

# General Conference

**GC(67)/OR.4**

Issued: June 2024

**General Distribution**

Original: English

---

## Sixty-seventh regular session

# Plenary

## Record of the Fourth Meeting

*Held at Headquarters, Vienna, on Tuesday, 26 September 2023, at 3.05 p.m.*

**President:** Ms MANGKLATANAKUL (Thailand)

**Later:** Mr USTINOV (Russian Federation)

**Later:** Mr BIGGS (Australia)

**Later:** Ms MANGKLATANAKUL (Thailand)

## Contents

Item of the agenda <sup>1</sup>	Paragraphs
7	General debate and Annual Report for 2022 ( <i>continued</i> )
	1194
	Statements by the delegates of:
	Jordan
	1-8
	Slovenia
	9-18
	United Kingdom
	19-29
	Democratic Republic of the Congo
	30-40
	Monaco
	41-46
	Syrian Arab Republic
	47-58
	United Republic of Tanzania
	59-64
	Azerbaijan
	65-72
	Bosnia and Herzegovina
	73-78

---

<sup>1</sup> GC(67)/24

## Contents (continued)

	Paragraphs
Burkina Faso	79-87
Botswana	88-96
Viet Nam	97-104
Tajikistan	105-114
Mozambique	115-122
Niger	123-132
Cambodia	133-141
Singapore	142-151
Morocco	152-159
Malaysia	160-174
Thailand	175-185
Armenia (right of reply)	186-191
Azerbaijan (right of reply)	192
Armenia (right of reply)	193-194

## Abbreviations used in this record

AFRA	African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology
ALPS	Advanced Liquid Processing System
ARASIA	Co-operative Agreement for Arab States in Asia for Research, Development and Training Related to Nuclear Science and Technology
ASEAN	Association of Southeast Asian Nations
ASEANTOM	ASEAN Network of Nuclear Regulatory Bodies on Atomic Energy
Assistance Convention	Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency
COMPASS	Comprehensive Capacity-Building Initiative for SSACs and SRAs
COVID-19	coronavirus disease 2019
CPF	Country Programme Framework
CPPNM	Convention on the Physical Protection of Nuclear Material
CSA	comprehensive safeguards agreement
CTBT	Comprehensive Nuclear-Test-Ban Treaty
DPRK	Democratic People's Republic of Korea
ENSREG	European Nuclear Safety Regulators Group
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GNSSN	Global Nuclear Safety and Security Network
GW	gigawatt
ICERR	IAEA-designated International Centre based on Research Reactor
ICONS	International Conference on Nuclear Security
imPACT	integrated missions of PACT
INIR	Integrated Nuclear Infrastructure Review

**Abbreviations used in this record (continued)**

INSServ	International Nuclear Security Advisory Service
INSSP	Integrated Nuclear Security Support Plan
IPPAS	International Physical Protection Advisory Service
IRRS	Integrated Regulatory Review Service
ISAMZ	IAEA Support and Assistance Mission to Zaporizhzhya
ISO	International Organization for Standardization
JCPOA	Joint Comprehensive Plan of Action
MW	megawatt
NDT	non-destructive testing
NPP	nuclear power plant
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NPT Review Conference	Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons
NSF	Nuclear Security Fund
NUTEC Plastics	Nuclear Technology for controlling Plastic Pollution
NWFZ	nuclear-weapon-free zone
ORPAS	Occupational Radiation Protection Appraisal Service
OSART	Operational Safety Review Team
PACT	Programme of Action for Cancer Therapy
Pelindaba Treaty	African Nuclear-Weapon-Free Zone Treaty
R&D	research and development
RASIMS	Radiation Safety Information Management System
ReNuAl	Renovation of the Nuclear Applications Laboratories
SALTO	Safety Aspects of Long Term Operation
SDGs	Sustainable Development Goals
SESAME	Synchrotron-light for Experimental Science and Applications in the Middle East
SIT	sterile insect technique

**Abbreviations used in this record**

SMR	small and medium sized or modular reactor
SQP	small quantities protocol
TC	technical cooperation
TCF	Technical Cooperation Fund
TPNW	Treaty on the Prohibition of Nuclear Weapons
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
USA	United States of America
WMDs	weapons of mass destruction
ZODIAC	Zoonotic Disease Integrated Action



