# 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

Distr.: General 30 August 2021

Original: English

New York, 4-28 January 2022

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

# Report submitted by Belgium

1. The present report is submitted pursuant to 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 (NPT/CONF.2010/50 (Vol. I)). That action plan stipulates that "States parties should submit regular reports, within the framework of the strengthened review process for the Treaty, on the implementation of the present action plan, as well as of article VI, paragraph 4 (c), of the 1995 decision entitled 'Principles and objectives for nuclear non-proliferation and disarmament', and the practical steps agreed to in the Final Document of the 2000 Review Conference, and recalling the advisory opinion of the International Court of Justice of 8 July 1996."

# Pillar I. Nuclear disarmament

Policy, principles and objectives

- 2. Belgium is firmly committed to the goal of a world without nuclear weapons. This goal must be achieved through a gradual process of concrete, irreversible and verifiable reductions. Belgium is in favour of a building blocks or progressive approach, whereby parallel and simultaneous steps are taken to make progress towards global zero.
- 3. We are convinced that the Non-Proliferation Treaty should remain the essential foundation for the pursuit of nuclear disarmament. No other instrument is better defined or equipped to guide us on the path towards the global zero. It is therefore essential that the Treaty becomes truly universal. India, Israel and Pakistan should join the Treaty as non-nuclear-weapon States. At the same time, true universality is only achievable if the integrity of the Treaty is preserved. Those that violate the Treaty should be held accountable and return to compliance.
- 4. In its coalition agreement of 2020, the Government stated that: "Belgium will play a proactive role in the NPT Review Conference in 2021 and, together with its European NATO allies, it will examine how to strengthen the multilateral





non-proliferation framework and how the UN Treaty on the Prohibition of Nuclear Weapons could give new impetus to multilateral nuclear disarmament."

- 5. Belgium is in favour of realistic proposals that lead to practical and effective disarmament. All nuclear-weapon States should reduce the size of their nuclear arsenals, diminish the role of nuclear weapons in military doctrine and security policies and decrease the operational readiness of nuclear weapons systems. All nuclear-weapon States should increase transparency with respect to their arsenals.
- 6. We welcome the full implementation of the New START Treaty between the United States of America and the Russian Federation, in accordance with the time schedule of the Treaty. In the run-up to its expiry date of 5 February 2021, Belgium repeatedly called upon the United States and the Russian Federation to extend the Treaty for a further five years, both in bilateral consultations and at international meetings. Belgium welcomes the extension of the New START Treaty as agreed in early 2021. The United States and the Russian Federation should now seek further reductions of all types of nuclear weapons, including strategic, non-strategic, deployed and non-deployed weapons.
- 7. We encourage the United States and the Russian Federation to include non-strategic nuclear weapons in the next round of their bilateral nuclear weapons reduction and to further develop transparency and confidence-building measures. A first step could be to report on the current status of the implementation of the 1991 and 1992 Presidential nuclear initiatives and to consider verification measures.
- 8. Belgium acknowledges the progress made by the United Kingdom of Great Britain and Northern Ireland and France in reducing their nuclear stockpiles and delivery systems. We regret the increase by the United Kingdom in the cap on its overall nuclear warheads stockpile and the decrease in transparency, as announced in the "Integrated Review of Security, Defence, Development and Foreign Policy" of March 2021.
- 9. We call upon the nuclear-weapon States to accept and conform to a common yardstick of commitments. In this regard, we note that China is the only nuclear-weapon State not to have declared a formal and irreversible stop to the production of fissile material for nuclear weapons use. We also regret that China is the only nuclear-weapon State still increasing its nuclear stockpile. We call upon it to demonstrate more transparency on its doctrine and stockpile.
- 10. Belgium supports the promotion of nuclear disarmament in the international organizations of which it is a member. The European Union supports the goal of a world without nuclear weapons through its statements and working documents in multilateral forums and through its contribution to non-proliferation and disarmament initiatives, for example, Council decision (CFSP) 2019/615 in support for activities leading up to the 2020 Review Conference. The North Atlantic Treaty Organization (NATO) has reduced the role, numbers and readiness of nuclear weapons in its defence posture, confirmed the de-targeting and de-alerting status of the nuclear components and promoted increased transparency and nuclear confidence-building measures. NATO acknowledges that the circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote. NATO allies also support the ultimate goal of a world without nuclear weapons.
- 11. As a non-permanent member of the Security Council (2019–2020), Belgium organized a briefing in preparation of the Review Conference of the Non-Proliferation Treaty and in commemoration of the fiftieth anniversary of the entry into force of the Treaty during its presidency of the Council, on 26 February 2020. In a Security Council statement to the press, issued on that occasion, all Security Council members

