Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons

Report submitted by Canada

Introduction

1. Step 12 of the 13 practical steps agreed to by all Governments at the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons calls for regular reports, within the framework of the strengthened review process for the Non-Proliferation Treaty, by all States parties on the implementation of article VI and paragraph 4 (c) of the 1995 Decision on Principles and Objectives for Nuclear Non-Proliferation and Disarmament (NPT/CONF.1995/32/DEC.2), and recalls the advisory opinion of the International Court of Justice of 8 July 1996. This call was reiterated in action 20 of the 2010 Review Conference action plan (NPT/CONF.2010/50 (Vol. I)). In line with this commitment, and with a view to enhancing transparency and building confidence, Canada submits the present report on the implementation of the Treaty on an article-by-article basis, on the 13 practical steps and on the 2010 action plan. Such comprehensive reporting is not intended to expand the scope of the commitments made, but is a reflection of the linkages that exist among the articles of the Treaty, the 13 practical steps and the 2010 action plan. Canada calls on all other States parties to submit such comprehensive reports at Treaty meetings. We regret that so few States parties have fulfilled their commitments in this regard.

Article-by-article review, including the 13 practical steps

Article I

2. Canada continues to call upon nuclear-weapon States not to assist, encourage or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices. Nuclear proliferation continues to pose a threat to the world. Canada maintains that members of the United Nations must work together to ensure that Security Council resolutions are fully
implemented and that States work together to halt activities that have no reasonable purpose other than the further acquisition of nuclear weapons. Canada welcomed the unanimous adoption of Security Council resolution 1887 (2009). Canada has implemented resolution 1540 (2004), which aims to prevent the proliferation of weapons of mass destruction by non-State actors. We welcomed resolution 1977 (2011), by which the Council extended the mandate of the 1540 Committee until 2021.

3. Canada is a member of the Group of Eight-led 24-member Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, an initiative launched at the 2002 Summit of the Group of Eight. In 2002, Canada pledged C$ 1 billion over 10 years to the Global Partnership as a part of the overall US$ 20 billion commitment by leaders of the Group of Eight to address the threat posed by the proliferation of weapons and materials of mass destruction as well as related knowledge. To date, Canada has spent more than C$ 820 million through its Global Partnership Programme through concrete projects that support the non-proliferation, counter-terrorism and disarmament objectives of the Treaty, including more than C$ 430 million in nuclear security. At the Nuclear Security Summit held in Seoul in 2012, the Prime Minister of Canada announced that Canada was renewing its Global Partnership Programme from 2013 to 2018. Through its Programme, Canada has provided more than C$ 61 million towards critical security upgrades at 10 nuclear facilities in the Russian Federation, and is also developing joint nuclear security projects with the United States of America in third countries beyond the former Soviet Union. It has also funded multiple projects to secure highly radioactive sources. Canada is the third largest State donor to the International Atomic Energy Agency (IAEA) Nuclear Security Fund, established to strengthen nuclear and radiological security worldwide. In March 2012, the Prime Minister of Canada announced that Canada would voluntarily contribute a further C$ 5 million to the Fund in order to complement the nuclear security improvements made previously. In cooperation with the United States Department of Energy, Canada is working to enhance the security of vulnerable radioactive sources, many of which are of Canadian origin, at sites in the Americas and Africa. Canada has fully dismantled 13 decommissioned nuclear submarines and de-fuelled 30 reactors in north-west Russian Federation. In far eastern Russian Federation, Canada started projects for the safe return of spent nuclear fuel from the region and has de-fuelled four reactors. As a member of the International Science and Technology Centre in Moscow and the Science and Technology Centre in Ukraine, Canada has funded over 180 individual research projects engaging over 2,600 former weapons scientists in civilian employment through various research projects and other programmes and activities, including in the area of nuclear and radiological security.

4. Canada is an active participant in the Proliferation Security Initiative, which seeks to enhance, in a manner consistent with national legal authorities and international law, practical cooperation on the interdiction of, inter alia, nuclear weapons material and technology flowing illegally to and from States and non-State actors. Canada is also an initial partner nation of the Global Initiative to Combat Nuclear Terrorism, a member of the Nuclear Suppliers Group and an active participant in the G8 Non-Proliferation Directors Group. To contribute to ongoing activities and exercises of the Global Initiative, Canada will host a table-top exercise demonstrating emergency management capabilities in Toronto, Canada, in May 2012.
5. In September 2010, Canada joined the Non-Proliferation and Disarmament Initiative, a cross-regional group of 10 non-nuclear-weapon States parties to the Treaty that works to promote and support the implementation of the commitments made by all States parties, particularly the 2010 action plan, and advocate for further progress through practical contributions and proposals. The group has held ministerial-level meetings in New York in September 2010 and September 2011 and in Berlin in April 2011. In accordance with the Initiative’s Berlin Statement of 30 April 2011, the group’s priorities include (a) advancing negotiations for a fissile material cut-off treaty; (b) promoting entry into force of the Comprehensive Nuclear-Test-Ban Treaty; (c) increasing the level of transparency with regard to the nuclear stockpiles of the nuclear-weapon States; and (d) promoting the universality of an additional protocol with IAEA.

Article II

6. Canada continues to abide by its Treaty commitment not to receive the transfer of, receive control over, manufacture or acquire nuclear weapons or other nuclear explosive devices. This commitment is implemented domestically primarily through the Nuclear Safety and Control Act of 2000 and the Export and Import Permits Act of 1985.