## **7. General debate and Annual Report for 2022 (continued)** (GC(67)/2)

1. Mr TOUKAN (Jordan), congratulating the Director General on his reappointment and commending the Agency for the progress achieved in the peaceful uses of atomic energy, said that a number of achievements had been made within the framework of his country's national nuclear programme. In particular, the Jordan Research and Training Reactor had emerged as an important centre of education for students of the Department of Nuclear Engineering at the Jordan University of Science and Technology and for Agency-sponsored trainees from States in the region. The reactor was also continuing to produce medical radioisotopes such as iodine-131 and holmium-166 for detecting and treating thyroid cancer and liver cancer, respectively, and work was under way to license, produce and distribute technetium-99m. Jordan was also carrying out a feasibility study for lutetium-177 production and conducting R&D in the use of terbium-161.
2. With respect to industrial applications, ISO 9001 certification had been achieved for the production of iridium-192 for use in NDT, and a system for neutron transmutation doping in pure silicon crystals was being built for use in advanced electronic applications. Jordan's hosting of the International Conference on Research Reactors: Achievements, Experience and the Way to a Sustainable Future, to be held in November 2024, pointed to the status of the Jordan Nuclear Research and Training Reactor as a regional nuclear science and technology hub and an Agency-accredited training platform.
3. As for Jordan's NPP project, the relevant national institutions were working with Agency experts on the technical and economic evaluation of several SMR designs and their use and integration in accordance with national needs and requirements, in particular for electricity generation and desalination.
4. The Jordan Uranium Mining Company had been operating a pioneering yellowcake extraction plant since the start of 2021 and had produced tens of kilograms of yellowcake from hundreds of tonnes of processed uranium ore. The resulting engineering data would be used to complete the economic feasibility studies for the country's uranium extraction project.
5. SESAME continued to transform advanced scientific research in the Middle East with its five operational beamlines: the X-ray spectroscopy beamline, the spectromicroscopy infrared beamline, the materials science beamline, the soft X-ray beamline and the tomography beamline. To date, SESAME had been used for 165 laboratory research projects, which had resulted in 78 publications in advanced international scientific journals.
6. Jordan was deepening its technical cooperation with the Agency on regional capacity building in nuclear science and technology. In 2022, it had hosted 236 trainees from neighbouring and Arab States, thereby strengthening its efforts to become a recognized scientific and technical capacity building hub for the integration of nuclear power in regional projects. In addition, for the second year in a row, his country had hosted the Postgraduate Educational Course in Radiation Protection and the Safety of Radiation Sources, which was delivered in Arabic using a syllabus that took into account developments in the workflow used in Jordan's nuclear power programme.
7. Jordan's Energy and Minerals Regulatory Commission continued to oversee all peaceful uses of nuclear energy and ionizing radiation in order to ensure nuclear safety, radiation protection and

nuclear security. Underscoring the importance of joint and sustainable international efforts to strengthen the comprehensive nuclear security regime in line with regional and international obligations, Jordan reaffirmed its commitment to supporting the disarmament and non-proliferation regime and using nuclear energy only for peaceful applications that benefited all countries and peoples, in accordance with the spirit of the NPT.

8. Jordan would continue to make positive contributions to nuclear disarmament efforts, especially towards the establishment of a zone free of nuclear weapons and other WMDs in the Middle East. It reiterated that the Agency was the competent international forum for coordinating efforts to develop the peaceful uses of nuclear energy, establishing the foundations and rules of nuclear safety and combating nuclear proliferation.

9. Ms FAJON (Slovenia) said that her country had recently completed its term as a member of the Board of Governors and was preparing to become a non-permanent member of the UN Security Council for the next two years. As a strong supporter of multilateralism, Slovenia considered the Agency's work to be of the utmost importance. Moreover, the dedicated engagement of the Director General and the Agency's staff was commendable.

10. Slovenia strongly condemned the Russian Federation's unprovoked and unjustified military aggression against Ukraine and was discouraged by the precarious nuclear safety and security situation in the country. Until the Russian Federation withdrew its troops from the entire territory of Ukraine, respect for the seven indispensable pillars for ensuring nuclear safety and security during an armed conflict, as set out by the Director General, was essential. More specifically, the Russian Federation's occupation of Zaporizhzhya NPP remained a major risk factor. The importance of respecting the Director General's five concrete principles to avoid a nuclear accident in Ukraine could therefore not be overstated.

11. It was essential to ensure the nuclear safety and nuclear security of civilian nuclear infrastructure and materials in all circumstances, including during armed conflict. Slovenia commended the Agency and the team stationed at Zaporizhzhya NPP for their dedication, professionalism and impartiality in addressing the nuclear situation in Ukraine.

12. Iran's nuclear activities, which manifestly departed from the provisions of the JCPOA, remained of concern. Assurance was needed that the country's nuclear programme was exclusively peaceful. The JCPOA nuclear deal was a vital part of the global nuclear non-proliferation architecture and its regime must be preserved. Slovenia therefore called on Iran to refrain from any further escalation, reverse all activities inconsistent with the JCPOA and resume all JCPOA-related monitoring and verification measures. It also expected Iran to engage fully with the Agency in implementing all its commitments and legal obligations under its CSA.

13. Supportive of all diplomatic efforts that would lead to the complete, verifiable and irreversible de-nuclearization of the DPRK, Slovenia called on the country to refrain from its unlawful nuclear and ballistic missile tests, which constituted a grave threat to international peace and security, return to compliance with the NPT and its CSA, and sign and ratify the CTBT without delay. Until then, all States should implement fully and effectively the restrictive measures in force.

