been that nuclear-weapon states have not met their Article VI obligations to pursue negotiations on **nuclear disarmament** and general and complete disarmament¹¹.

The non-nuclear-weapon states can help to promote conditions conducive to nuclear disarmament, including by:

- supporting efforts to encourage the nuclear-weapon states to make clear their nuclear weapons policies and the measures they have taken to give effect to their disarmament commitments under the NPT;
- promoting NPT disarmament-related objectives such as entry-into-force of the CTBT and the negotiation of a Fissile Material Cut-off Treaty (FMCT); and
- contributing to the development of practical steps towards future nuclear disarmament steps, including movement towards the elimination of nuclear weapons.

The 2010 NPT Review Conference (2010 RevCon) will be the next principal opportunity for Australia to work with the international community to address these challenges, to reaffirm the value of the NPT and to secure the Treaty's relevance into the future. Australia's initiative in establishing, with Japan, the International Commission on Nuclear Non-Proliferation and Disarmament is expected to make a major contribution in this regard. In the NPT Review Conference process, Australia will promote the benefits of an effective NPT, advocate the value of universal application of the Additional Protocol, and promote the entry-into-force of complementary multilateral treaties conducive to nuclear disarmament, specifically the CTBT, and the negotiation of an FMCT.

Entry into force of the **Comprehensive Nuclear-Test-Ban Treaty** (CTBT) would represent an opportunity to make real progress on nuclear non-proliferation and disarmament. Once the

¹⁰ The Nuclear Suppliers Group (NSG) is a group of nuclear supplier countries which contribute to the non-proliferation of nuclear weapons through the implementation of Guidelines for nuclear exports and nuclear related exports. The NSG is not based on a treaty or any other multilateral instrument. Its decisions are not binding under international law, but represent a strong policy commitment by NSG members.

¹¹ Substantial cuts have been made by Russia and the United States to their nuclear arsenals, particularly through the START process. By 2012 the United States and Russia will have arsenals approximately one quarter and one third respectively of those held at the height of the Cold War. The United Kingdom and France have also made reductions to their nuclear arsenals.

CTBT is in force, focus will turn to ensuring compliance with it including through the International Monitoring System.

The negotiation and entry into force of a **Fissile Material Cut-Off Treaty (FMCT)** banning the production of fissile material for nuclear weapons is an immediate disarmament priority for Australia – and over the years Australia has been a leader in the development of FMCT concepts, particularly for verification approaches. An FMCT would provide a substantial confidence-building measure for all states. It would formalise the moratoria on the production of fissile material for weapons which are currently being observed by the five NPT nuclear-weapon states. Moreover, an FMCT would enable the extension of the ban on production of fissile material for nuclear weapons to states outside the NPT.

Such a treaty would advance nuclear disarmament by capping the amount of fissile material available for nuclear weapons and would reinforce the principle of irreversible disarmament. It would strengthen non-proliferation goals by tightening further the controls over fissile material, thereby reducing the risk of it being diverted to proliferators or terrorists.

An FMCT has been discussed informally in the **Conference on Disarmament (CD)**, the principal multilateral negotiating forum for disarmament treaties, over a number of years. However, there have been no negotiations on the proposed treaty because there has been no consensus in the CD for over a decade on a formal work program, including a mandate for negotiation of an FMCT.

There have been proposals by some states and civil society for the negotiation of a **Nuclear Weapons Convention** that would ban all nuclear weapons. Australia supports the exploration of possible legal frameworks for the eventual abolition of nuclear weapons, including the possibility of negotiation of a nuclear weapons convention. The negotiation of such a convention is a long-term goal.

New mechanisms will be needed to **verify** future **nuclear disarmament** steps. Australia can make a practical contribution to future disarmament steps by working with others to develop verification concepts and tools, and recently hosted a workshop with UK experts to initiate this.

The **South Pacific Nuclear Free Zone Treaty and other nuclear weapon free zone treaties** require more comprehensive commitments against nuclear weapons than the NPT. For example SPNFZ does not allow the stationing or testing of any nuclear explosive device in the territory of a State Party.

The **Convention on the Physical Protection of Nuclear Material**, as amended in 2005, provides a strong multilateral basis for securing nuclear material and facilities in most countries. Ongoing efforts will be needed to promote entry into force of the amendment. Australia is also one of the core group of countries currently negotiating updated and strengthened IAEA nuclear security standards. Once finalised, universalisation of the new standards will be an important goal.