7. Canada calls on other non-nuclear-weapon States not to receive the transfer of, receive control over, manufacture, acquire or seek to receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices or their delivery vehicles. In this context, Canada condemned the failed ballistic missile test by the Democratic People’s Republic of Korea on 13 April 2012 in violation of Security Council resolutions. Canada also condemned the nuclear test by the Democratic People’s Republic of Korea of 25 May 2009 and urges the Democratic People’s Republic of Korea to refrain from further tests or other provocative actions that run contrary to its stated desire to engage constructively with the community of nations. Canada calls upon the Democratic People’s Republic of Korea to immediately resume cooperation with IAEA inspectors, to comply fully with all of its obligations under resolutions 1718 (2006) and 1874 (2009), and to fulfil all commitments it made as part of previous six-party agreements, including abandoning all its nuclear weapons and existing nuclear and ballistic missile programmes and immediately ceasing all related activities. We support the six-party talks, which remain the best means to achieve a permanent, peaceful resolution of the Korean Peninsula’s long-standing security issues and encourage efforts towards the early resumption of this process.

8. On 10 February, 2010, the Prime Minister of Canada called on the Islamic Republic of Iran to end its defiance of the international community, suspend its enrichment activity and take immediate steps towards transparency and compliance by halting the construction of new enrichment sites and fully cooperating with IAEA. The serious concerns of Canada about the possible military dimensions of the nuclear programme of the Islamic Republic of Iran were reinforced by the November 2011 report of IAEA, in which the Agency noted that the Islamic Republic of Iran “has carried out activities relevant to the development of a nuclear explosive device”, including “efforts to develop undeclared pathways for the production of nuclear material”, the “acquisition of nuclear weapons development information” and “indigenous design”. This assessment, based on credible
information from a wide variety of sources, appears to show that the Islamic Republic of Iran has violated its commitments under article II. Canada continues to urge the Islamic Republic of Iran to comply with the international obligations set out by the Security Council and to engage seriously and without preconditions in efforts aimed at restoring international confidence in the exclusively peaceful nature of its nuclear programme including primarily by immediately and fully cooperating with IAEA to address serious concerns about the military dimensions of its nuclear programme and fully implementing the additional protocol to its comprehensive safeguards agreement. Canada has fully implemented in Canadian law the requirements of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1929 (2010) by imposing rigorous sanctions on the Islamic Republic of Iran.

9. Canada fully supported the resolution of the IAEA Board of Governors requesting the IAEA Director General to report to the Security Council the assessment that an undeclared nuclear reactor existed at Dair Alzour, Syrian Arab Republic, in breach of its safeguards obligations. Canada continues to call on the Syrian Arab Republic to urgently remedy its non-compliance and to meet its own commitment to “fully cooperate with the Agency to resolve related outstanding issues”, so that the Agency can provide the necessary assurances as to the exclusively peaceful nature of the Syrian Arab Republic’s nuclear programme. Canada also continues to urge the Syrian Arab Republic to bring into force an additional protocol as soon as possible.

10. Canada’s national export control system is consistent with the lists of those multilateral nuclear export control mechanisms in which it participates, and operates in a transparent manner. These measures serve to facilitate peaceful nuclear commerce and international cooperation while ensuring that non-proliferation policies are met. As part of our commitment to continuous improvement, Canada hosted a mission of the IAEA International Regulatory Review Service in June 2009 and follow up missions in June 2011 and December 2011. The international peer review team found that 30 of the 32 recommendations from the initial 2009 mission had been implemented and affirmed that Canada has a mature and well-established nuclear regulatory framework. Canada continues to cooperate actively with other like-minded States in a variety of international forums to develop new measures aimed at further strengthening the non-proliferation regime, particularly with regard to the transfer of enrichment and reprocessing technologies associated with the production of special fissionable material suitable for nuclear weapons purposes, and the suspension of nuclear cooperation in cases of non-compliance with nuclear non-proliferation commitments.

Article III

11. Pursuant to article III, Canada has in place a comprehensive safeguards agreement and an additional protocol to the agreement with IAEA. Canada is of the view that such an agreement, together with an additional protocol, constitutes the safeguards standard required under article III. With this safeguards standard in place, IAEA is in a position to draw an annual conclusion regarding the non-diversion of declared nuclear material from peaceful nuclear activities and the absence of undeclared nuclear material and activities in Canada. This broader conclusion, first achieved in 2005 and subsequently maintained on an annual basis, provides the highest level of confidence that Canada is in compliance with its commitments under
the Treaty. Furthermore, the attainment and maintenance of the broader conclusion has allowed IAEA to fundamentally change the way safeguards are undertaken in Canada, by implementing a State-level integrated safeguards approach. These developments are a direct result of Canada’s strong support for the IAEA safeguards system and of the high level of cooperation between IAEA and Canada in the implementation of its comprehensive safeguards agreement and additional protocol. At IAEA and at the United Nations General Assembly, Canada continues to urge States that have yet to bring into force such an agreement and additional protocol to do so as soon as possible. Canada supports the outreach efforts of the G8 and the Non-Proliferation and Disarmament Initiative to make the additional protocol universal. In addition, through the Canadian Safeguards Support Programme, Canada contributes to the research, development and support of safeguards equipment and techniques aimed at strengthening the effectiveness and efficiency of IAEA safeguards. This effort resulted in a contribution of approximately C$ 1 million over the 2010/11 fiscal year. Canada also provided a voluntary, extrabudgetary contribution of C$ 1 million towards the IAEA enhancing capabilities of the safeguards analytical services project to help ensure that the Agency has the necessary facilities and equipment with which to undertake accurate and timely scientific analyses of countries’ nuclear safeguards compliance.

12. Consistent with its obligation not to provide source or special fissionable material, or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to any non-nuclear-weapon State for peaceful purposes unless the source or special fissionable material is subject to IAEA safeguards, and with decision 2, paragraph 12, of the 1995 Treaty Review and Extension Conference, with only one exception, Canada will only authorize nuclear cooperation involving proliferation-significant items with those non-nuclear-weapon States that have made an internationally legally binding commitment not to acquire nuclear weapons or other nuclear explosive devices, and have accepted IAEA safeguards on the full scope of their nuclear activities. All of Canada’s nuclear partners, through a bilateral nuclear cooperation agreement with Canada, have accepted a number of additional measures designed to ensure that nuclear items supplied by Canada do not contribute to the proliferation of nuclear weapons. Canada maintains a national system for controlling the export of all items especially designed or prepared for nuclear use and certain nuclear-related dual-use items, including, with respect to the specific requirements of article III, paragraph 2, of the Treaty, source or special fissionable material and equipment or material especially designed or prepared for the processing, use or production of special fissionable material. It ensures that exports of nuclear and nuclear dual-use items are not authorized where there is found to be an unacceptable risk of diversion to a weapons of mass destruction programme or a non-safeguarded facility, or when an export would be otherwise contrary to Canada’s non-proliferation policy and international commitments and obligations. Canada’s export control legislation includes a catch-all provision.

