

Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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

Report submitted by Canada

Action 20 of the action plan set out in the Final Document of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons calls on States parties to submit regular reports on their implementation of the action plan, as well as of the 13 practical steps towards disarmament contained in the Final Document of the 2000 Review Conference, and of article VI, paragraph 4 (c), of the 1995 decision entitled “Principles and objectives for nuclear non-proliferation and disarmament”. Canada submits the present report to further fulfil these commitments. This report updates the information provided in the reports submitted by Canada to the Preparatory Committee at its sessions held in 2012 ([NPT/CONF.2015/PC.I/10](#)), 2013 ([NPT/CONF.2015/PC.II/9](#)), 2014 ([NPT/CONF.2015/PC.III/8](#) and [NPT/CONF.2015/PC.III/9](#)), 2017 ([NPT/CONF.2020/PC.I/10](#)), and 2018 ([NPT/CONF.2020/PC.II/10](#)) and to the Review Conference in 2015 ([NPT/CONF.2015/34](#)).

Action Steps taken to implement commitments since May 2018

Nuclear disarmament

- 1 Canada supports a pragmatic, step-by step approach to nuclear disarmament that halts the production of materials for nuclear weapons, reduces existing stockpiles and irreversibly eliminates them. Canada’s international security policy is consistent with its North Atlantic Treaty Organization (NATO) obligations and advocates for a rules-based international order that provides strategic stability for all.

Canada promotes this policy with its allies and partners in NATO, the Group of Seven (G7), the Francophonie, the Organization of American States, the Association of Southeast Asian Nations and the Non-Proliferation and Disarmament Initiative, among others.

Canada recognizes that maintaining international peace and security requires an inclusive approach that considers the perspectives of all persons, and that gender balance and gender considerations have a positive impact on the achievement of the shared goals of the Non-Proliferation Treaty across all three of its pillars. In this regard, Canada strongly supported General Assembly resolution [73/46](#) on women, disarmament, non-proliferation



and arms control. In addition, Canada's efforts on the International Gender Champions Disarmament Impact Group in Geneva on mainstreaming gender language in the United Nations General Assembly First Committee, combined with Canada's more systematic application of a gender lens to its policy and programming work in disarmament and non-proliferation, has yielded progress. Between 2017 and 2018, the number of United Nations General Assembly First Committee resolutions with a gender dimension increased from 15 per cent to 25 per cent, and the number of delegations speaking about gender and disarmament has grown.

- 2 Canada continues to promote the principles of irreversibility, verifiability and transparency in the implementation of Treaty obligations, most notably through co-sponsorship of the Non-Proliferation and Disarmament Initiative joint working papers on enhancing transparency for strengthening the review process for the Treaty on the Non-Proliferation of Nuclear Weapons.

Canada co-sponsored and voted in favour of General Assembly resolution [73/62](#), entitled "United action with renewed determination towards the total elimination of nuclear weapons", which emphasized the importance of applying the principles of irreversibility, verifiability and transparency to the process of nuclear disarmament and non-proliferation.

Canada welcomed the adoption of the General Assembly decision entitled "Nuclear disarmament verification" ([A/C.1/73/L.31](#)).

- 3 Not applicable

- 4 Not applicable

- 5 Not applicable

- 6 Canada continues to support the creation of a subsidiary body in the Conference on Disarmament to deal with nuclear disarmament as part of a balanced and comprehensive programme of work.

- 7 Canada continues to support the creation of a subsidiary body in the Conference on Disarmament to address effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons as part of a balanced and comprehensive programme of work.

- 8 Not applicable

- 9 Canada continues to advocate strongly for the full implementation of the resolution on the Middle East adopted at the 1995 Non-Proliferation Treaty Review and Extension Conference, and specifically for the establishment of a weapons-of-mass-destruction free zone in the region.

In 2018, Canada abstained from decision [73/546](#) on "Convening a conference on the establishment of a Middle East zone free of nuclear weapons and other weapons of mass destruction" on the basis that the proposed conference could make decisions without requiring consensus of all States in the region.