By setting conditions for nuclear supply that build on the NPT and IAEA safeguards, Australia's network of **bilateral safeguards agreements** effectively provides a model for international best practice in the application of safeguards. This offers an opportunity for

Australia to lead efforts to improve the international safeguards regime. For example, the requirement for adherence to the IAEA's Additional Protocol as a condition of supply could encourage more states to adopt that safeguards standard. If efforts succeed to persuade other nuclear supplier countries to promote the same requirement, the impact could be considerable.

As a further example, Australia can help to limit the spread of sensitive nuclear technologies through contribution to international efforts in this regard in the IAEA and fora such as the Nuclear Suppliers Group, and through decisions on consent rights under bilateral safeguards agreements.

4. How inter-parliamentary action can assist in strengthening treaty-based aspects of the nuclear non-proliferation and disarmament regime

Parliamentary exchanges offer a unique opportunity to work with parliamentarians in other countries to inform and influence their views on key nuclear security objectives. Australian Parliamentary Delegations regularly highlight the importance of securing the entry-into-force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), the benefits of negotiation of a Fissile Material Cut-Off Treaty (FMCT), and encourage states to conclude Additional Protocols with the IAEA.

International parliamentary organisations such as the International Parliamentary Union (IPU), the Asia-Pacific Parliamentary Forum (APPF) and the Parliamentarians for Nuclear Non-proliferation and Disarmament are fora in which action in support of nuclear disarmament and non-proliferation objectives are, and should continue to be, promoted. In particular, resolutions supporting a successful 2010 Review Conference would be welcome. At the 119th meeting of the IPU in 2008, the Australian delegation presented a report and a draft resolution entitled *Advancing nuclear non-proliferation and disarmament, and securing the entry into force of the Comprehensive Nuclear-Test-Ban Treaty: The role of Parliaments*. The 120th meeting of the IPU in 2009 will debate the resolution.

Parliamentary attention will also have an important role in raising public awareness of the urgency of nuclear non-proliferation and disarmament, at a time when other issues such as climate change and the global financial crisis have taken attention away from the undiminished threat of nuclear proliferation.

5. How the Committee and the Parliament can contribute to the work of the International Commission on Nuclear Non-proliferation and Disarmament.

The Committee's findings will help inform the work of the International Commission on Nuclear Non-proliferation and Disarmament (ICNND). The Terms of Reference of the Committee's inquiry are relevant to identifying the global legal framework best able to advance nuclear non-proliferation and disarmament. Consideration of how international non-proliferation and disarmament treaties might be made more comprehensive and effective is an essential step towards achieving a nuclear weapon-free world. The timelines for the Committee mean that its report will be available well before ICNND finalises its major report in late 2009 or early 2010. It should be noted that while the Commission is funded by the Australian and Japanese governments, the Commissioners are independent. ICNND's

analysis and conclusions will therefore not necessarily reflect the views of the Australian, Japanese or any other government.

One way the Parliament could contribute to ICNND would be to use contacts with overseas parliaments to encourage support for the Commission's aim of reinvigorating global nuclear non-proliferation and disarmament efforts. Members of Parliament can increase public awareness of ICNND and its goals through inclusion of appropriate references to the Commission in debate or other activity on non-proliferation and disarmament. Parliamentary delegations to other countries and to Inter-Parliamentary Union meetings provide further opportunities to spread awareness of the Commission and its aims.