13. Canada is the 2012 Chair of the Zangger Committee, a group of 38 States that maintains a list of nuclear-related strategic goods on which IAEA safeguards are applied.
Article IV

14. Canada strongly supports the peaceful uses of nuclear energy. Canada pioneered a pressurized heavy water reactor system, the CANDU nuclear power reactor, that has been successfully exported to four other States parties. Canada maintains a robust domestic nuclear power programme and has a broad and diverse nuclear industry including uranium, radioisotopes for medical, academic and industrial purposes, and nuclear reactor services. Canada believes that nuclear energy can make an important contribution to prosperity and sustainable development, while also addressing concerns about climate change. To this end, Canada has 27 nuclear cooperation agreements in force covering 44 States parties to the Treaty, both developed and developing, to provide a framework for the fullest possible exchange of nuclear and other material, equipment and technology. Since the 2010 Review Conference, Canada has held four official bilateral consultations with partner States of its nuclear cooperation agreements as well as formal administrative arrangement consultations with five nuclear cooperation agreement partner country authorities. Canada has been a strong supporter of the IAEA Technical Cooperation Programme and has often met or exceeded the rate of attainment for voluntary contributions to the IAEA Technical Cooperation Fund. Canada has also actively supported efforts to strengthen the Technical Cooperation Programme to make it more transparent and accountable in a results-based framework. In April 2012, Canada passed legislation to amend its Criminal Code to improve its approach to prosecute those who commit acts of nuclear terrorism. These amendments will facilitate Canada’s process to ratify the International Convention for the Suppression of Acts of Nuclear Terrorism and the 2005 Amendment to the Convention on the Physical Protection of Nuclear Materials.

15. Canada is active in all aspects of the work of IAEA. Canada drafts and sponsors annual resolutions on nuclear power for the IAEA General Conference; Canada also co-sponsors resolutions regarding various non-power nuclear applications. Canadian experts participate in the drafting of IAEA technical documents, act as lecturers for IAEA technical cooperation projects and other training courses, serve as peer-review team members, provide guidance and advice to countries embarking on nuclear power programmes and host IAEA technical cooperation fellows at Canadian nuclear institutions. Canada also participates in the IAEA International Project on Innovative Nuclear Reactor and Fuel Cycles. Canada is the seventh highest contributor to the IAEA regular budget, pays its assessed contribution in full and on time, and makes extrabudgetary contributions to the IAEA nuclear safety, security, safeguards, energy and technical cooperation programmes.

16. In view of the inherent relationship between inalienable rights of States to the peaceful uses of nuclear energy and the obligations contained elsewhere in the Treaty, cooperation by Canada with other countries in the peaceful uses of nuclear energy takes fully into account the non-proliferation credentials of the recipient country. Canada is committed to working with other States and relevant international organizations on new arrangements for the supply of nuclear items, consistent with the balance of rights and obligations agreed to in the Treaty and in particular in articles II, III and IV.

17. Canada continues to be involved in and support efforts to assist the harmonized implementation of the IAEA Code of Conduct on the Safety and
Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources. Canada has on four occasions provided extrabudgetary funding to IAEA to support its Code and Guidance technical meetings to facilitate the participation of delegates from developing countries. Canada continues to assist the harmonized implementation of the Guidance through the establishment of bilateral administrative arrangements on the import and export of radioactive sources with its foreign regulatory counterparts. Canada has established 11 such arrangements. IAEA has recognized this initiative as a best practice and encourages other States to follow Canada’s lead. As one of the world’s leading suppliers and exporters of radioactive sources, Canada has a strong interest in the establishment and maintenance of an effective, efficient and harmonized international regime for ensuring their safety and security, including measures to prevent their use in malicious or terrorist acts. Canada encourages all States to implement the provisions of the Code and Guidance in a harmonized manner to assist in providing assurances that radioactive sources are used and maintained within an appropriate regulatory framework of radiation safety and security.

Article V

18. The Final Document of the 2000 Review Conference affirmed that the provisions of article V are to be interpreted in the light of the Comprehensive Nuclear-Test-Ban Treaty. Canada signed the Treaty in September 1996 and ratified it in December 1998. In October 1998, Canada was the first State signatory of the Treaty to sign a facility agreement with the Preparatory Commission of the Comprehensive Nuclear-Test-Ban Treaty Organization to establish the legal basis for activities to construct the monitoring stations to be hosted in Canada. Canada has played an active role in encouraging further signatures and ratification of the Treaty with a view to achieving its universality. In September 2010, Canada co-hosted a “Friends of the Comprehensive Nuclear-Test-Ban Treaty” ministerial meeting in New York on the margins of the General Assembly high-level meetings. The ministerial meeting produced a joint statement reiterating support for the Treaty and its entry into force that was endorsed by 62 States. In September 2011, Canada joined the consensus among ratifying States of the Comprehensive Nuclear-Test-Ban Treaty in support of the Final Declaration of the article XIV Conference to Promote the Entry into Force of the Treaty.