- committed to working towards a successful Review Conference and reaffirmed the goal of a world without nuclear weapons.
- 12. Belgium is concerned about the catastrophic humanitarian impact of a nuclear detonation. It therefore supports efforts to reduce the risk of intentional or inadvertent use of nuclear weapons. Belgium cooperates with civil society on this issue. At the thirty-second International Conference of the Red Cross and Red Crescent, in 2015, the Belgian authorities committed to a joint pledge with the Belgian Red Cross regarding a "dialogue on the humanitarian impact of nuclear weapons". At the thirty-third International Conference of the Red Cross and Red Crescent, in 2019, a joint pledge with the Belgian Red Cross regarding "nuclear weapons support for risk reduction measures and other confidence-building measures" was announced.
- 13. In 2016, Belgium participated actively in the Open-ended Working Group taking forward multilateral nuclear disarmament negotiations. It co-authored the following three working documents: "A progressive approach to a world free of nuclear weapons: revisiting the building blocks paradigm" (A/AC.286/WP.9), "The road to zero: the progressive approach" (A/AC.286/WP.25/Rev.1) and "Security assurances" (A/AC.286/WP.26/Rev.1).
- 14. Belgium actively supports the work of the Conference on Disarmament, including the working groups and subsidiary bodies dealing with nuclear disarmament and security assurances.
- 15. Within the framework of the United Nations, Belgium supports a variety of resolutions calling for nuclear disarmament, reducing the operational readiness of nuclear weapons and other related issues. Belgium is co-sponsor of the General Assembly resolutions on the Comprehensive Nuclear-Test-Ban Treaty; united action towards the total elimination of nuclear weapons; joint courses of action and future-oriented dialogue towards a world without nuclear weapons (2019); nuclear disarmament verification; the Treaty on a Nuclear Weapon-Free Zone in Central Asia; The Hague Code of Conduct against Ballistic Missile Proliferation; preventing the acquisition by terrorists of radioactive sources; and measures to prevent terrorists from acquiring weapons of mass destruction.

#### Nuclear-weapon-free zones

- 16. Belgium acknowledges the contribution that nuclear-weapon-free zones can make to regional and global peace and security.
- 17. Belgium is committed to the implementation of the resolution on the Middle East adopted by the Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons in 1995. It supports the establishment of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems based on arrangements freely arrived at between all States of the region. It is concerned that the first confirmed use of a weapon of mass destruction in the twenty-first century took place in that region, namely, the chemical weapons attack by the Syrian Arab Republic against its own civilian population.

#### Comprehensive Nuclear-Test-Ban Treaty

18. The support of Belgium for the Comprehensive Nuclear-Test-Ban Treaty is long-standing. In 1996, it submitted the final treaty text to the Conference on Disarmament as a national paper (CD/1427). This allowed the Conference to forward the treaty to the General Assembly, which endorsed it based on a resolution introduced by Australia. Belgium ratified the Treaty on 29 June 1999. Belgium calls upon all States concerned to adhere to the Treaty without further delay. A special responsibility rests with the States in annex 2 thereto, which hold the key to the entry into force of

**3/10** 

the Treaty. We believe that adherence should not be made contingent upon the position of other States.