**MULTILATERAL & BILATERAL NUCLEAR NON-PROLIFERATION & DISARMAMENT
TREATIES**

Treaty Title - MULTILATERAL	Purpose	Entry into Force for Australia
Statute of the International Atomic Energy Agency	Treaty which created the IAEA.	Signed in New York on: 14 December 1956; ratified on 29 July 1957; and entered into force on 29 July 1957.
Agreement between the Governments of Australia, Argentina, Chile, the French Republic, Japan, New Zealand, Norway, the Union of South Africa, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and North Ireland and the United States of America concerning the Peaceful Uses of Antarctica. (Short title: The 'Antarctic Treaty')	Establishes Antarctica as a non-militarised zone. Prohibits nuclear explosions, the disposal of radioactive waste material and the testing of any type of weapons.	Signed in Washington on 1 December .1959; ratified on 23 June 1961; and entered into force on 23 June 1961.
Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water (Partial Test Ban Treaty)	Commits parties not to test nuclear weapons in the atmosphere, in outer space and under water.	Signed in Moscow on 8 August 1963; ratified on 12 November 1963; and entered into force on 5 October 1963.
Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty)	Prohibits the deployment of nuclear weapons in orbit, on the moon or other celestial bodies or otherwise in outer space.	Signed in Washington on 27 January 1967; ratified on 10 October 1967; and entered into force on 10 October 1967.
Treaty on the Non-Proliferation of Nuclear Weapons	Commits non-nuclear weapons states not to attempt to acquire nuclear weapons; guarantees the right to peaceful nuclear energy; and commits nuclear weapons states to pursue disarmament.	Signed in Vienna on February 1970; ratified 23 January 1973; and entered into force on 23 January 1973.
Treaty on the Prohibition on the Emplacement of Nuclear Weapons and other Weapons of Mass Destruction on the Sea Bed and the Ocean Floor and in the Sub-soil thereof (Seabed Treaty)	Parties undertake not to place nuclear weapons, WMD or any launching installations or other facilities specifically designed for storing, testing or using such weapons on the sea-bed and the ocean floor and in the subsoil thereof beyond the outer limit of a sea-bed zone. Treaty does not apply to the coastal State or to the sea-bed beneath its territorial waters.	Signed in London/ Moscow/Washington on 11 February 1971; ratified: on 23 January 1973; and entered into force on 23 January 1973.

Treaty Title - MULTILATERAL	Purpose	Entry into Force for Australia
Agreement between Australia and the International Atomic Energy Agency for the Application of Safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968	Consistent with Australia's NPT obligations, Australia accepts safeguards on all source or special fissionable material in all peaceful nuclear activities within its territory.	Signed in Vienna and entered into force on 10 July 1974.
Agreement Governing the Activities of States on the Moon and other Celestial Bodies (Moon Treaty)	Prohibits the deployment of nuclear weapons on the moon and other celestial bodies.	Acceded to on 7 July 1986; and entered into force for Australia on 6 August 1986.
South Pacific Nuclear Free Zone Treaty (Treaty of Raratonga)	Establishes an NFZ in the South Pacific.	Signed in Raratonga on 6 August 1985; ratified and entered into force for Australia on 11 December 1986.
Convention on the Physical Protection of Nuclear Material	Parties commit to provide physical protection to nuclear material in international transport, and to criminalise various activities in relation to unauthorised dealings with nuclear material.	Signed in Geneva on 22 February 1984; ratified on 22 September 1987; and entered into force for Australia on 22 October 1987.
Protocol Additional to the Agreement [of 10 July 1974] between Australia and the International Atomic Energy Agency for the Application of Safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968	Enhances the IAEA's ability to provide assurances about the peaceful nature of a state's nuclear activities.	Signed in Vienna on 23 September 1997; and entered into force on 12 December 1997.
Comprehensive Nuclear Test Ban Treaty	Prohibits any nuclear explosion, and causing, encouraging or participating in the conduct of a nuclear explosion.	Signed in New York on 24 September 1996; ratified on 9 July 1998; but Treaty not yet in force generally.
Amendments to the Convention on the Physical Protection of Nuclear Material	Extends physical protection obligations to material in domestic use, storage or transport, and to nuclear facilities.	Adopted at Vienna on 8 July 2005; ratified on 17 July 2008; but, not yet in force generally.

Treaty Title - MULTILATERAL	Purpose	Entry into Force for Australia
International Convention for the Suppression of Acts of Nuclear Terrorism	Parties must establish criminal offences with appropriate penalties in relation to a number of offences relating to nuclear terrorism.	Signed in New York on 14 September 2005; Convention has not yet been ratified by Australia; but, entered into force generally on 7 July 2007.