Canada voted in favour of General Assembly resolutions [72/24](#) and [73/28](#), entitled "Establishment of a nuclear-weapon-free zone in the region of the Middle East" and [73/71](#), entitled "Fourth Conference of Nuclear-Weapon-Free Zones and Mongolia, 2020." Canada co-sponsored and joined consensus on General Assembly resolutions [73/26](#), entitled "African Nuclear-Weapon-Free Zone Treaty" and [73/58](#), entitled "Treaty on a Nuclear-Weapon-Free Zone in Central Asia".

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- 10 Not applicable
- 11 Canada signed the Comprehensive Nuclear-Test-Ban Treaty on 24 September 1996 and ratified it on 2 December 1998.
- Canada's Comprehensive Nuclear-Test-Ban Treaty Implementation Act is being implemented provisionally pending the Treaty's entry into force.
- 12 Canada provides annual updates on its efforts to promote the entry into force and universalization of the Comprehensive Nuclear-Test-Ban Treaty for inclusion in the report of the Secretary-General to the General Assembly.
- 13 Canada participated in the ninth ministerial meeting of the Friends of the Comprehensive Nuclear-Test-Ban Treaty on 27 September 2018, co-chaired by Australia and Japan, and supported the adoption of the Joint Ministerial Statement on the Comprehensive Nuclear-Test-Ban Treaty, which, inter alia, called for concrete and actionable steps towards early entry into force and universalization of the Comprehensive Nuclear-Test-Ban Treaty.
- Canada co-sponsored and voted in favour of General Assembly resolution [72/70](#), entitled "Comprehensive Nuclear-Test-Ban Treaty".
- Canada also co-sponsored Security Council resolution [2310 \(2016\)](#), which, inter alia, called for the Treaty's early entry into force and for all States to maintain voluntary moratoriums on nuclear test explosions.
- 14 All of the 16 stations and laboratories hosted by Canada as a part of the International Monitoring System for the Comprehensive Nuclear-Test-Ban Treaty have been completed and certified by the Comprehensive Nuclear-Test-Ban Treaty Organization.
- Since December 2017, Canada and Kazakhstan have been implementing a project to build and install a radionuclide monitoring station in Kurchatov, Kazakhstan. Once completed, it will be established as a cooperating national facility that will strengthen the ability of the Comprehensive Nuclear-Test-Ban Treaty Organization to detect nuclear explosions.
- 15 Canada has actively called for the commencement of negotiations on a treaty banning the production of fissile materials for nuclear weapons or other nuclear explosive devices.
- Pursuant to General Assembly resolution [71/259](#), Canada chaired the high-level fissile material cut-off treaty expert preparatory group. The group concluded its work in June 2018 with the adoption of a consensus report containing recommendations on substantial elements of a future treaty.
- At the seventy-third session of the General Assembly, in 2018, Canada co-sponsored resolution [73/65](#) calling for progress on commencing negotiations on a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices. The resolution was adopted with a vote of 182 in favour and 1 against (Pakistan), with 5 abstentions (Democratic People's Republic of Korea, Egypt, Iran, Israel and Syria).
- 16 Not applicable
- 17 Canada continues to support the development of appropriate legally binding verification arrangements to ensure that surplus fissile material no longer required for military purposes is irreversibly removed (applicable only to nuclear-weapon States).
- 18 In conformity with its legal obligations through its comprehensive safeguards agreement and additional protocol with the International Atomic Energy Agency (IAEA), arising from the Non-Proliferation Treaty and as verified by regular IAEA inspections, Canada does not