14. Slovenia strongly supported the Agency's work across the spectrum of its mandate. It welcomed the Agency's ongoing monitoring of ALPS-treated water discharge at Fukushima Daiichi NPP, appreciated Japan's transparent and cooperative approach and looked forward to the Agency's further reports on the matter.

15. Slovenia commended the transparent manner in which Australia, the UK and the USA had approached the acquisition of nuclear-powered submarines by Australia. The AUKUS partners



should continue to pursue their goals in concert with the Secretariat and with full respect for their international obligations.

16. As a country operating an NPP, Slovenia placed special emphasis on nuclear safety and security and supported the continuous development and improvement of that field. At the same time, it appreciated the Agency's work in connection with sustainable development and supported its activities with regard to a broad range of peaceful uses of nuclear energy, including as a clean and reliable energy source. Accordingly, Slovenia was pleased to be a financial supporter of the renovation of the Seibersdorf laboratories.

17. The activities of the Secretariat in pursuit of gender equality were commendable. Slovenia had made donations to the Marie Skłodowska-Curie Fellowship Programme and was pleased that the Agency had shown coherence in its approach by launching the Lise Meitner Programme for early- and mid-career women professionals. Slovenia was grateful to the Director General for all his efforts to achieve true gender parity within the Agency.

18. As a member of the UN Security Council, Slovenia would do its utmost to support the Agency's work, which was essential at a time when the international community was confronted with mounting nuclear risks.

19. Mr BOWIE (United Kingdom), expressing appreciation to the Director General and the Secretariat for their work over the past year to ensure the Agency's continued success, said that the UK would continue to give the Secretariat and the Director General its wholehearted support.

20. The UK remained resolutely committed to new nuclear. As the most reliable and clean source of energy in the world, nuclear would have a major role to play in the country's transition to a net zero economy by 2050. The UK had ambitious plans to produce a quarter of all its electricity — up to 24 GW — using nuclear power by that time, which was why it had joined the World Nuclear Association and the Emirates Nuclear Energy Corporation's Net Zero Nuclear campaign, as the inaugural government partner, and the Agency's Atoms4NetZero. Moreover, in July 2023, it had launched Great British Nuclear, an arms-length organization designed to oversee the UK's entire nuclear programme, which would provide the expert support and financial backing necessary to accelerate the growth of new nuclear projects and place the UK at the forefront of a global race to develop cutting-edge technologies.

21. Recognizing the need for advancements in decommissioning, the UK was moving forward with plans for a geological disposal facility and considering ways to speed up decommissioning and to manage radioactive waste, including new disposal routes.

22. The UK would host the 29th IAEA Fusion Energy Conference in October 2023 and planned to build a prototype fusion power plant by 2040, thereby demonstrating its commitment to innovation beyond fission, including advancing fusion technologies.

23. In addition, the UK was exploring the use of nuclear in other innovative sectors, such as nuclear medicine and space exploration.

24. With regard to the enhanced trilateral security partnership between the UK, Australia and the USA, his Government was working closely with its US and Australian partners to ensure that the nuclear-powered submarine programme set a strong precedent for safeguards and verification in naval nuclear propulsion. The UK was in regular contact with the Agency, as the Director General had reported to the Board in June 2024, and would continue to be open and transparent.

25. The UK was committed to effective nuclear security in order to uphold the nuclear non-proliferation regime and preserve public confidence in the peaceful use of nuclear technology.

26. The UK was committed to effective nuclear security in order to uphold the nuclear non-proliferation regime and preserve public confidence in the peaceful use of nuclear technology. It therefore remained one of the largest contributors to the NSF and continued to support the universalization of key nuclear security conventions and called on all States parties to ratify and implement them as soon as possible. In that connection, it welcomed the success of the first session of the Conference of the Parties to the Amendment to the CPPNM in 2022 and looked forward to ICONS 2024, which would provide an important opportunity for all States to reaffirm their collective commitment to strengthening global nuclear security.

27. The Agency could count on the UK's full support in strengthening the nuclear safeguards system, as an effective and robust system was crucial for the peaceful use of nuclear technology and energy. In that regard, the UK called upon all countries that had not yet done so to agree and ratify CSAs, revised SQPs and additional protocols. It welcomed the recent commitment by Saudi Arabia to rescind its SQP.

28. The UK remained deeply concerned about the implications for nuclear safety, security and safeguards of the Russian Federation's unprecedented and illegal control of Zaporizhzhya NPP. That country's military presence was putting the plant at risk of a nuclear accident, and the UK called for the Russian Federation's full withdrawal from the plant and the surrounding town and for the plant to be returned to the competent Ukrainian authorities. Anything less was unacceptable. Meanwhile, the tireless and important work being done by the Agency's staff in Ukraine under increasingly difficult conditions was commendable. The UK had recently pledged to supply vital fuel for Ukraine's other NPPs, with a £192 million loan guarantee to help power Ukraine over the winter and end its reliance on Russian supplies.