Treaty Title – MULTILATERAL AGREEMENTS RELATING TO SAFETY	Purpose	Entry into Force for Australia
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	The convention prohibits the dumping or deliberate disposal of hazardous waste and seeks to control marine pollution.	Signed in London, Mexico City, Moscow and Washington on 10 October 1973; ratified on 21 August 1985; and entered into force for Australia on 20 September 1985.
Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA)	Facilitates technical and political cooperation in the peaceful applications of nuclear science and technology among the 17 regional member countries.	Accepted and entered into force for Australia on 11 June 1987; a fourth extension Agreement, which will extend the RCA until 11 June 2012, is currently awaiting Executive Council approval.
Convention on the Early Notification of a Nuclear Accident	Establishes an international notification scheme for reporting nuclear accidents that may have trans-boundary consequences.	Signed in Vienna on 26 September 1986; ratified on 22 August 1987; and entered into force for Australia on 23 Oct.1987.
Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency	Establishes an international scheme for the provision of assistance and support in the case of a nuclear or radiological accident.	Signed Vienna on 26 Sept. 1986; ratified on 22 Sept. 1987; and entered into force for Australia on 23 Oct.1987.
Convention on Nuclear Safety	Covers the construction, design, operation and safety of nuclear power plants. The convention creates a peer review mechanism.	Signed in Vienna on 20 Sept.1994; ratified 24 Dec. 1996; and entered into force for Australia on 24 March 1997.

Treaty Title – MULTILATERAL AGREEMENTS RELATING TO SAFETY	Purpose	Entry into Force for Australia
Convention on Supplementary Compensation for Nuclear Damage	Creates a worldwide liability regime to supplement and enhance the Vienna and Paris Conventions on civil liability for nuclear damage, thereby ensuring the availability of compensation for victims of a nuclear accident.	Signed in Vienna on 1 October 1997. This Convention has not yet been ratified by Australia; and it is not yet in force generally.
Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management	Covers the construction, design, operation and safety of facilities for the management of spent fuel and of radioactive waste. The convention creates a peer review mechanism.	Signed: in Vienna on 13 Nov. 1998; ratified on 5 August 2003; entered into force for Australia on 3 November 2003.

Treaty Title - BILATERAL NUCLEAR AGREEMENTS	Purpose - All Australian uranium is exported for exclusively peaceful purposes, and only to countries and parties with which Australia has a bilateral Safeguards Agreement.	Entry into Force for Australia
Agreement between the Government of Australia and the Government of the Republic of Korea concerning Cooperation in Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material		Signed in Canberra and entered into force on 2 May 1979.
Agreement between the Government of Australia and the Government of the United Kingdom of Great Britain and Northern Ireland concerning Nuclear Transfers between Australia and the United Kingdom		Signed in London and entered into force on 24 July 1979.
Agreement between the Government of Australia and the Government of the Republic of Finland concerning the Transfer of Nuclear Material between Australia and Finland		Signed in Helsinki on 20 July 1978; and entered into force on 9 February 1980.
An exchange of notes constituting an Agreement between Australia and the United States of America concerning Peaceful Uses of Nuclear Energy, and Agreed Minute		Notes and agreed minute exchanged in Washington on 5 July 1979; and entered into force on 16 January 1981.

Treaty Title - BILATERAL NUCLEAR AGREEMENTS	Purpose - All Australian uranium is exported for exclusively peaceful purposes, and only to countries and parties with which Australia has a bilateral Safeguards Agreement.	Entry into Force for Australia
Agreement between the Government of Australia and the Government of Canada concerning the Peaceful Uses of Nuclear Energy		Signed in Ottawa and entered into force on 9 March 1981.
Agreement on Conditions and Controls for Nuclear Transfers for Peaceful Purposes between Australia and Sweden, and Exchange of Letters		Signed in Canberra on 18 March 1981; and entered into force on 22 May 1981.
Agreement concerning Nuclear Transfers between Australia and France, and Exchange of Letters		Signed in Paris on 7 January 1981; and entered into force on 12 September 1981.
Agreement with the European Atomic Energy Community (EURATOM) concerning Transfers of Nuclear Material from Australia to EURATOM, and two exchanges of Letters		Signed in Brussels on 21 September 1981; and entered into force on 15 January 1982.
Agreement between the Government of Australia and the Government of the Republic of the Philippines concerning Co-operation in Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material		Signed in Manila on 8 August 1978; and entered into force on 11 May 1982.
Agreement between the Government of Australia and the Government of Japan for Cooperation in the Peaceful Uses of Nuclear Energy, and three Exchanges of Notes		Signed in Canberra on 5 March 1982; and entered into force on 17 August 1982.
Agreement between Australia and Switzerland concerning the Peaceful Uses of Nuclear Energy, and two exchanges of Letters		Signed in Berne on 28 January 1986; and entered into force on 27 July 1988.
Agreement concerning Cooperation in the Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material between Australia and the Arab Republic of Egypt		Signed in Cairo on 18 February 1988; and entered into force on 2 June 1989.