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- operate any facility that produces fissile material for use in nuclear weapons or other nuclear explosive devices.
- 19 Canada participates actively in the International Partnership for Nuclear Disarmament Verification, engaging in the intersessional meetings of the working groups and contributing to discussion papers.
- Canada supported resolution [71/67](#) on nuclear disarmament verification, adopted by the General Assembly at its seventy-first session, to create in 2018–2019 a Group of Governmental Experts on nuclear disarmament verification. Canada supports the work of the Group of Governmental Experts on nuclear disarmament verification.
- 20 Canada submits regular reports as indicated in action 20.
- 21 As a member of the Non-Proliferation and Disarmament Initiative, Canada endorses the efforts of the Non-Proliferation and Disarmament Initiative to establish a standard reporting form as a template for providing greater transparency on nuclear disarmament activities by the nuclear-weapon States. This includes Canada’s endorsement of the draft reporting form of the Non-Proliferation and Disarmament Initiative submitted at the 2017 session of the Preparatory Committee, the 2018 Non-Proliferation and Disarmament Initiative joint working paper entitled “Proposals by the Non-Proliferation and Disarmament Initiative to enhance transparency for strengthening the review process for the Treaty on the Non-Proliferation of Nuclear Weapons” ([NPT/CONF.2020/PC.II/WP.26](#)) and ongoing efforts in advance of the 2019 session of the Preparatory Committee.
- 22 Global Affairs Canada, in partnership with The Simons Foundation Canada, continues to support the enhancement of Canadian graduate-level scholarships on non-proliferation, arms control and disarmament issues. Four scholarships (totalling \$20,000) are awarded annually, with \$345,000 having been distributed since the programme’s inception in 2003.
- On 28 March 2019, Global Affairs Canada held a forum with experts from Canadian civil society organizations, academia, think tanks and the private sector to promote transparency, openness and education on disarmament, arms control and non-proliferation. Constant efforts are made to increase youth participation at this event.

Nuclear non-proliferation

- 23 Canada continues to call upon States that have not yet done so to accede to the Treaty.
- 24 Canada’s comprehensive safeguards agreement with IAEA has been in place since 21 February 1972.
- Canada’s additional protocol with IAEA has been in place since 8 September 2000.
- 25 Canada continues to urge all States that have not yet done so to complete and implement a comprehensive safeguards agreement and additional protocol with IAEA, which Canada considers to be the verification standard under article III of the Treaty. Within the context of IAEA, during negotiations of the resolution on strengthening the effectiveness and improving the efficiency of Agency safeguards, Canada, in cooperation with other countries, resisted attempts to revise language that would eliminate the call for universalization of comprehensive safeguards agreements.
- 26 Since 2005, IAEA has concluded on an annual basis that all nuclear material in Canada remains in peaceful activities. This broader conclusion pursuant to Canada’s comprehensive safeguards agreement and additional protocol provides the highest level of confidence that Canada is in compliance with its non-proliferation commitments under the Non-Proliferation Treaty.