- 19. As a member of the European Union, Belgium participates actively and financially in the efforts to promote the universalization of the Comprehensive Nuclear-Test-Ban Treaty. From September 2017 to September 2019, Belgium served as co-coordinator, together with Iraq, of the article XIV process on facilitating the entry into force of the Treaty. During that period, Thailand and Zimbabwe ratified the Treaty, and Tuvalu signed it. In addition to démarches to States not yet party to the Treaty, Belgium organized an international conference on the Treaty in Brussels, entitled "Towards a world without nuclear tests: fulfilling the promise" (22 May 2018). The Minister for Foreign Affairs of Belgium, together with his Iraqi counterpart and the Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization, published an op-ed in leading international newspapers entitled "Why prohibiting nuclear testing matters, and what we can do about it" (September 2017). The Ministers for Foreign Affairs of Belgium and Iraq and the Executive Secretary of the Provisional Technical Secretariat of the Comprehensive Nuclear-Test-Ban Treaty Organization made a joint appeal on the eve of the Singapore Summit meeting between the Democratic People's Republic of Korea and the United States, calling for the signature and ratification of the Treaty by the Democratic People's Republic of Korea. The Minister for Foreign Affairs of Belgium participated in the ninth Ministerial Meeting in Support of the Comprehensive Nuclear-Test-Ban Treaty, organized by the Friends of the Comprehensive Nuclear-Test-Ban Treaty in New York on 27 September 2018. Together with nine other States, Belgium published a working document on the interlinkage between the Comprehensive Nuclear-Test-Ban Treaty and the Non-Proliferation Treaty in the framework of the third Preparatory Committee for the Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons in New York in 2019 (NPT/CONF.2020/PC.III/WP.28). Belgium published several press releases on the issue of the Comprehensive Nuclear-Test-Ban Treaty with an appeal to the States in annex 2 thereto to join the Treaty. Belgian representatives participated in several side events on the Comprehensive Nuclear-Test-Ban Treaty in the margins of Non-Proliferation Treaty meetings.
- 20. In order to strengthen the verification regime of the Preparatory Commission of the Comprehensive Nuclear-Test-Ban Treaty Organization, Belgium contributes to the efforts to minimize the interference of radioxenon releases with the capability of the International Monitoring System to detect nuclear explosions. The Belgian Nuclear Research Centre (SCK CEN), in collaboration with the Institute for Radioelements, and financed in the context of the European Union Council decisions V and VI in support of the Comprehensive Nuclear-Test-Ban Treaty, has studied possible options to mitigate radioxenon stemming from medical isotope production facilities. In the context of European Union Council decision VII, the Belgian Nuclear Research Centre investigates new adsorption materials for xenon collection and purification from air for use in International Monitoring System stations.
- 21. Furthermore, the relevant Belgian institutions are dedicating important research and development efforts to developing new options to efficiently trap radioxenon from medical isotope facilities and to build a mobile demonstration set-up. Other research and development efforts in support of the Comprehensive Nuclear-Test-Ban Treaty Organization are related to the modelling of atmospheric transport and dispersion, especially concerning the uncertainty quantification of such model calculations.
- 22. Belgium hosted a Comprehensive Nuclear-Test-Ban Treaty Organization workshop on "Signatures of medical and industrial isotope production" in May 2015, in close cooperation with the United States Department of Energy. This workshop

helped to better understand the issue of radioxenon releases and to deepen the dialogue between producers and the scientific community.

23. Belgium, the Netherlands and Luxembourg signed a memorandum of understanding in January 2019, which formalizes the exchange and pooling of expertise between the national data centres and scientists of the three States. This is the first example of such regional cooperation under the Comprehensive Nuclear-Test-Ban Treaty, and it contributes to confidence in the verifiability of the Treaty.

# Fissile material cut-off treaty

24. Another crucial building block is the conclusion of a fissile material cut-off treaty aimed at banning the production of fissile materials for nuclear weapons or other nuclear explosive devices. Belgium supported the work undertaken by the Group of Governmental Experts, created by the General Assembly in its resolution 67/53, between 2012 and 2015. Belgium also supported the creation of the high-level fissile material cut-off treaty expert preparatory group, created by the Assembly in its resolution 71/259. It presented its views at the two informal open-ended meetings organized in New York in 2017 and 2018. Belgium supports the immediate commencement of negotiations of a fissile material cut-off treaty, which is the next logical step along the path towards a world without nuclear weapons. Pending such a treaty, all States possessing nuclear weapons should maintain or declare a moratorium on the production of fissile material for nuclear weapons purposes.

#### Nuclear disarmament verification

25. Belgium has been a member of the International Partnership for Nuclear Disarmament Verification since its creation in 2015. In September 2019, Belgium organized an exercise for members of the Partnership at its Nuclear Research Centre, in Mol. The main aim was to test nuclear measurement methods that can distinguish various isotopic compositions of plutonium from one another. In addition, the capacity of the methods to distinguish between various quantities of plutonium was tested.

# Transparency and reporting

26. Transparency is an essential element for nuclear disarmament, together with irreversibility and verifiability. Belgium supports efforts to establish a standard reporting form. The present report is guided by the national reporting template as proposed by the Non-Proliferation and Disarmament Initiative (NPT/CONF.2020/PC.III/WP.24, annex).