19. Canada co-sponsored General Assembly resolution 66/44 on the treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices. In the resolution, the Assembly called for the earliest possible entry into force of the treaty and urged the maintenance of unilateral moratoriums on nuclear weapons test explosions until the entry into force is achieved. At the March 2010 Nuclear Security Summit in Washington D.C., the Prime Minister of Canada stated that Canada would, through the Global Partnership Programme, develop new training projects directed at select States to robustly implement existing nuclear security instruments, including nuclear non-proliferation and disarmament frameworks such as the Comprehensive Nuclear-Test-Ban Treaty. Canada places a priority on the establishment of the Treaty’s verification system and, as such, is a leader among State signatories in contributing resources and expertise to the development of the Treaty’s International Monitoring System. Canada hosts 16 stations and laboratories of the System. All facilities hosted by Canada were
completed and certified by the Comprehensive Nuclear-Test-Ban Treaty Organization as at November 2009.

**Article VI**

20. Canada continues to take seriously the obligation of article VI and the commitments agreed upon in the 1995 Decision on “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”, in the 13 practical steps and in the 2010 action plan. These have been at the forefront of a number of activities and statements.

**Steps 1 and 2**

21. Canada’s action in support of the Comprehensive Nuclear-Test-Ban Treaty and the moratorium on nuclear testing is described above under the implementation of article V.

**Steps 3 and 4**

22. Canada supported decision CD/1864 that was adopted by consensus by the Conference on Disarmament in May 2009. Canada’s priority at the Conference is the start of negotiations on a verifiable fissile material cut-off treaty. At the sixty-sixth session of the General Assembly, Canada sponsored resolution 66/44, in which, inter alia, the Assembly called for the Conference to begin negotiations on a fissile material cut-off treaty early in its 2012 session. It also resolved to consider options for negotiating such a treaty should the Conference fail to agree on and implement a programme of work by the end of its 2012 session. Canada supported decision CD/1933, which was tabled by the Egyptian President of the Conference on 8 March 2012. Canada regrets that the adoption of the draft programme of work contained in CD/1933 was blocked by one member of the Conference.

**Step 5**

23. Canada emphasizes the importance of transparency, irreversibility and verifiability in the reduction and eventual elimination of nuclear weapons arsenals and facilities. At the sixty-sixth session of the General Assembly, Canada co-sponsored resolution 66/45 on united action towards the total elimination of nuclear weapons.

**Step 6**

24. Canada voted in favour of General Assembly resolutions 66/40 on measures towards a nuclear-weapon-free world and accelerating the implementation of nuclear disarmament commitments, and 66/45.

25. As a member of the North Atlantic Treaty Organization (NATO), Canada continues to advocate for NATO to play a positive role in advancing disarmament objectives through a continuous step-by-step approach in a manner that increases international peace and stability. The 2010 Strategic Concept of NATO clearly stated its commitment “to seek a safer world for all and to create the conditions for a world without nuclear weapons in accordance with the goals of the Nuclear
Non-Proliferation Treaty, in a way that promotes international stability and is based on the principle of undiminished security for all”.

**Step 7**

26. Canada welcomed the entry into force of the new Strategic Arms Reduction Treaty between the United States and the Russian Federation on 5 February 2011 and the unilateral steps taken by France and the United Kingdom of Great Britain and Northern Ireland with respect to their nuclear arsenals. We also welcomed the convening of a follow-up meeting to the 2010 Review Conference by the nuclear-weapon States parties, which took place in Paris on 30 June and 1 July 2011, and the ongoing experts meetings, such as the one on disarmament verification research that took place in London on 4 April 2012.

**Step 8**

27. Canada has encouraged the Russian Federation and the United States to implement a trilateral initiative by placing surplus stocks of fissile material under IAEA control.

**Step 9**

28. As noted previously, Canada voted in favour of General Assembly resolution 66/40. Canada also supports measures to reduce the operational readiness of nuclear weapons systems in ways that promote international stability and security, as called for in resolution 66/45.

**Step 10**

29. Through the Global Partnership Programme, Canada is contributing to the elimination and disposal of fissile material, ensuring that it cannot be acquired by terrorists or countries of proliferation concern. Canada has also pledged funds towards the Russian Federation’s plutonium disposal programme, which will convert 34 tons of weapons-grade plutonium into forms not usable for weapons. In addition, Canada contributed to a United States-led project to shut down the last weapons-grade plutonium producing reactor of the Russian Federation in Zheleznogorsk. Canada strongly supports the Nuclear Security Summit and welcomes the goal of securing all vulnerable nuclear materials around the world. At the 2010 Nuclear Security Summit, the Prime Minister of Canada announced that Canada would contribute C$ 5 million and C$ 3 million respectively to United States-led nuclear security projects in Mexico and Viet Nam. These projects involved the conversion of nuclear reactors and the complete removal of highly enriched uranium from these countries. The Mexico project was completed in March 2012 and the Viet Nam project is expected to be completed in 2013. Through its renewed Global Partnership Programme, Canada will continue to work to develop nuclear security projects around the world.

**Step 11**

30. Canada is party to various conventions, including the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction; the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical
Weapons and on their Destruction; the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on their Destruction; the Treaty on Conventional Armed Forces in Europe; the Treaty on Open Skies; the Convention on Certain Conventional Weapons; and the Outer Space Treaty. Canada continues its support to mine action in Asia, Africa, the Middle East, Europe and South America. Canada has signed the Convention on Cluster Munitions and is working on its ratification.

Step 12

31. Canada continues to encourage States to submit information about their efforts and activities to implement the Treaty as official reports prior to Preparatory Committee meetings and Review Conferences.

Step 13

32. At the sixty-fourth session of the General Assembly, Canada sponsored decision 64/512 entitled “Verification in all its aspects, including the role of the United Nations in the field of verification”, which was adopted without a vote.

Article VII

33. Canada continues to underline the need to preserve and respect the negative security assurances provided by nuclear-weapon States to non-nuclear-weapon States parties to the Treaty through Security Council resolution 984 (1995) and, as applicable, their respective nuclear postures. Canada is not a member of a nuclear-weapon-free zone.