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- 27 Canada welcomes the ongoing implementation of the Joint Comprehensive Plan of Action, which provides a framework to establish confidence that the nuclear activities of the Islamic Republic of Iran are peaceful in nature through monitoring and verification by IAEA. Canada is currently the lead financial contributor to IAEA efforts to monitor and verify the implementation by the Islamic Republic of Iran of its commitments under the Joint Comprehensive Plan of Action and its predecessor, having provided Can\$14.5 million since 2014, including Can\$1.5 million in October 2018.
- Canada regrets that the Democratic People's Republic of Korea has yet to take steps that would meaningfully degrade the capabilities of its nuclear weapons programme despite its stated intention to denuclearize. At the IAEA General Conference and the IAEA Board of Governors meetings in 2015 and in each subsequent year, Canada has reiterated its condemnation of the illicit nuclear weapons development programme of the Democratic People's Republic of Korea, including nuclear testing; the production of fissile material, uranium enrichment and separated plutonium; and ballistic missile testing.
- During Canada's G7 presidency in 2018, Canada coordinated demarches under the Non-Proliferation Directors Group on the Democratic People's Republic of Korea's weapons of mass destruction programmes and efforts to evade United Nations sanctions. Canada also co-hosted, with the United States, the Foreign Ministers' Meeting on Security and Stability on the Korean Peninsula in January 2018. Canada's weapons of mass destruction threat reduction programme supports projects in various countries to build capacity to implement Security Council sanctions on the Democratic People's Republic of Korea. In May and October 2018, Canada deployed a maritime patrol aircraft as part of a multinational initiative to counter the Democratic People's Republic of Korea's maritime sanctions evasion. HMCS Calgary, a Royal Canadian Navy frigate, also contributed to this effort in October 2018.
- Canada continues to call on the Democratic People's Republic of Korea to comply fully with all relevant Security Council resolutions, to return to compliance with the Non-Proliferation Treaty and with its safeguards agreement with IAEA, to fulfil its commitments to denuclearize, and to accede to the Comprehensive Nuclear-Test-Ban Treaty.
- At the IAEA General Conference and IAEA Board of Governors meetings in 2015 and in every subsequent year, Canada also called on the Syrian Arab Republic to cooperate fully with the Agency to resolve all outstanding issues regarding its non-compliance with its safeguards agreement, particularly with regard to the Dayr al-Zawr site and other functionally-related sites identified by IAEA.
- 28 Canada's additional protocol with IAEA was signed on 24 September 1998 and entered into force on 8 September 2000.
- 29 Canada continues to support the G7 initiative to make diplomatic representations to advance the universalization of the comprehensive safeguards agreement and the additional protocol thereto. Canada continues to call upon all States to conclude and implement a comprehensive safeguards agreement.
- 30 Not applicable
- 31 Not applicable
- 32 Canada welcomes IAEA efforts to develop a State-level safeguards approach for each State with a safeguards agreement in force, as part of the continuing evolution of safeguards implementation necessary to increase the effectiveness and efficiency of IAEA safeguards. IAEA and Canada are working collaboratively to develop the practical arrangements

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- pursuant to the revised State-level approach for Canada that will set expectations for IAEA, the State and the operators.
- 33 Canada paid its 2019 assessed contribution to the IAEA regular budget and its voluntary assessed contribution to the Technical Cooperation Fund on time and in full, in line with Canada's sustained efforts towards timely and predictable payments.
- 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 IAEA safeguards.
- 35 Canada is a member of and an active participant in the Nuclear Suppliers Group and the Zangger Committee and implements the relevant commitments through a national export control system and bilateral nuclear cooperation agreements.
- Canada is an active member of the Group of Friends of resolution 1540 (2004) and regularly advocates for the full and universal implementation of resolution 1540 (2004), including by calling on other nations to fulfil their reporting and action plan obligations.
- 36 Canada's export control system is consistent with the lists of multilateral nuclear export control mechanisms in which it participates.
- Legislation amending Canada's Export and Import Permits Act received royal assent on 13 December 2018. Among the amendments is the creation of brokering controls and a requirement for the Minister of Foreign Affairs to assess export permits against the Arms Trade Treaty criteria (including peace and security, terrorism and transnational organized crime). Brokering controls will apply via regulation to items, including dual-use items, on the Export Control List when destined for a weapons of mass destruction end-use. This legislation and related regulations are anticipated to come into force by mid-2019.
- 37 Canada's national export control system ensures that exports of controlled goods and technology, including nuclear and nuclear-related dual-use items, are not authorized where the proposed export would be inconsistent with Canada's foreign and defence policy (including where there is deemed to be an unacceptable risk of diversion to a weapons of mass destruction programme or to an unsafeguarded facility, or when an export would be otherwise contrary to Canada's non-proliferation policy and international commitments and obligations).
- 38 Canada's nuclear non-proliferation policy requires that all prospective nuclear partners, including both non-nuclear-weapon States and nuclear-weapon States, must agree to – and conclude – a binding nuclear cooperation agreement before cooperation can commence. Nuclear cooperation agreements commit Canada's nuclear partners to comply with a set of non-proliferation policy requirements, notably that Canadian nuclear exports would be used only for peaceful, non-explosive end uses. Other requirements include prior consent for the high enrichment of uranium, reprocessing of spent fuel or retransfer of Canadian-supplied items to third countries; adequate physical protection; and provision for bilateral "fall-back" safeguards in the event that the IAEA safeguards system becomes immobilized. All provisions are fully reciprocal. Nuclear cooperation agreements are required before exports of nuclear material, equipment or technology can take place.
- In addition, Canada supports the IAEA technical cooperation programme, as outlined in section 56.
- 39 Cooperation by Canada with other countries in the peaceful uses of nuclear energy takes fully into account the non-proliferation credentials of the prospective recipient country, as

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well as its implementation of nuclear safety standards and nuclear security guidance and recommendations.