29. Unfortunately, there were still serious challenges to the safeguards regime on which all States depended. The UK remained deeply concerned by the Agency's ongoing investigations into possible undeclared nuclear material and activity in Iran, particularly with regard to the treatment of Agency inspectors, the outstanding discrepancy between the amount of natural uranium in the Jabr Ibn Hayan Multipurpose Research Laboratory declared by Iran and the amount verified by the Agency, and the continued lack of technically credible information that would resolve the outstanding issues at Varamin and Turqzabad. Iran had failed to fulfil its legal obligations under the NPT and provide technically credible explanations to the Agency's outstanding safeguards questions for nearly five years. Iran's decision to remove experienced Agency inspectors and deny visas to Agency officials further reflected a lack of full cooperation with the Agency. Separately, Iran continued to escalate its nuclear programme to unprecedented levels with no credible civilian justification. Nonetheless, the UK remained committed to finding a diplomatic solution to the increasingly severe threat posed to international peace and security.

30. Mr KURHENGA (Democratic Republic of the Congo), congratulating the Director General on his reappointment and sincerely thanking the Secretariat for the support provided to his country, recalled that the Democratic Republic of the Congo had been a Member State since 1961 and had enjoyed partnerships with the Agency in many areas of the peaceful use of nuclear energy, including agriculture, health, energy, mining, education and nuclear safety and security, through various regional and national TC projects.

31. Human and animal health had been a particularly fruitful area for the country's cooperation with the Agency for several years, and he underlined the importance of Agency support for nuclear medicine and the control of transboundary animal diseases, including zoonotic diseases through the ZODIAC initiative.

32. The Democratic Republic of the Congo had made progress in establishing a multidisciplinary diagnosis and radiotherapy centre, with a letter of acceptance for the project having been signed at the

national level. Land for the centre had been acquired, the architectural plans had been drawn up and soil surveys were under way. The country requested support in order to ensure the prompt and successful completion of the project.

33. In the sphere of education, the Democratic Republic of the Congo thanked the Agency for its support in establishing a graduate school of nuclear science and techniques and noted that significant progress had been made in that regard, including in curriculum development and the identification of laboratory equipment requirements. The country sought help from other Member States for human resources development and the provision of educational and research equipment.

34. The Democratic Republic of the Congo thanked the USA for agreeing to fund the strengthening of physical protection systems at the nuclear facilities of the Kinshasa Regional Nuclear Research Centre and to provide training in various aspects of nuclear security.

35. In early 2023, the Democratic Republic of the Congo had submitted its draft CPF for 2023–2028 to the Agency. It focused on six priority thematic areas, and thanks were due to the Director General and the Department of Technical Cooperation for arranging its signing during the current session of the General Conference.

36. In July 2023, the country had joined the revised, definitive AFRA Agreement, demonstrating the willingness and determination of its Government to promote the peaceful use of nuclear science and technology at the regional level.

37. The Democratic Republic of the Congo thanked the Agency for its support in organizing a recent in-service inspection of nuclear fuel and reactor components. In that regard, it requested Agency support to acquire a new control panel and train operators and regulators so as to ensure the safe operation of its reactor. The country was also investigating the possible use of particle accelerators, which had proved effective in other States.

38. The country welcomed the organization of the Agency's 2023 Scientific Forum on Nuclear Innovations for Net Zero, which included discussions on the importance of artificial intelligence, digitization and robotics in nuclear development for the benefit of humanity.

39. In terms of agriculture and food security, the Democratic Republic of the Congo remained fragile, owing to several persistent underlying factors, and so it was pleasing that the country had recently developed four new, high-yield varieties of soya plant. The country thanked the Agency for the support provided in terms of equipment and human capacity building through TC projects and AFRA, and for strengthening the country's technical capacity to ensuring food safety.

40. The Democratic Republic of the Congo remained determined to build a nuclear-weapon-free world and committed to sharing knowledge to promote the benefits of nuclear energy for peaceful purposes.

41. Ms ROSABRUNETTO (Monaco) expressed her country's appreciation for the extensive work of the Agency, under the Director General's able leadership, in particular in response to the COVID-19 pandemic and threats to global peace and security and through the implementation of Major Programmes.

42. Monaco welcomed the Agency's efforts to preserve nuclear safety, security and safeguards in Ukraine, in particular through the various expert missions that had been carried out since September 2022, with some having been led by the Director General in person, under ISAMZ.

43. In addition to its longstanding support for PACT, Monaco was committing multiyear financial support to the Rays of Hope initiative, which, through the establishment of radiotherapy units in

countries currently without such facilities, would improve care for cancer patients and lead to thousands of lives being saved. It was important to support and strengthen such work in order to provide a global framework for the well-being of the population of the whole world.

44. Protecting the marine environment from the effects of climate change was a global concern and also a major focus of Monaco's national and international policy, with Prince Albert II having a deep personal interest in ensuring that the seas and oceans were protected and could continue to act as climate regulators for the planet. Monaco welcomed the Agency's continued focus on the issue, especially through NUTEC Plastics.