Article VIII

34. The indefinite extension of the Treaty and accompanying decisions adopted in 1995 enshrined the concept of permanence with accountability. In accordance with the commitments arising from the Final Document of the 2000 Review Conference, Canada delivered at the 2010 Review Conference its fifth report on its implementation of the Treaty, which was preceded by reports at the 2007, 2008 and 2009 Preparatory Committees. Canada also reported at the 2012 Preparatory Committee and the 2010 Review Conference on the steps it has taken to promote the achievement of a nuclear-weapon-free zone in the Middle East and the realization of the goals and objectives of the 1995 Resolution on the Middle East.

35. Canada has been active in promoting measures to reinforce the authority and integrity of the Treaty and ensure the implementation of its obligations. At the 2010 Review Conference, Canada co-submitted a working paper (NPT/CONF.2010/WP.4) with recommendations for reforming the institutional structure of the Treaty, including annual meetings and the possibility for extraordinary meetings as required, greater continuity between review cycles and the creation of an implementation support unit. These proposals were not included as action items in the Final Document of the 2010 Review Conference. Canada continues to support efforts to make the institutional structure of the Treaty more responsible, flexible and accountable.
Article IX

36. Canada has consistently worked to make the Treaty universal. At the sixty-sixth session of the General Assembly, Canada co-sponsored resolution 66/45, in which the Assembly reaffirmed the importance of the universality of the Treaty and called upon States not party to the Treaty to accede to it as non-nuclear-weapon States without delay and without conditions. Canada views its position in this regard as consistent with Security Council resolutions 1540 (2004), 1673 (2006) and 1810 (2008) on the non-proliferation of weapons of mass destruction, in which the Council calls on all States to promote the universal adoption and full implementation of multilateral treaties, the aims of which are to prevent the proliferation of nuclear, biological and chemical weapons.

Article X

37. Canada has continued to coordinate a core group of countries at the IAEA General Conference responsible for a resolution on the Democratic People’s Republic of Korea. Every year since 2006, the Canadian-led core group has facilitated the adoption of a resolution to promote the resumption of that country’s obligations under the Treaty, including the implementation of its comprehensive safeguards agreement.

38. Canada welcomed the indefinite extension of the Treaty, adopted without a vote in 1995. Negative security assurances provided in 1995 by the five nuclear-weapon States parties to the Treaty in Security Council resolution 984 (1995) furnished part of the basis for this indefinite extension, as well as paragraph 8 of the 1995 Decision on “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”.

Article XI

39. The present report is available in Canada’s official languages, English and French, which comprise two of the five languages in which the Treaty text was produced.
Report on the Implementation of the 2010 action plan

**Action 1.** Through its international security policy, Canada continues to promote the non-proliferation, reduction and eventual elimination of nuclear weapons.

**Action 2.** Canada continues to promote the principles of irreversibility, verifiability and transparency in the implementation of Treaty obligations.

**Action 3.** Not applicable, since this is a commitment for nuclear-weapon States.

**Action 4.** Canada welcomed the entry into force of the new Strategic Arms Reduction Treaty between the United States and the Russian Federation on 5 February 2011.

**Action 5.** As a member of the Non-Proliferation and Disarmament Initiative, Canada endorsed the group’s draft standard reporting form to promote greater transparency with regard to the nuclear stockpiles of the nuclear-weapon States parties to the Treaty.

**Action 6.** Canada continues to call on the Conference on Disarmament to agree on a comprehensive programme of work that addresses all of the core issues on the agenda of the Conference.

**Action 7.** Canada continues to call on the Conference on Disarmament to agree on a comprehensive programme of work that addresses all of the core issues on the agenda of the Conference.

**Action 8.** Not applicable, since this is a commitment for nuclear-weapon States.

**Action 9.** While Canada is not a member of a nuclear-weapon-free zone, it supports the convening of a conference on a weapons of mass destruction-free zone in the Middle East, as proposed in the Final Document of the 2010 Review Conference.

**Action 10.** Canada continues to call on all States that have not yet done so to sign and ratify the Comprehensive Nuclear-Test-Ban Treaty as soon as possible and without condition. Canada welcomed the ratification of the Treaty by annex 2 State Indonesia in February 2012.


**Action 12.** Canada was an active participant at the 2011 Article XIV Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty, which took place on 23 September 2011 in New York. Canada joined the consensus on the Final Declaration produced by the Conference.

**Action 13.** As a part of its 2010 G8 presidency, Canada launched an initiative that made diplomatic representations on behalf of the G8 in States that had yet to ratify the Comprehensive Nuclear-Test-Ban Treaty. This initiative was continued in 2011 and 2012. Furthermore, since 2002, Canada has co-hosted a “Friends of the Comprehensive Nuclear-Test-Ban Treaty” ministerial-level event on the margins of the General Assembly high-level meetings in New York in years when Article XIV Conferences of the Treaty are not held.

**Action 14.** Canada continues to promote the completion of the International Monitoring System of the Comprehensive Nuclear-Test-Ban Treaty. Canada is host to 15 stations and one laboratory that are a part of the System. All of the facilities
hosted by Canada were completed and certified by the Comprehensive Nuclear-Test-Ban Treaty Organization by November 2009.

**Action 15.** At the sixty-sixth session of the General Assembly, Canada sponsored resolution 66/44 in which, inter alia, the Assembly called for the Conference on Disarmament to begin negotiations on a fissile material cut-off treaty early in its 2012 session. It also resolved to consider options for negotiating such a treaty should the Conference fail to agree on and implement a programme of work by the end of its 2012 session.

**Action 16.** Not applicable, since this is a commitment for nuclear-weapon States.

**Action 17.** Canada supports the development of appropriate legally binding verification arrangements to ensure that fissile material designated as no longer required for military purposes is irreversibly removed.

**Action 18.** Canada does not operate any facility that produces fissile material for use in nuclear weapons or other nuclear explosive devices.

**Action 19.** Canada continues to support increasing confidence, improving transparency and developing efficient verification capabilities related to nuclear disarmament.