Treaty Title - BILATERAL NUCLEAR AGREEMENTS	Purpose - All Australian uranium is exported for exclusively peaceful purposes, and only to countries and parties with which Australia has a bilateral Safeguards Agreement.	Entry into Force for Australia
Agreement between the Government of Australia and the Government of the Union of Soviet Socialist Republics concerning the Peaceful Uses of Nuclear Energy	Applies to transfers of Australian nuclear material to the USSR either directly or through a third party. The Agreement covers the processing (conversion, enrichment or fuel fabrication) of Australian obligated nuclear material (AONM) in Russia on behalf of other partner countries, but does not permit the use of AONM by Russia.	Signed in Canberra on 15 February 1990; and entered into force on 24 December 1990.
Agreement between the Government of Australia and the Government of the United Mexican States concerning Cooperation in Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material		Signed in Canberra on 28 February 1992; and entered into force on 17 July 1992.
Agreement between the Government of Australia and the Government of New Zealand concerning the Transfer of Uranium		Signed in Canberra on 14 September 1999; and entered into force on 1 May 2000.
Agreement for Cooperation between the Government of Australia and the Government of the United States of America concerning Technology for the Separation of Isotopes of Uranium by Laser Excitation (SILEX Agreement), Agreed Minute and Exchange of Notes	Applies to cooperation in research on and development and utilization of SILEX nuclear technology for peaceful purposes.	Signed in Washington on 28 October 1999; and entered into force on 24 May 2000.
Agreement between the Government of Australia and the Government of the Czech Republic concerning Cooperation in the Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material		Signed in Prague on 27 July 2001; and entered into force on 17 May 2002.
Exchange of Notes Constituting an Agreement between Australia and the United States of America Concerning Cooperation on the Application of Non Proliferation Assurances on Retransfer to Taiwan	The Agreement facilitates the retransfer of Australian uranium to Taiwan for use in the generation of electricity via transfers to the United States.	Signed in Washington on 31 July 2001; and entered into force on 17 May 2002.

Treaty Title - BILATERAL NUCLEAR AGREEMENTS	Purpose - All Australian uranium is exported for exclusively peaceful purposes, and only to countries and parties with which Australia has a bilateral Safeguards Agreement.	Entry into Force for Australia
Agreement Between the Government of Australia and the Government of the Republic of Hungary on Cooperation in Peaceful Uses of Nuclear energy and the Transfer of Nuclear Material		Signed in Budapest on 8 August 2001; and entered into force on 15 June 2002.
Agreement with the Argentine Republic concerning cooperation in the peaceful uses of nuclear energy		Signed in Canberra on 8 August 2001; and entered into force on 12 January 2005.
Agreement with the People's Republic of China on the transfer of Nuclear Material		Signed in Canberra on 3 April 2006; and entered into force on 3 February 2007.
Agreement with the People's Republic of China for Cooperation in the peaceful uses of Nuclear Energy		Signed in Canberra on 3 April 2006; and entered into force on 3 February 2007.
Agreement with the Russian Federation on Cooperation in the Use of Nuclear Energy for Peaceful Purposes	All Australian uranium is exported for exclusively peaceful purposes, and only to countries and parties with which Australia has a bilateral safeguards Agreement.	Signed in Sydney on 7 September 2007; but Agreement has not yet entered into force.

Treaty Title - OTHER RELEVANT AGREEMENTS	Purpose	Entry into Force for Australia
Exchange of Notes between Australia and Singapore constituting an Agreement concerning Cooperation in the Physical Protection of Nuclear Material	The agreement provides for application of physical protection measures to uranium ore concentrates when transhipped in Singapore.	Signed in Singapore and entered into force on 15 December 1989.
Agreement between Australia and the Republic of Indonesia on the Framework for Security Cooperation (Lombok Treaty)	The agreement includes provisions by which the parties undertake to cooperate on nuclear non-proliferation and on peaceful uses of nuclear energy.	Signed in Mataram, Lombok on 13 November 2006; and entered into force on 7 February 2008.