- 40 Canada maintains the highest level of effective physical protection of nuclear materials and facilities 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 March 2018, the mandate of Canada's weapons of mass destruction threat reduction programme was indefinitely extended, which will allow Canada to continue to enhance nuclear and radiological security worldwide. Key priorities include funding for bilateral and multilateral projects to combat illicit trafficking, improve physical protection of nuclear facilities, promote safe management and disposal of radioactive sources and improve transportation security.
- 41 Consistent with the IAEA recommendations on the physical protection of nuclear material and nuclear facilities, Canada maintains strong physical protection measures for its nuclear materials, including 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.
- 42 Canada ratified the 2005 amendment to the Convention on the Physical Protection of Nuclear Material in December 2013 and welcomed its entry into force on 8 May 2016. Canada also supported a series of workshops aimed at promoting the ratification and implementation of the Convention and its 2005 amendment to countries that had not yet done so. In August 2018, Canada and the United Nations Office on Drugs and Crime (UNODC) completed an agreement that will provide over Can\$1.58 million for a three-year project to raise awareness of and build capacity to implement the International Convention for the Suppression of Acts of Nuclear Terrorism and the Convention on the Physical Protection of Nuclear Material and its 2005 amendment (see sect. 44 below for details on additional assistance projects).
- 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, as well as the Guidance on the Management of Disused Radioactive Sources, approved in September 2017.
- Through its weapons of mass destruction threat reduction programme, Canada provided funding to IAEA to allow approximately 40 experts from developing countries to participate in major international meetings between 2018 and 2020 on the Code of Conduct on the Safety and Security of Radioactive Sources.
- 44 See Action 40. In addition, Canada is active internationally in providing assistance to promoting security and physical protection of nuclear materials and facilities.
- Canada has endorsed the Proliferation Security Initiative and is an active member of its Operational Experts Group. In July 2018 and February 2019, Canada engaged in outreach activities to Caribbean and African States, respectively, to encourage wider endorsement.
- Since June 2017, Canada has been the Chair of the Nuclear Forensics Working Group of the Global Initiative to Combat Nuclear Terrorism, which aims to enhance partner countries' nuclear forensics capabilities to improve material accountancy and investigations into

material out of regulatory control, including trafficked materials. In January–February 2019 in Montreal, Canada and the United Kingdom co-hosted the “Resolute Sentry” joint exercise on nuclear detection and nuclear forensics to combat nuclear terrorism.

Canada is also providing assistance through its weapons of mass destruction threat reduction programme to remove high activity disused sealed radioactive sources from six countries in Latin America and the Caribbean; to enhance regulatory frameworks for both nuclear security and radiation safety in States in Latin America and Africa; to strengthen nuclear security in Ukraine; to support the INTERPOL subdirectorates for chemical, biological, radiological, nuclear and explosive materials to conduct capacity-building activities in Latin America and South-East Asia; and to strengthen border security, counter nuclear smuggling and build critical incident response capacity in Jordan.

- 45 Canada ratified the International Convention for the Suppression of Acts of Nuclear Terrorism in November 2013. Fulfilling an action item in the 2016 Nuclear Security Summit action plan in support of the United Nations, Canada co-hosted with UNODC an event celebrating the tenth anniversary of the entry into force of the Convention on 5 December 2017. States parties met to take stock of implementation efforts and to identify areas of complementarity between the International Convention for the Suppression of Acts of Nuclear Terrorism and the Convention on the Physical Protection of Nuclear Material. This event aimed to help States parties with implementation efforts and to raise awareness among States that have yet to ratify the International Convention for the Suppression of Acts of Nuclear Terrorism. Under Canada’s 2018 G7 presidency, joint demarches were conducted to encourage countries that have signed but not yet ratified the International Convention for the Suppression of Acts of Nuclear Terrorism to join the Convention, in order to help with universalization and implementation.
- 46 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. Canada continues to work with IAEA to implement the updated State-level approach for Canada.