**Action 20.** Canada continues to encourage States to submit information about their efforts and activities to implement the Treaty as official reports prior to Preparatory Committee meetings and Review Conferences.

**Action 21.** As a member of the Non-Proliferation and Disarmament Initiative, Canada endorsed the group’s draft standard reporting form to promote greater transparency with regard to the nuclear stockpiles of the nuclear-weapon States parties to the Treaty.

**Action 22.** Since 2003, Canada has, through the international security research and outreach programme of its Department of Foreign Affairs and International Trade, collaborated with a Canadian non-governmental organization on an annual graduate research awards competition. The programme aims to engage post-graduate students at Canadian universities on select issues on the international security agenda, particularly nuclear non-proliferation, arms control and disarmament. In 2010, the project was expanded to include a presentation and debate of research papers by award recipients at an event attended by Canadian officials and the Canadian expert community.

**Action 23.** Canada continues to call on States that have not yet done so to accede to the Treaty as non-nuclear-weapon States.

**Action 24.** Pursuant to article III, Canada has in place a comprehensive safeguards agreement with IAEA.

**Action 25.** We urge all States that have not yet done so to complete and implement a comprehensive safeguards agreement and additional protocol with IAEA, which we view as the safeguards standard required under article III.

**Action 26.** With Canada’s comprehensive safeguards agreement and additional protocol in place, IAEA has reached annual conclusions regarding the non-diversion of declared nuclear material from peaceful nuclear activities and the absence of undeclared nuclear material and activities in Canada. This broader conclusion was
first achieved in 2005 and has been maintained on an annual basis. It provides the highest level of confidence that Canada is in compliance with its commitments under the Treaty. Furthermore, the attainment and maintenance of the broader conclusion has allowed IAEA to fundamentally change the way safeguards are applied in Canada, by implementing a State-level integrated safeguards approach. These developments are a direct result of Canada’s strong support for the IAEA safeguards system and of the high level of cooperation between IAEA and Canada in the implementation of its comprehensive safeguards agreement and additional protocol.

**Action 27.** Canada is in full compliance with its safeguards obligations and is in full conformity with the statute of IAEA. Canada continues to use its Board of Governors membership to direct IAEA to resolve cases of non-compliance with safeguards obligations.

**Action 28.** In support of IAEA efforts to strengthen the safeguards system, Canada brought into force an additional protocol to its safeguards agreement on 8 September 2000. Canada has provided updates to its declaration pursuant to article II of the protocol on an annual basis and has provided complementary access to IAEA inspectors under the provisions of article V. We urge States that have yet to do so to conclude and bring into force an additional protocol with IAEA.

**Action 29.** In November 2011, Canada joined its Non-Proliferation and Disarmament Initiative members in signing a letter addressed to the Director General of IAEA that expressed the group’s support for the efforts of the Agency to bring into force further comprehensive safeguards agreements and additional protocols, and declared the group’s interest in providing assistance, both individually and in a coordinated manner, to advance the implementation of the additional protocol. Canada also supported the joint G8 outreach initiative in 2012 to make the additional protocol universal.

**Action 30.** Not applicable, since this is a commitment for nuclear-weapon States.

**Action 31.** Not applicable, since this is a commitment for States with a small quantities protocol.

**Action 32.** Canada regularly assesses the status of its safeguards to ensure that they are as effective and efficient as possible, and implements all decisions adopted by the IAEA policy bodies.

**Action 33.** Canada continues to provide the fullest possible political, technical and financial support to IAEA. Canada consistently provides experts to IAEA technical working groups, supports the Director General and secretariat, pays its assessed contributions on time and in full, and contributes significant extrabudgetary funding to the IAEA Safeguards Department on an annual basis.

**Action 34.** Through its Safeguards Support Programme, Canada contributes to the research, development and support of safeguards equipment and techniques aimed at strengthening the effectiveness and efficiency of IAEA safeguards. This effort resulted in a contribution of approximately C$ 1 million over the 2010/11 fiscal year and included the development of updated electronics for systems used to monitor on-load refuelled reactors, studies in the application of satellite imagery in monitoring nuclear facilities and support for upgrades to improve the effectiveness and efficiency of safeguarding transfers to dry storage.
Action 35. Consistent with its obligation not to provide source or special fissionable material, or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to any non-nuclear-weapon State for peaceful purposes unless the source or special fissionable material is subject to IAEA safeguards, and with decision 2, paragraph 12, of the 1995 Review and Extension Conference, Canada will only authorize nuclear cooperation involving proliferation-significant items with those non-nuclear-weapon States that have made an internationally legally binding commitment not to acquire nuclear weapons or other nuclear explosive devices and have accepted IAEA safeguards on the full scope of their nuclear activities. All of Canada’s nuclear partners have accepted, through a bilateral nuclear cooperation agreement with Canada, a number of additional measures designed to ensure that nuclear items supplied by Canada do not contribute to the proliferation of nuclear weapons.

Action 36. Canada’s national export control system is consistent with the lists of those multilateral nuclear export control mechanisms in which it participates. These measures ensure that nuclear non-proliferation policies are met, while facilitating peaceful nuclear commerce and international cooperation.

Action 37. Canada maintains a national system for controlling the export of all items especially designed or prepared for nuclear use and certain nuclear-related dual-use items. It ensures that exports of nuclear and nuclear-related dual-use items are not authorized where there is found to be an unacceptable risk of diversion to a weapons of mass destruction programme or a non-safeguarded facility, or when an export would be otherwise contrary to Canada’s non-proliferation policy and international commitments and obligations.

Action 38. Canada supports the legitimate right of all States parties to full access to nuclear material, equipment and technological information for peaceful purposes. Canada continues to negotiate nuclear cooperation agreements with States parties and continues to export nuclear power plants and nuclear material to States for the development of peaceful nuclear energy.