#### Education

27. In cooperation with civil society, Belgium promotes disarmament and non-proliferation education, which, inter alia, contributes to raising public awareness of the catastrophic consequences of any use of nuclear weapons. Representatives of the Government have participated in panels and conferences organized by the International Conference of the Red Cross and Red Crescent, non-governmental organizations and think tank institutions. Belgium is a co-signatory of the joint statement, introduced by Japan at the Preparatory Committee sessions, on practical measures for promoting disarmament and non-proliferation education.

# Pillar II. Nuclear non-proliferation

#### Universalization

28. Belgium regularly calls upon India, Israel and Pakistan to join the Non-Proliferation Treaty as non-nuclear-weapon States. After the aforementioned Security Council meeting on 26 February 2020, a reference to the importance of

21-12019 5/10

universalization was included in the press remarks that Belgium made on behalf of the Security Council members.

# Safeguards

- 29. Belgium supports the essential role of the International Atomic Energy Agency (IAEA) in providing the international community with credible assurances about the exclusively peaceful nature of nuclear programmes. Belgium is of the view that a comprehensive safeguards agreement, combined with an additional protocol, constitutes the current verification standard. Belgium regularly calls upon States that have not done so to conclude such agreements at the earliest possible date. Belgium brought into force a safeguards agreement in 1977, and an additional protocol was concluded in 1998.
- 30. The Belgian Nuclear Research Centre is host to numerous IAEA training activities. In 2015, an international agreement with IAEA on training and education was signed. Belgium gave a voluntary contribution for the replacement of the large geometry secondary ion mass spectrometer at the IAEA Safeguards Laboratory in Seibersdorf.

## Export control

- 31. Belgium contributes to non-proliferation efforts through its system of robust export controls, which ensures that nuclear materials and nuclear technology will be used for peaceful purposes only. Export control is governed by Council regulation (EC) N°428/2009 of the European Union on dual-use items, complemented by dedicated national legislation. Belgium is a member of the Zangger Committee and the Nuclear Suppliers Group. Nuclear transfers between Belgium and other States are fully consistent with the guidelines under the Zangger Committee and the Nuclear Suppliers Group.
- 32. Belgium was chair of the Nuclear Suppliers Group for the period 2020–2021. The plenary meeting of the Nuclear Suppliers Group took place in Brussels from 21 to 25 June 2021.
- 33. As a member of the European Union, Belgium contributes to the efforts to facilitate the implementation of Security Council resolution 1540 (2004) throughout the world.

#### *Nuclear security*

- 34. Belgium has a robust nuclear security regime for its civilian nuclear installations. Over the last years, Belgium has strengthened and updated its legal and regulatory framework regarding the physical protection of nuclear installations. Legislation has been adopted in compliance with the relevant international conventions to which it is a party, namely, the Convention on the Physical Protection of Nuclear Material and its 2005 Amendment, and the International Convention for the Suppression of Acts of Nuclear Terrorism. In addition, the legal and regulatory framework reflects IAEA INFCIRC/225, as revised, and other documents from the IAEA Nuclear Security Series.
- 35. The nuclear security infrastructure was reinforced in terms of response forces, cybersecurity and security of radioactive materials. A specialized protection force within the Federal Police was created. Deployed at the nuclear sites, these police units ensure a permanent armed response capacity.
- 36. Belgium commends the value of the International Nuclear Security Advisory Service of IAEA. In 2019, it hosted an International Physical Protection Advisory Service follow-up mission covering, inter alia, computer security and regulations for