Peaceful uses of nuclear energy

- 47 Canada has an indigenous nuclear power reactor system and a broad, diverse nuclear sector, and is a reliable supplier of uranium, nuclear equipment and technology and radioisotopes.
- 48 Canada has 30 nuclear cooperation agreements in place covering 48 States, in addition to a wide range of memorandums of understanding facilitating increased cooperation with partner countries and institutions. As part of efforts to promote and encourage peaceful uses of nuclear under the Non-Proliferation Treaty, and in a manner that is fully consistent with the international nuclear non-proliferation regime, Canada has co-sponsored the French-led working paper titled “Framework for Peaceful Nuclear Cooperation” ([NPT/CONF.2020/PC.II/WP.8](#)) as a step to promote our policy for nuclear cooperation.
- 49 Canada provides experts, equipment and technology to many IAEA member States through technical cooperation projects. In addition, Canada has nuclear cooperation agreements in place with many developing countries. Canada provides expertise to support IAEA technical cooperation activities and regularly hosts related events in Canada. Through the weapons of mass destruction threat reduction programme, Canada has provided over \$54.5 million since 2012 to the IAEA Nuclear Security Fund to implement capacity-building projects that enhance nuclear and radiological security worldwide, particularly in developing areas of the world, which has the effect of enhancing the accessibility of nuclear energy for peaceful purposes. This includes a Can\$9.65 million contribution to enhance nuclear security through

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- the sustainable management of disused sealed radioactive sources in Latin America, Africa and the Pacific.
- 50 See action 49 for information on Canada's nuclear cooperation with developing countries.
- 51 See actions 38 and 39 for information on Canada's nuclear cooperation.
- 52 In the context of the IAEA Technical Assistance and Cooperation Committee, the Board of Governors and General Conference, Canada regularly proposes initiatives to improve the governance and management of the Technical Cooperation Programme, including: greater strategic management of the Programme; encouraging IAEA member States to pay their voluntary assessed contribution to the Technical Cooperation Fund in full and on time; encouraging countries in a position to do so to contribute to funding their own technical cooperation projects through the government cost-sharing mechanism rather than drawing from the Technical Cooperation Fund; and encouraging the implementation of outcome monitoring for all technical cooperation projects.
- 53 Canada continues its long-standing efforts to improve governance and management of the IAEA Technical Cooperation Fund through the IAEA policymaking organs and relevant working groups. Despite some progress in recent years, additional work remains to be done in the areas of strategic management, outcome monitoring, which countries draw on the Fund and member State payment of contributions to the Fund. Canada will continue to engage IAEA member States to encourage positive changes in these areas, which also contribute to our mutual commitment towards the Sustainable Development Goals.
- 54 Approaching a rate of attainment of voluntary assessed contributions to the Technical Cooperation Fund of 100 per cent is an important step towards ensuring sufficient, assured and predictable resources for the IAEA technical cooperation activities. Canada paid its 2019 voluntary assessed contribution to the Technical Cooperation Fund in full and on time and advocates consistently for all IAEA member States to do the same. In addition, Canada continues to advocate for improved governance measures of the Technical Cooperation Fund, including strengthening the application of the due account mechanism.
- 55 Canada has contributed Can\$38 million to the IAEA Peaceful Uses Initiative since 2016 and provides in-kind resources to Peaceful Uses Initiative projects.
- 56 Canada is an active and regular contributor to the IAEA Technical Cooperation Programme, including through provision of expertise and support. Canada continues to host fellowship participants and scientific visitors from the Americas, Asia, Africa and Europe, as well as Technical Cooperation Programme meetings in the areas of nuclear safety and regulatory activities. Canadian lecturers and experts have contributed to technical training in the areas of human health, agriculture and food security, water and the environment, energy, radiation technology and security and safety.
- 57 See actions 24, 28 and 42 for information on comprehensive safeguards agreements, the additional protocol and the Convention on the Physical Protection of Nuclear Material.
- The Nuclear Energy Act of 1985 (amended in 1997) relates to the development and utilization of nuclear energy in Canada.
- The Nuclear Safety and Control Act came into force in May 2000, replacing the Atomic Energy Control Act. The Nuclear Safety and Control Act established the Canadian Nuclear Safety Commission as the national regulator and set out its mandate, responsibilities and powers. These include domestically regulating the development, production and use of nuclear energy and materials to protect health, safety, security and the environment and to implement Canada's international commitments to the peaceful use of nuclear energy.