Action 39. In view of the inherent relationship between the inalienable rights of States parties to the peaceful uses of nuclear energy and the obligations contained elsewhere in the Treaty, cooperation by Canada with other countries in the peaceful uses of nuclear energy takes fully into account the non-proliferation credentials of the recipient country.

Action 40. Canada remains committed to maintaining the highest possible standards of security and physical protection of nuclear materials and facilities. Canada achieves effective physical protection at the domestic level through a robust regulatory framework that integrates relevant safety, security and safeguard elements, the implementation of strong physical protection measures and an industry that fully understands and fulfils its responsibilities. This is reinforced by close cooperation on nuclear security issues between the regulator, the Canadian Nuclear Safety Commission, federal and provincial law enforcement and intelligence agencies, industry, foreign Governments and international organizations. In April 2012, Canada passed legislation to amend its Criminal Code to improve its approach to prosecute those who commit acts of nuclear terrorism. These amendments will facilitate Canada’s process to ratify the International Convention for the Suppression of Acts of Nuclear Terrorism and the 2005 Amendment to the Convention on the Physical Protection of Nuclear Materials.
Action 41. Following a complete review, nuclear security regulations were amended in 2006 to further reinforce the physical protection of nuclear materials in Canada. Canadian physical protection measures include armed on-site response forces, constant threat monitoring, enhanced security screening, a comprehensive drill and exercise programme and robust perimeter protection. Physical protection in Canada is strengthened by a rigorous nuclear material accounting system that tracks nuclear materials, in line with Canada’s international commitments.

Action 42. Canada is working to ratify the amendment to the Convention on the Physical Protection of Nuclear Materials and encourages all States in a position to do so to ratify the amendment.

Action 43. Canada remains committed to the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources. Canada further encourages all States to implement the provisions of the Code and Guidance in a harmonized manner to assist in providing assurances that radioactive sources are used and maintained within an appropriate regulatory framework of radiation safety and security.

Action 44. Canada supports counter-proliferation initiatives such as Security Council resolution 1540 (2004), the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism. We regularly promote these efforts in multilateral forums and work to advance these issues within, inter alia, the G8, the Organization of American States, the United Nations General Assembly and NATO. We encourage States that have not yet done so to join these initiatives, in order to strengthen the international counter-proliferation framework. Canada’s Global Partnership Programme has a dedicated unit for Security Council resolution 1540 (2004) that has a number of projects under way, including facilitating a coordinator on resolution 1540 (2004) within the Central American Integration System, in response to their request made through the 1540 Committee. Canada participates fully in the IAEA Illicit Trafficking Database programme. Canada also supports regional workshops to build the capacity of States that face obstacles in ratifying international legal instruments related to the security of nuclear materials and facilities, such as the Convention on the Physical Protection of Nuclear Materials and its Amendment. We are also beginning a pilot project on chemical, biological, radiological, nuclear and explosives training in Colombia, in response to a request made to the 1540 Committee. In addition, Canada will host a Global Initiative tabletop exercise in May 2012 in Toronto. The event will focus on intergovernmental interaction during a consequence management event following a radiological attack.

Canada continues to assess areas to improve its national capabilities to detect, deter and disrupt illicit trafficking in nuclear materials. Canada has established effective domestic controls to prevent the proliferation of nuclear weapons and their components, in accordance with its international legal obligations.

Action 45. Canada signed the International Convention for the Suppression of Acts of Nuclear Terrorism in 2005 and is in the process of ratifying it.

Action 46. Canada views a strong and cooperative State system of accounting and control as vital to the implementation of an effective safeguards system. The nature of such a State system is one of the key State-specific factors that IAEA considers when developing a State-level approach to safeguards, which allows for a more
focused, adaptable safeguards system. Canada regularly advocates these views within various international forums and continues to work with IAEA in further developing the State-level safeguards concept.

**Action 47.** Canada possesses an indigenous nuclear power reactor system and a broad and diverse nuclear sector, and is a reliable supplier of uranium, nuclear equipment and technology, and radioisotopes.

**Action 48.** Canada strongly supports the peaceful uses of nuclear energy. In view of the inherent relationship between the inalienable rights of States to the peaceful uses of nuclear energy and the obligations contained elsewhere in the Treaty, cooperation by Canada with other countries in the peaceful uses of nuclear energy takes fully into account the non-proliferation credentials of the recipient country.

**Action 49.** Canada provides experts, equipment and technology through technical cooperation to many developing States parties. Canada’s exports of nuclear power reactors and equipment have been to developing countries.

**Action 50.** Canada strongly supports the peaceful uses of nuclear energy. In view of the inherent relationship between the inalienable rights of States to the peaceful uses of nuclear energy and the obligations contained elsewhere in the Treaty, cooperation by Canada with other countries in the peaceful uses of nuclear energy takes fully into account the non-proliferation credentials of the recipient country. Canada is a strong supporter of the IAEA Technical Cooperation Programme and provides experts, equipment and technology through this Programme to developing States parties. Canada has exported nuclear power reactors and equipment to developing countries.

**Action 51.** Canada is committed to working with other States and relevant international organizations on new arrangements for the supply of nuclear items, consistent with the balance of rights and obligations agreed to in the Treaty and in particular in articles I, II, III and IV. Canada currently has in place 27 nuclear cooperation agreements with 44 States parties to the Treaty.

**Action 52.** Canada is a strong supporter of the IAEA Technical Cooperation Programme. Canada is actively involved in the work and decisions of the IAEA Board of Governors Technical Assistance and Cooperation Committee, in addition to the annual negotiation and adoption of an IAEA General Conference resolution on the strengthening of technical cooperation. Canada contributes significant funding, equipment and expertise to the IAEA Technical Cooperation Programme and continues to encourage more focus on results and the dedication of more resources to project implementation and away from administration of the programme, in the first instance by fewer and larger technical cooperation projects. Canada further supports IAEA partnerships with other development agencies of the United Nations with a view to leveraging additional funding for technical cooperation project implementation.