- facilities holding radioactive sources. The Advisory Service team observed a significant enhancement of the nuclear security regime since its previous mission in 2014. Belgium has also provided national experts to several International Physical Protection Advisory Service missions in other States.
- 37. The Belgian Federal Agency for Nuclear Control, together with the United States National Nuclear Security Administration, organized a symposium on insider threat mitigation in March 2019, in Brussels. The purpose of the symposium was to provide an international forum to discuss challenges to insider threat mitigation, share best practices and encourage additional subscribers to the "Joint statement on mitigating insider threats" (INFCIRC/908). At the International Conference on Nuclear Security, held in February 2020 in Vienna, Belgium and the United States organized a side event to review the outcome of the symposium and to present the terms of reference of the Advancing Insider Threat Mitigation Working Group. In 2022, the Belgian Federal Agency for Nuclear Control will host an IAEA international advanced training course on the same topic.
- 38. Belgium believes that a secure, sustainable and sufficient financial footing is needed for the IAEA nuclear security work, including from the regular budget, within existing resources. Since 2010, Belgium has made regular voluntary contributions to the IAEA Nuclear Security Fund. Its contributions for the period from 2015 to 2020 total over €700,000.
- 39. Belgium participated in the Nuclear Security Summit process from its start in 2010 to its conclusion in Washington, D.C. in 2016. This multinational initiative has improved the security of nuclear material worldwide and thus reduced the chances of such material falling into the hands of terrorists or criminals. Apart from fully supporting the outcome of those summits, Belgium has committed itself to several voluntary initiatives, the "gift baskets".
- 40. Belgian experts are actively engaged in international exchanges and nuclear or radiological material security training programmes, inter alia, those offered by the Belgian Federal Agency for Nuclear Control. In October 2021, Belgium will host the third International Seminar to Share Experience and Best Practices from Conducting International Physical Protection Advisory Service Missions.
- 41. Belgium applies the principles of the revised IAEA Code of Conduct on the Safety and Security of Radioactive Sources. Belgium is a co-sponsor of the biannual General Assembly resolution on preventing the acquisition by terrorists of radioactive sources.
- 42. Belgium is a member of the Proliferation Security Initiative, the G7 Global Partnership against the Spread of Weapons and Materials of Mass Destruction and the Global Initiative to Combat Nuclear Terrorism.

# Compliance and other issues

43. Ensuring compliance with non-proliferation commitments is a prerequisite for preserving the integrity of the Non-Proliferation Treaty. Belgium has added its voice to the condemnations by the European Union of the nuclear tests and the ballistic missile launches carried out by the Democratic People's Republic of Korea in contravention of its obligations under the Treaty and relevant Security Council resolutions. During its mandate as a non-permanent member of the Security Council (2019–2020), Belgium continuously pleaded for the complete, verifiable and irreversible denuclearization of the Democratic People's Republic of Korea within the framework of the Non-Proliferation Treaty and the Comprehensive Nuclear-Test-Ban Treaty. Belgium scrupulously implements all United Nations and European Union sanctions against the Democratic People's Republic of Korea. Belgium has

21-12019 7/10

financially contributed to the IAEA "enhanced readiness" programme regarding the Democratic People's Republic of Korea. It also trained IAEA inspectors in the field of plutonium measurement methods.

- 44. Belgium supports the Joint Comprehensive Plan of Action aimed at guaranteeing the exclusively peaceful nature of the nuclear programme of the Islamic Republic of Iran. The Permanent Representative of Belgium to the United Nations in New York was the facilitator of the Security Council regarding the implementation of resolution 2231 (2015), endorsing the Plan of Action, during the period 2019–2020. In the difficult context of the notification of the alleged snapback by the United States (from August 2020 onwards), Belgium acted as an "honest broker" among the diverging views of the members of the Security Council. This approach was paramount to successfully preserving the integrity of the working structures of resolution 2231 (2015), paving the way for the re-engagement by all parties. Belgium has voluntarily contributed €800,000 in total to fund the enhanced verification activities of IAEA in the Islamic Republic of Iran. In order to facilitate legitimate trade and financial operations with the Islamic Republic of Iran, as allowed under the Plan of Action, Belgium joined the Instrument in Support of Trade Exchanges. Belgium regretted the decision in 2018 of the then United States Administration to pull out of the Plan of Action. The Islamic Republic of Iran, for its part, should reverse all the decisions taken since 2019 that are inconsistent with the Plan of Action. Belgium has made this position clear, inter alia, in the IAEA Board of Governors, of which it was a member (2017-2020).
- 45. Belgium is deeply concerned by the continued non-compliance of the Syrian Arab Republic with its IAEA safeguards agreement in connection with its construction of an undeclared nuclear reactor in Dayr al-Zawr. Belgium has joined other States in statements deploring the failure of the Syrian Arab Republic to respond to the IAEA Director General's calls for cooperation in connection with unresolved issues arising from its non-compliance.