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- 58 Canada supported the decision of the IAEA Board of Governors in December 2010 to establish an IAEA low enriched uranium bank. Canada welcomes the progress made to date in establishing the bank and in bringing it towards operation. Canada will continue to assess proposed fuel assurance mechanisms based on their individual merits.
- 59 Canada ratified the Convention on Early Notification of a Nuclear Accident in January 1990.
- Canada ratified the Convention on Nuclear Safety in December 1995.
- Canada ratified the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management in May 1998.
- Canada ratified the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency in August 2002.
- See actions 42 and 45 for more information on the amendment to the Convention on the Physical Protection of Nuclear Material and the International Convention for the Suppression of Acts of Nuclear Terrorism. Canada had ratified both instruments as of December 2013.
- 60 Canada is providing funding through its weapons of mass destruction threat reduction programme to the World Institute for Nuclear Security to develop a nuclear security support centre in Mexico that will provide the Central American region with additional support in enhancing nuclear security, including through the provision of certified training.
- Canada continues to provide in-kind support to IAEA for the development of IAEA safety standards and IAEA Nuclear Security Series documents. Canada actively participates in the review meetings of the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management and presided over the 2017 Convention on Nuclear Safety review meeting.
- In addition, one of the main themes of Canada's G7 presidency in 2018 in the context of the Nuclear Safety and Security Group was engagement with the nuclear industry and the private sector on nuclear safety and security.
- 61 Canada is making good progress on its initiatives to reduce stocks of highly enriched uranium (HEU), including by repatriating HEU to the United States of America, in accordance with previous Nuclear Security Summit commitments to repatriate HEU spent fuel originating from the United States in 2010 and HEU liquid in 2012.
- At the 2014 Nuclear Security Summit, leaders agreed to continue minimizing the use of HEU in the production of medical isotopes, and in October 2016 Canada ceased routine production of the medical isotope molybdenum-99 (Mo-99) at the National Research Universal reactor. From November 2016 to March 2018, the reactor remained in "hot standby" mode to produce isotopes as an "international supplier of last resort" in the event of a prolonged and unforecast global shortage that cannot otherwise be mitigated. The reactor was decommissioned in March 2018 and HEU is being repatriated to the United States. Consistent with its Nuclear Security Summit commitments, Canada is also decommissioning HEU-fuelled research reactors at the University of Alberta and the Saskatchewan Research Council. Canada participated in the International Symposium on HEU Minimization and Elimination, hosted by Norway in June 2018, in order to take stock of international minimization and elimination efforts to date and to share updates on minimization efforts.
- 62 Canadian transport regulations for radioactive materials are based on the IAEA Regulations for the Safe Transport of Radioactive Material.

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- 63 On 1 January 2017, the Nuclear Liability and Compensation Act entered into force. Canada ratified the Convention on Supplementary Compensation for Nuclear Damage in June 2017.
- Canada will be hosting an inaugural meeting of the parties and signatories to the Convention on Supplementary Compensation for Nuclear Damage in Ottawa on June 4 and 5 2019. This meeting will provide parties with a forum to discuss matters relating to their implementation of the Convention, discuss opportunities for expanded participation in the Convention, and discuss long-term engagement amongst Convention countries.
- 64 Canada notes and reaffirms the consensus reached at the fifty-third session of the IAEA General Conference 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 IAEA statute.
-