**Action 53.** Canada strongly supports the peaceful uses of nuclear energy. Canada also remains a strong supporter of and financial contributor to the IAEA Technical Cooperation Programme. Canada provides experts, equipment and technology through technical cooperation to developing States parties. Canada has exported nuclear power reactors and equipment to developing countries. Canada is actively involved in the work and decisions of the IAEA Board of Governors Technical Assistance and Cooperation Committee, in addition to the annual negotiation and
adoption of an IAEA General Conference resolution on the strengthening of technical cooperation.

**Action 54.** Canada believes strongly in the importance of the IAEA Technical Cooperation Fund and continues to contribute its assessed voluntary contribution. Canada also uses its IAEA Board of Governors Technical Assistance and Cooperation Committee membership to ensure better use of the Fund’s resources.

**Action 55.** Canada supports the IAEA Peaceful Uses Initiative, including by providing in-kind resources to projects of the Initiative.

**Action 56.** Canada regularly contributes to projects under the IAEA Technical Cooperation Fund intended to support the training of the skilled workforce necessary for countries seeking to develop their own nuclear energy infrastructure. Canada drafts and introduces alternating, biennial IAEA General Conference resolutions on nuclear power infrastructure development and nuclear knowledge, education and training.

**Action 57.** Canada ensures that the use of nuclear energy is consistent with its national legislation and respective international obligations, both in terms of nuclear safety, nuclear security and nuclear safeguards. Canada has performed a systematic and thorough review of the implications and lessons learned from the March 2011 accident in Fukushima, Japan. The assessment concluded that Canadian nuclear power plants are safe, the Canadian nuclear regulatory framework is strong and that emergency preparedness and response measures are adequate.

**Action 58.** Canada acknowledges the potential contribution that new mechanisms could make to help ensure reliable access to nuclear fuel if they provided increased confidence to those seeking to develop or expand nuclear power capabilities. With this in view, Canada supported the decision of the IAEA Board of Governors to establish an IAEA low-enriched uranium fuel bank and will continue to assess proposed fuel assurance mechanisms based on their individual merits.

**Action 59.** Canada is a party to the Convention on Nuclear Safety; the Convention on Early Notification of a Nuclear Accident; the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency; the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management; the International Convention for the Suppression of Acts of Nuclear Terrorism; and the Convention on the Physical Protection of Nuclear Materials. Canada has begun the process to ratify the amendment to the Convention on the Physical Protection of Nuclear Materials.

**Action 60.** The Fukushima nuclear crisis tested Canadian abilities to respond to serious nuclear safety accidents and we were able to offer a significant package of expertise and assistance to Japan. Canadian nuclear and health experts produced daily assessments and modelling of the situation, developed a recommended precautionary evacuation zone for Canadians and provided daily analysis of the worst-case scenarios to guide policy. In December 2011, the IAEA Integrated Regulatory Review Service completed its follow-up assessment of Canada’s nuclear regulatory framework, which confirmed that Canada’s actions in response to the Fukushima accident were prompt, robust and comprehensive. The response of the Canadian nuclear regulator was identified as a good practice that should be used by other regulatory bodies. Canada supports and encourages Integrated Regulatory Review Service peer reviews to share best practices in the area of nuclear safety.
Peer reviews compare a country’s regulatory practices with international standards and equivalent good practices elsewhere in the world. In this regard, Canada has published both the findings made by the Integrated Regulatory Review Service in its 2011 follow-up mission to Canada and the follow-up actions taken as a result of these findings, and encourages others to do the same. With respect to nuclear security, Canada continues to actively assist in the further development of the IAEA Nuclear Security Series to assist and promote international recommendations and guidance in this area. Canada has contributed experts to assist in the development of the Nuclear Security Series, particularly the development of the Nuclear Security Fundamentals and the three recommendation-level documents within the series that provide the basis for its technical and implementing guides. Canada has provided experts to the IAEA International Physical Protection Advisory Committee teams to further assist in this area. Canada further actively supports the World Institute for Nuclear Security; it has assisted with co-hosting three conferences of the Institute in Canada to date and has participated in other conferences, resulting in the production of best practices guides of the Institute.

**Action 61.** At the 2010 Nuclear Security Summit in Washington, D.C., Canada committed to work with the United States to repatriate spent, United States-origin, highly enriched uranium fuel that is currently stored at Chalk River Laboratories by the end of 2018. Canada has made good progress in this commitment, in that the first shipment of spent highly enriched uranium fuel was successfully returned to the United States in 2010, and a second shipment is planned for later this year. At the March 2012 Nuclear Security Summit in Seoul, Canada agreed to work with the United States to repatriate additional non-fuel highly enriched uranium materials stored at Chalk River Laboratories by 2018. In 2010, Canada signalled its intention to cease isotope production using highly enriched uranium targets by 2016, and invested $35 million to support the development of alternative isotope production technologies that do not use uranium. In its 2012 budget, Canada reinforced its commitment by providing an additional $17 million over two years to further the accelerated development of these non-highly enriched uranium isotope technologies.

**Action 62.** Canada transports radioactive materials consistent with relevant international standards of safety, security and environmental protection. Transport regulations are based on the IAEA Regulations for the Safe Transport of Radioactive Materials. Canada also actively participates in the development of IAEA regulations in this area.

**Action 63.** Canada is proceeding with the modernization of the Nuclear Liability Act, its domestic civil nuclear liability legislation. There is an expectation that a new bill could be introduced within the year, subject to the considerations of the Government. In concert with the revisions to Canada’s domestic regime, we will incorporate provisions that would enable Canada to join an appropriate international nuclear civil liability convention and the Convention on Supplementary Compensation for Nuclear Damage.

**Action 64.** Canada notes and reaffirms the consensus reached by the IAEA General Conference at its fifty-third session that any armed attack on or threat against safeguarded nuclear facilities devoted to peaceful purposes constitutes a violation of the principles of the Charter of the United Nations, international law and the IAEA statute.