45. The year 2023 marked both the centenary of the birth of Prince Rainier III, who had initiated Monaco's cooperation with the Agency, and the twenty-fifth anniversary of the IAEA Marine Environment Laboratories at their current location. The original IAEA Marine Environment Laboratory had been established in Monaco more than 60 years previously, after the country had instigated and hosted an international conference on the discharge of radioactive substances at sea. Ever since, the innovative research programmes and support offered to Member States through the laboratories had made a significant contribution to reducing the effects of pollution in the marine environment and helping to establish a range of measures to prevent the release of radioactive substances into the sea. Monaco had continued its support for the development of the laboratory premises, including in 2023 by funding specific facilities for identifying radionuclides in ALPS-treated water.

46. The Agency had a major role to play in environmental protection and the fight against climate change, and Monaco therefore welcomed the fact that the Agency would be represented at the twenty-eighth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP28) later in 2023, in Dubai. Moreover, the data collected by the Agency on plastic pollution in the marine environment would be particularly valuable in negotiations to conclude an international legally binding instrument on plastic pollution, including in the marine environment.

47. Mr OTHMAN (Syrian Arab Republic) said that his country had every confidence in the Director General's outstanding leadership as he entered his second term and assured him of Syria's cooperation in ensuring that the Agency could continue to carry out its functions with complete independence, professionalism and neutrality and preventing it from being used as a tool to further the narrow political agendas of certain States.

48. The Board of Governors' agenda item on the implementation of the safeguards agreement in his country was an example of such exploitation of the Agency by certain States. Israel's assault on Syrian territorial sovereignty in 2007 — which should have been roundly condemned — had been used as a platform to attack, demonize, blockade and exert political pressure on his country. After a decade of denial and lies, Israel's eventual acknowledgement of its responsibility for the assault should oblige the Agency to start sending inspection missions to Israel immediately. Continuing to discuss the agenda item would serve no purpose as long as Israel remained uncooperative.

49. In contrast, Syria had cooperated with the Agency in a fully transparent and flexible way. The Agency's annual reports on safeguards implementation had confirmed that Syria was complying fully with its CSA and the NPT and had responded to all periodic inspection requests on time, the most recent inspection having been carried out in May 2023.

50. Syria welcomed Iran's compliance with its obligations under the JCPOA, as confirmed in all relevant Agency reports. The Plan contained rights and responsibilities, and its successful implementation did not depend on Iran alone. All other participants must meet their obligations under the Plan, in particular those relating to the lifting of sanctions.

51. The AUKUS partnership, which involved the transfer of nuclear material to a non-nuclear-weapon State, had serious, long term ramifications for global stability and security and the nuclear non-proliferation regime.

52. With respect to the water stored at the Fukushima Daiichi NPP, Syria called on the States concerned to find an appropriate solution to prevent radioactive material entering the oceans and seas.

53. General Conference resolution GC(53)/RES/17 on Israeli nuclear capabilities was a reflection of the international community's grave concern regarding the threat posed to security and stability in the Middle East by the proliferation of nuclear weapons. Through that resolution, the General Conference had delivered the clear message that Israel should accede to the NPT and place all its nuclear facilities under comprehensive Agency safeguards.

54. Israel's aggressive conduct in the region and its continued possession of nuclear capabilities covered by neither the NPT nor a CSA posed a serious risk to the non-proliferation regime and threatened regional and international peace and security. As Israel not only refused to join the NPT or any other treaty on WMD disarmament but also possessed significant nuclear capabilities, it had no moral right to criticize cases of non-compliance with the NPT.

55. Israel continued to defy the international community, remaining outside the non-proliferation regime, and relied on the full backing of its allies — above all the USA, which applied double standards when it came to Israeli nuclear capabilities. Meanwhile, all other States in the region were committed to establishing a zone free of nuclear weapons and other WMDs in the Middle East. Intensive international action was needed to take practical steps to compel Israel to accede to the NPT as a non-nuclear-weapon State.

56. He thanked the Agency and donor States for providing radiation medicine equipment, NDT devices and other assistance in the wake of the devastating earthquake that had struck Syria and Türkiye in February 2023, especially as the compulsory economic measures imposed unilaterally on Syria by certain hostile States had prevented it from responding effectively to the earthquake. Such unjust and inhumane measures must be brought to an immediate end.

57. Syria supported all technical projects run by ARASIA. With Agency support, Syria had established and was managing the Agreement's website, launched on the occasion of its 20th anniversary, and covering the running costs of the website until July 2024. His country commended the Department of Technical Cooperation's tireless work to prepare and follow up on national and regional TC programmes.

58. Syria had benefited from advice provided through an imPACT Review mission and was implementing an ambitious national cancer control programme. It hoped to be included in Rays of Hope and looked forward, moreover, to receiving material and moral support from the Agency to establish a mini-cyclotron to increase the production of short-lived medical radioisotopes for use in treating cancer patients in the northern, eastern and coastal regions.

