

# Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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## Third session

New York, 28 April-9 May 2014

## Implementation of the action plan agreed at the 2010 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons

### Report submitted by Canada

Action 20 of the action plan contained in the Final Document of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons calls for States parties to submit regular reports on the implementation of the action plan, the 13 practical steps towards disarmament contained in the Final Document of the 2000 Review Conference, article VI of the Treaty and paragraph 4 (c) of the 1995 Review Conference decision entitled “Principles and objectives for nuclear non-proliferation and disarmament”. In line with this commitment, and with a view to enhancing transparency and building confidence, Canada submits this report on its implementation of the 2010 action plan included in the Final Document of the 2010 Review Conference. It provides information that builds upon the reports Canada submitted at the first and second meetings of the Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons ([NPT/CONF.2015/PC.I/10](#) and [NPT/CONF.2015/PC.II/9](#)).

**Action 1:** Canada’s international security policy 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:** N/A as this is a commitment for nuclear-weapon States.

**Action 4:** Canada welcomed the entry into force on 5 February 2011 of the Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms.

**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 State



parties to the Treaty. This draft reporting form was circulated at the 2012 Preparatory Committee, with working paper [NPT/CONF.2015/PC.I/WP.12](#).

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

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

**Action 8:** N/A as 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.

**Action 10:** Canada continues to call upon 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.

**Action 11:** Canada ratified the Comprehensive Nuclear-Test-Ban Treaty in December 1998.

**Action 12:** Canada was an active participant at the 2013 Article XIV Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty, which took place on 24 September 2013 in New York. Canada joined the consensus on the Final Declaration produced by the Conference.

**Action 13:** As a part of its 2010 presidency of the Group of Eight, Canada launched an ongoing initiative that makes diplomatic representations on behalf of the Group of Eight in States that had yet to ratify the Comprehensive Nuclear-Test-Ban Treaty.

**Action 14:** In September 2013, Canada completed a contribution of airborne radiation detection equipment and training to the Comprehensive Nuclear-Test-Ban Treaty Organization to strengthen the Organization's on-site inspection capabilities. Canada continues to promote the completion of the Comprehensive Nuclear-Test-Ban Treaty international monitoring system and development of its on-site inspection capabilities. Canada hosts 16 stations and laboratories that are a part of the international monitoring 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:** In May 2013, Canada submitted to the Secretary-General a report of its views on a fissile material cut-off treaty as requested in General Assembly resolution [67/53](#), led by Canada, entitled "Treaty banning the production of fissile materials for nuclear weapons and other nuclear explosive devices". Canada also conducted diplomatic representations in 41 States to encourage them to provide reports on the fissile material cut-off treaty to the Secretary-General. Canada is pleased to chair the Group of Governmental Experts that will meet in 2014 and 2015 to make recommendations on possible aspects that could contribute to, but not negotiate, a fissile material cut-off treaty.

**Action 16:** N/A as 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 all States parties to the Treaty on the Non-Proliferation of Nuclear Weapons to submit information about their efforts and activities to implement the Treaty and all relevant agreements at Review Conferences as official reports to Preparatory Committee meetings and Review Conferences. Such reports are vital to strengthen the principle of “permanence with accountability” that underpinned the Treaty’s indefinite extension in 1995.

**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 State parties to the Treaty.

**Action 22:** Since 2003, Canada, through the Department of Foreign Affairs, International Trade and Development’s International Security Research and Outreach Programme, has 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. On 10 and 11 April 2014, two Canadian students participated in the youth exchange programme that took place in Hiroshima, Japan, on the margins of the Non-Proliferation and Disarmament Initiative Ministerial meeting.

**Action 23:** Canada continues to call upon States that have not yet done so to accede to the Treaty as non-nuclear-weapon States, and calls on the Democratic People’s Republic of Korea to resume adherence to the Treaty.

**Action 24:** Pursuant to article III, Canada has in place a comprehensive safeguards agreement and additional protocol with the (International Atomic Energy Agency) 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 the comprehensive safeguards agreement and the additional protocol.

**Action 27:** Canada is in full compliance with its safeguards obligations and is in full conformity with the IAEA Statute. 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 a protocol additional 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 February 2013, the Non-Proliferation and Disarmament Initiative sent joint letters to key States to urge them to complete and implement an Additional Protocol agreement with IAEA. Canada supports the ongoing Group of Eight initiative to make diplomatic representations to advance the universalization of the additional protocol.

**Action 30:** N/A as this is a commitment for nuclear-weapon States.

**Action 31:** N/A as 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 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, has contributed significant extrabudgetary funding to the Agency's Safeguards Department on an annual basis.

**Action 34:** Through the Canadian Safeguards Support Programme, Canada contributes to the research, development and support of safeguards equipment and techniques for both domestic and international use aimed at strengthening the effectiveness and efficiency of the Agency's safeguards. This effort resulted in an average annual contribution of approximately C\$1 million over the last three fiscal years and included the further development of equipment for the verification of spent fuel assemblies at light water reactors and its adaptation for use at the Fukushima Daiichi nuclear power plant, new systems for the monitoring of on-load refuelled reactors, development of laser technology for nuclear material identification, and support for improving the IAEA's processes in drawing safeguards conclusions.

**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, 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. Canada participated actively in the Nuclear Suppliers Group's list review and is in the process of incorporating the revised lists into national legislation. These measures ensure that nuclear non-proliferation policies are met, while facilitating peaceful nuclear commerce and international cooperation. At the 2013 Preparatory Committee meeting, Canada co-sponsored a working paper by the Non-Proliferation and Disarmament Initiative on export controls, which included recommendations for consideration at the 2015 Review Conference.

**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 also 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 an unsafeguarded 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 negotiates nuclear cooperation agreements with States parties, including developing countries, to facilitate mutually beneficial exchanges for the peaceful uses of nuclear energy.