# Pillar III. Peaceful uses of nuclear energy

- 46. Belgium has seven nuclear reactors generating about half of its electricity. Its first commercial nuclear power reactor began operating in 1974. In 2025, Belgium will cease the production of electricity based on nuclear fission technology. However, it will continue its activities in other peaceful uses, such as the production of radioisotopes for medical purposes, as well as its nuclear research.
- 47. Belgium decided to start the construction of the innovative accelerator-driven reactor project MYRRHA (multi-purpose hybrid research reactor for high-tech applications) of the Belgian Nuclear Research Centre. The first phase of this research facility is expected to be operational by the end of 2026. The new lead-bismuth-cooled research reactor will be used for several strategic purposes: research in transmutation of spent fuel, research in new nuclear materials and continued research and production of new radioisotopes for medical purposes. Transmutation of spent nuclear fuel could facilitate its sustainable geological disposal by reducing the radiotoxicity and/or thermal output, thereby directly optimizing the footprint of such a disposal facility.

# International cooperation

48. Belgium has actively contributed to enhancing civil nuclear energy cooperation by means of bilateral nuclear cooperation agreements and European Atomic Energy Community cooperation agreements. Belgium has nuclear bilateral agreements in force with China (1985), France (1966, 1981, 1984 and 2014), India (1965), the Republic of Korea (1981), Lithuania (1978 and 1998), Luxembourg (1970, 2002 and

- 2004), the Netherlands (1984 and 1990), Romania (1974), the Russian Federation (1993) and the United States (1962 and 1983). The Belgo-Luxembourg Economic Union concluded bilateral agreements with China (1979) and Poland (1973).
- 49. Thanks to the membership of its Nuclear Research Centre in the International Centres based on Research Reactors, Belgium is able to put its research and facilities at the disposal of researchers of IAEA member States for education, training and joint research and development.
- 50. Belgium always attains the target rate of the voluntary assessed contributions to the IAEA Technical Cooperation Fund. In addition, it has made further voluntary contributions, focusing on the renewal of the nuclear laboratories at Seibersdorf, safeguards implementation, radiotherapy and nuclear medicine, agricultural development and the fight against zoonotic diseases. It regularly accepts fellowships on its territory in the framework of the IAEA technical cooperation programme.
- 51. Belgium contributes to the work of IAEA, notably through the organization of workshops and training courses and the participation in research programmes. The Belgian Nuclear Research Centre is a founder of the IAEA Underground Research Facilities Network for Geological Disposal.

# Nuclear safety

- 52. Belgium supports the highest standards of nuclear safety and is a party to the relevant treaties, notably 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 and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.
- 53. Belgium makes use of the IAEA safety instruments and peer review services. During the present review cycle, it received a follow-up mission in 2017 of the Integrated Regulatory Review Service and two missions (in 2015 and 2017) and two follow-up missions (in 2016 and 2019) of the Safety Aspects of Long Term Operation. In the future, it will also receive missions of the Operational Safety Review Team, the Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation, the Integrated Safety Assessment of Research Reactors and the Integrated Regulatory Review Service.

## Minimization of sensitive nuclear material

- 54. Belgium is committed to the efforts to minimize the use of highly enriched uranium for civilian purposes, when economically and technically feasible. It has been working towards the timely conversion to low enriched uranium of the high-performance research reactor BR2 of the Belgian Nuclear Research Centre, and the processing facility of the Institute for Radioelements for medical radioisotopes.
- 55. The Belgian Nuclear Research Centre is actively leading international efforts to design and qualify in the BR2 reactor different high-density low enriched uranium fuels, which are candidates to replace highly enriched uranium fuel, not only for its own reactor BR2, but also for high-performance reactors in France and the United States.
- 56. The Institute for Radioelements delivered its first commercial batch of low enriched uranium-based Mo-99 in 2020 and is in the final stages of converting its processing facilities to low enriched uranium, in close cooperation with the appropriate institutions of the United States. While this complex process is under way, Belgium continues to guarantee the production of medical radioisotopes, an essential contribution to human health care worldwide.

21-12019 **9/10** 

- 57. On 11 February 2020, the United States and Belgium announced a joint commitment to minimizing the use of highly enriched uranium for civilian purposes. Belgium reaffirmed its commitment to timely completing the conversion of its medical isotope production facility and its nuclear research centre to low enriched uranium.
- 58. The Belgian Nuclear Research Centre and the Institute for Radioelements are implementing a structural solution for the management of all excess irradiated highly enriched uranium and future irradiated low enriched uranium stemming from the production of radioactive isotopes by downblending and purifying it to low enriched uranium in the RECUMO facility under construction at the Belgian Nuclear Research Centre.

# *Nuclear liability*

59. Belgium is a party to the Convention on Third Party Liability in the Field of Nuclear Energy, the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention and the Convention on Supplementary Compensation for Nuclear Damage.