59. Ms NOMBO (United Republic of Tanzania), congratulating the Director General on his reappointment, said that her country acknowledged the work and support provided to Member States by the Agency to help them attain the SDGs. Tanzania continued to embrace nuclear science and technology as vital tools for achieving global development objectives in the areas of human health, food production, water management, energy and environmental protection. The country intended to strengthen its technical cooperation with the Agency through its CPF for 2023–2027, which it had recently signed, with the hope that the resources to be allocated would facilitate achievement of the objectives of the TC programme, principally contributing to the realization of SDGs 2, 3, 6, 7, 9, 12, 15 and 17 and focusing on end-user-oriented activities with visible socioeconomic impact.

60. Nuclear energy was critical for achieving global objectives for net zero carbon emissions. It was important for all Member States to work towards ensuring the use of renewable energy sources and other low carbon options to reach that goal. The theme for the 2023 Scientific Forum — Nuclear Innovations for Net Zero — would ensure that the Forum would reinvigorate the technological and economic assessment of the potential roles and contribution of nuclear energy to that goal. Tanzania recognized and appreciated the importance of and need for partnership with the Agency to ensure the strategic planning necessary for the development of an updated national energy plan and future consideration of alternative energy sources.

61. Tanzania had begun considering various options for electricity generation, including SMRs, in order to ensure that electricity was both available and affordable. The country had continued to strengthen energy policies and strategies to promote economic growth, and noted that nuclear energy was an attractive option for countries that required additional reliable and cost-effective sources of energy. Tanzania would therefore continue to build capacity in such areas, including by strengthening its partnerships and collaborations.

62. With regard to efforts to combat hunger and malnutrition, Tanzania acknowledged the Agency's work in cooperation with FAO on using nuclear technology in agriculture to develop plant varieties with specific characteristics, such as drought tolerance or increased yields. Nuclear technology in plant breeding had shown positive results in contributing to food security in Tanzania, for example through the SUPA BC rice variety that the country had developed in cooperation with the Agency and that produced increased yields of more than 60% and was resistant to disease and saline soil. Agriculture remained a main focus for Tanzania, as it continued the fight against hunger and malnutrition and aimed to improve the socioeconomic well-being of its population. In the 2024–2025 TC cycle, the country would continue developing new crop varieties using nuclear technologies so as to improve the productivity and quality of crops such as cotton, beans and maize.

63. Tanzania expressed its support for AFRA, through which efforts to strengthen nuclear technology applications would be enhanced. It was grateful to Member States that were providing extrabudgetary support to ensure successful implementation of the Agency's peaceful programmes and initiatives and urged other international partners to become involved in them.

64. In conclusion, Tanzania reaffirmed its commitment to the Agency's activities and to achieving goals to advance nuclear science and technology for the well-being of humanity, and expressed its support for the proposed plans and budget.

**Mr Ustinov (Russian Federation), Vice-President, took the Chair.**

65. Mr AMIRASLANOV (Azerbaijan), wishing the Director General great success in his second term of office, said that his country supported the Agency as the main platform for international dialogue and cooperation on the peaceful use of nuclear technologies both through its national activities and through multilateral efforts, such as by promoting the role of the Agency through the country's position as Chair of the Non-Aligned Movement over the past four years, and by participating in various activities administered by the Agency.

66. Azerbaijan had submitted its candidacy for membership of the Board of Governors and asked for the support of Member States in that regard. If elected a member of the Board, the country would use that position to support the Agency's priority areas, including cooperation regarding the peaceful uses of nuclear energy, technology for detecting illicit transfers of nuclear and radioactive materials, enhanced verification mechanisms, human resource development in nuclear physics, and improved agricultural productivity through nuclear technology.

67. Turning to the peaceful uses of nuclear technologies, Azerbaijan drew attention to its fruitful cooperation with the Agency with regard to cotton growing, monitoring and ensuring radiation safety in the environment, use of nuclear and radiation technologies for cancer diagnosis and treatment, radiation processing of materials, nuclear and radiological emergency preparedness and response, and further strengthening the national infrastructure for radioactive waste management.

68. The Agency had provided support to the country's National Center of Oncology for more than 20 years and, in that context, Azerbaijan appreciated the Agency's efforts under the Rays of Hope initiative. The country had also cooperated with the Agency on radiation monitoring in its liberated territories using cutting-edge technology, including under the First State Program on the Great Return to the Liberated Territories of the Republic of Azerbaijan.

69. Azerbaijan attached great importance to ensuring the security of nuclear and radioactive materials and, with international cooperation, was taking measures to strengthen border controls in order to prevent smuggling and trafficking of such materials, to improve the security of facilities using them, and to ensure they were transported securely. In particular, the country was taking stringent measures to establish and enhance effective border controls in recently liberated areas to ensure that those territories were no longer used for illegal purposes, including the trafficking of nuclear and radioactive materials.