**Action 39:** In view of the inherent relationship between States parties' inalienable rights 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 which 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, the industry, foreign governments and international organizations. On 21 November 2013, Canada ratified the International Convention for the Suppression of Acts of Nuclear Terrorism. On 3 December 2013, Canada ratified 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 ratified the 2005 Amendment to the Convention on the Physical Protection of Nuclear Materials on 3 December 2013. We encourage all States in a position to do so to ratify the amendment as soon as possible.

**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 Group of Eight, the Organization of American States, the Regional Forum of the Association of Southeast Asian Nations, the General Assembly and the North Atlantic Treaty Organization (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 unit dedicated to resolution [1540 \(2004\)](#) which has a number of projects under way, including delivering chemical, biological, radiological, nuclear and explosives training to States that makes requests through the Security Council Committee established pursuant to resolution [1540 \(2004\)](#). Canada participates fully in the IAEA's Incident and Trafficking Database programme. Canada is also supporting regional workshops to build the capacity of States to adapt domestic legislation that would facilitate the ratification of international legal instruments related to the security of nuclear materials, such as the Convention on the Physical Protection of Nuclear Materials and its Amendment.

Canada continues to assess areas to improve its national capabilities to detect, deter and disrupt illicit trafficking in nuclear materials and has initiated a project to increase Canadian nuclear forensic capabilities. 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 ratified the International Convention for the Suppression of Acts of Nuclear Terrorism on 21 November 2013.

**Action 46:** Canada views a strong and cooperative State System of Accounting for and Control of Nuclear Material as vital to the implementation of an effective safeguards system. The technical capabilities of a country's System and the nature and the scope of cooperation between that System and IAEA are two of the State-specific factors that IAEA considers when developing a State-level approach to safeguards. This 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 States' inalienable rights 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 has nuclear cooperation with developing countries; cooperation has included exports of nuclear power reactors, nuclear material and equipment.

**Action 50:** Canada strongly supports the peaceful uses of nuclear energy. In view of the inherent relationship between States' inalienable rights 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's Technical Cooperation Programme and provides experts, equipment and technology through this Programme to developing States parties. Canada's exports of nuclear power reactors and equipment have been 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 29 nuclear cooperation agreements with 47 State parties to the Treaty. Most recently, Canada concluded an agreement with the United Arab Emirates and signed one with Kazakhstan.

**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 Agency's Technical Cooperation Programme and continues to encourage more focus on results, 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 United Nations development agencies 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's Technical Cooperation Programme. Canada provides experts, equipment and technology through technical cooperation to developing States parties. Canada's exports of nuclear power reactors and equipment have been 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 Technical Cooperation Fund 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 its own nuclear energy infrastructure. Canada drafts and introduces alternating, biennial IAEA General Conference resolutions on nuclear power infrastructure development and nuclear knowledge management.

**Action 57:** Canada ensures that the use of nuclear energy is consistent with its national legislation and respective international obligations in terms of nuclear safety, nuclear security and nuclear safeguards.

**Action 58:** Canada acknowledges the potential contribution that new mechanisms could make to help assure reliable access to nuclear fuel if they provide 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, the Convention on the Physical Protection of Nuclear Materials and its 2005 Amendment.

**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. Canada has also been contributing to the development of the IAEA's comprehensive report on the Fukushima accident in providing leadership and expertise on various areas that will be covered in the report. Canada is also actively participating in the IAEA's Emergency Preparedness and Response Expert Group to strengthen the international nuclear emergency management framework. Canada supports and strongly encourages peer reviews by the IAEA's Integrated Regulatory Review Service 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. Canada encourages other countries to conduct these missions, follow-up on their recommendations and make their report publicly available. Canada is strongly



supportive of initiatives undertaken by the leadership of the Sixth Review Meeting of the Convention on Nuclear Safety to improve the international legal framework on nuclear safety through the strengthening of the Convention and its supporting guidance documents.

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. In recognition of their importance, Canada continues to contribute experts to assist in the development of the Nuclear Security Series, particularly the Nuclear Security Fundamentals and the three recommendation level documents within the series which provide the basis for the series technical and implementing guides. Canada has provided experts to IAEA International Physical Protection Advisory Service teams to further assist in this area. Canada has requested the Service to review and assess the effectiveness of its security regime. Canada further actively supports the World Institute for Nuclear Security and has assisted with co-hosting three conferences of the Institute in Canada to date and has participated in other conferences resulting in the Institute's best practices guides being produced.

**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's first shipment of spent highly enriched uranium fuel was successfully returned to the United States in 2010, and a second shipment was repatriated in 2012. 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. Canada intends to cease isotope production using highly enriched uranium targets by 2016, and has invested \$60 million to support the development of alternative isotope production technologies that do not use uranium.

**Action 62:** Canada transports radioactive materials consistent with relevant international standards of safety, security and environmental protection. Transport regulations are based on the IAEA's Regulations for the Safe Transport of Radioactive Materials. Canada is in the process of updating its transport regulations to refer to the latest edition of the IAEA Transport Regulations.

**Action 63:** On 3 December 2013, the Minister of State (Foreign Affairs and Consular), signed the Convention on Supplementary Compensation for Nuclear Damage on behalf of Canada. On 29 January 2014, the Nuclear Liability and Compensation Act was introduced in Canada's parliament to modernize Canada's nuclear liability compensation framework. The proposed legislation will increase the civil liability limit of a nuclear power plant operator to C\$1 billion dollars, an amount in line with international standards. It will also include authority for Canada to ratify the Convention.

**Action 64:** Canada notes and reaffirms the consensus reached at the Fifty-Third General Conference of IAEA that any armed attack on and 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 Statute of IAEA.