70. The country was committed to international cooperation for nuclear security and the universalization and implementation of the Amendment to the CPPNM, and highly appreciated the establishment of the Agency's Nuclear Security Training and Development Centre. It also supported efforts to enhance nuclear safety, including by addressing the safety challenges posed by nuclear reactors. Although Azerbaijan fully respected the right of States to pursue the peaceful use of nuclear technologies to meet their needs, the inherently transboundary impact of such technologies should be duly taken into account.

71. Azerbaijan remained concerned by the safety risks posed to the region by the Metsamor NPP in Armenia, which was located in a highly seismic area and, having been built between 1976 and 1980, was based on outdated technology and had been subject to wear and tear. Azerbaijan appreciated the Agency's efforts to strengthen the security and safety of civilian nuclear facilities worldwide and called on Armenia to comply with Agency recommendations in that regard and take the necessary steps to address the concerns of neighbouring States in a transparent manner, in line with its international obligations.

72. In conclusion, he expressed Azerbaijan's appreciation for the Agency's activities aimed at promoting the use of atomic energy for peaceful purposes and increasing levels of safety and security globally. His country would continue to provide the necessary assistance and support to the Agency.

73. Mr BRKIĆ (Bosnia and Herzegovina) expressed his country's congratulations to the Director General on his reappointment and commended him for his able leadership of the Agency in the face of unprecedented challenges. Bosnia and Herzegovina noted with appreciation the Agency's continued effectiveness and ability to continue its work despite the difficult circumstances.

74. Croatia's decision to select Čerkezovac in Trgovska Gora, close to the border with Bosnia and Herzegovina and to the Una national park, as a preferred location for the disposal of radioactive waste and spent nuclear fuel from Krško NPP had remained a matter of concern since 2015. Analysis carried out by legal and scientific experts continued to underscore the threat to the health of residents of 13 municipalities, the risk of pollution, the potentially negative environmental impact, and concerns regarding the suitability of the location, given the high risk of earthquakes. It was therefore critical for a solution to be found through constructive dialogue between the two countries, in accordance with the provisions of the Convention on Environmental Impact Assessment in a Transboundary

Context, and Bosnia and Herzegovina reiterated its commitment to resolving the issue in a spirit of good neighbourly relations and mutual respect.

75. Although Bosnia and Herzegovina was not a nuclear country, it was committed to being a valuable Agency Member State and to meeting its international obligations in that regard. The country therefore intended to further strengthen its national legal and regulatory framework related to nuclear and radiation safety and security in line with international standards.

76. The country sincerely appreciated the valuable assistance provided to it by the Department of Technical Cooperation and remained committed to continuing that cooperation in order to improve and strengthen its national capabilities in the safe use of nuclear technology in medical, industrial, agricultural and veterinary fields, as well as in relation to radiation protection and nuclear safety and security.

77. As the TC programme was a key Agency mechanism for technological transfer and capacity building in the peaceful uses of nuclear science and technology to meet the needs of Member States, it was of critical importance for TC funding to be sufficient, assured and predictable. Bosnia and Herzegovina paid its assessed and voluntary contributions to the Agency regularly and also followed a payment schedule for the debt acquired as a successor State to the former Yugoslavia.

78. Regarding nuclear safety and security, Bosnia and Herzegovina benefited from participating in the GNSSN and its European and Central Asian Safety Network, for which the country served as coordinator of the working group for regulatory infrastructure. In order to meet its obligations under the CPPNM, Bosnia and Herzegovina was cooperating with the Agency and also bilaterally with various countries, including with the USA through its Office of Radiological Security.

79. Mr TRAORÉ (Burkina Faso), congratulating the Director General on his reappointment, expressed his country's thanks for all the support that it had received from the Agency, in particular Burkina Faso's inclusion in the Rays of Hope initiative.

80. Burkina Faso hoped to become a member of the Board of Governors, after a 13-year absence, and looked forward to contributing further to the Agency in that role.

81. The atom, through nuclear science and applications, could play an important role in many key socioeconomic areas, and the TC programme was therefore the best way for the Agency to support Member States. Burkina Faso looked forward to signing its CPF for 2023–2028, with a view to further strengthening its progress in five priority areas.

82. With regard to radiation protection, nuclear safety and nuclear security, technical assistance from AFRA and the Agency had strengthened the technical and operational capacities of Burkina Faso's regulatory authority and allowed for the country's defence and security forces to be equipped for the detection and identification of radioactive and nuclear materials.

83. In the fight against cancer, Burkina Faso had established modern treatment centres and appreciated the support provided by the Agency for 16 doctors specializing in radiotherapy and nuclear medicine. In order to help achieve the objectives of the Rays of Hope initiative, Burkina Faso expressed its willingness to contribute to the training of staff from other countries in the subregion at the cancer centre at the University Hospital Centre of Tengandogo, once it was operational, and at the radiotherapy centre in Bogodogo.

84. With regard to agriculture, Burkina Faso had made tremendous progress in use of the SIT and was grateful to the Agency for providing equipment for the Bobo-Dioulasso insectarium, a Collaborating Centre, which had enabled it to contribute to eradicating the tsetse fly in Africa. Burkina Faso was committed to supporting Member States, in particular in Africa, in tackling the



scourge of the tsetse and of trypanosomiasis by supplying the appropriate quantity and quality of sterile insects. In addition, the development of several rice and sorghum varieties with specific properties would contribute to the achievement of food security objectives. Burkina Faso had also made progress in animal farming and water resource management.

85. Ensuring access for the population to reliable, sustainable and modern energy services at an affordable price remained a priority for Burkina Faso, meaning that there was a need for modular NPPs in the country.

86. The country attached great importance to AFRA and therefore remained committed to establishing its national AFRA Network for Education in Science and Technology before the end of 2023. Burkina Faso had hosted a national workshop on threat assessment and design basis threat from 26 to 29 June 2023 in Ouagadougou and, given the importance of such processes in strengthening the nuclear security regime, had welcomed the presence of Agency experts alongside national experts. The country looked forward to hosting a regional workshop on conducting transport security inspections from 11 to 14 December 2023 in Ouagadougou.

87. Burkina Faso appreciated its cooperation with the Agency and stood ready to continue to host Agency activities and contribute to the training of experts in its dedicated centres and with the help of its qualified staff. Burkina Faso would continue to honour its financial commitments to the Agency.

88. Mr PUSOETSILE (Botswana) expressed his country's congratulations to the Director General on his reappointment, commended him on the Agency's achievements under his leadership and praised the invaluable work of the Secretariat. Botswana also welcomed Cabo Verde and The Gambia as the Agency's newest Member States.

89. Over the years, Botswana had benefited from considerable Agency support in realizing its national development programmes, most significantly its Reset and Reclaim Agenda, through the TC programme in particular and was grateful to the Director General and the Department of Technical Cooperation for their untiring commitment to facilitating the smooth implementation of its CPF. Botswana pledged to continue honouring its obligations in supporting the Agency's work and encouraged all other Member States to continue doing the same.

90. The official opening in July 2023, with Agency support, of the long-awaited first public radiotherapy centre in Botswana had been a major achievement, considering the current cancer burden and the need for increased access to services for Botswana's citizens.

91. Botswana attested to the positive impact of the Agency's capacity building and expert assistance on its social and economic development and looked forward to further collaboration and support as the country developed its nuclear medicine capabilities. In particular, the Rays of Hope initiative was expected to contribute to strengthening national capabilities in cancer management, and the country was committed to effectively implementing the ZODIAC initiative in order to be well prepared to rapidly detect and respond to zoonotic diseases.

92. Agriculture remained a priority area for Botswana. As a semi-arid country with unreliable rainfall, it considered that the development of drought resistant and high yielding crop varieties had become a necessity. The use of nuclear techniques was expected to accelerate the development and adoption of improved crop varieties and soil, water and nutrition management practices to support crop and livestock production and diversification, contributing to increased household food security and improvements in the livelihood of citizens. The country's long-standing agricultural cooperation programme, which was mainly focused on transboundary animal diseases, had yielded successes such as the designation of the Botswana National Veterinary Laboratory as a reference laboratory for the World Organisation for Animal Health for addressing contagious bovine pleuropneumonia.

93. Research, technology and innovation served as strategic drivers for Botswana in transforming its economy from middle to upper income status, and nuclear science and technology in particular had the potential to contribute significantly to realizing that vision. Botswana had therefore begun to explore opportunities in nuclear technology research and use, including under a national TC project entitled “Developing national nuclear science training programmes and research capacities”.

94. Botswana valued the training opportunities offered under AFRA, which continued to have a significant impact in the field. The country had made a high-level commitment to AFRA at the AFRA high-level policy meeting in December 2022, which was a potential catalyst for the success of the African Continental Free Trade Area.

95. Botswana remained committed to global nuclear security, abiding by all obligations under the conventions and agreements it had signed, including the CPPNM and Amendment thereto and the Code of Conduct on the Safety and Security of Radioactive Sources. To that end, it had incorporated programmes into its national development plan to strengthen its national nuclear security regime, including by enhancing detection capabilities at ports of entry to prevent illicit transactions involving nuclear and radioactive materials. The country also continued to review and update its INSSP to ensure that evolving security concerns were addressed.

96. Botswana remained resolute in its support of the Agency and in contributing to the agenda of ‘Atoms for Peace and Development’.

97. Mr LE Viet Nam), congratulating the Director General on his reappointment, said that his country appreciated the Agency’s remarkable achievements and its tremendous efforts to fulfil its mission to use nuclear energy for peaceful purposes and guarantee global safety and security.

98. Viet Nam reaffirmed its commitment to promoting the application of nuclear technology for peaceful purposes and sustainable development, especially through participation in Agency initiatives such as ZODIAC, NUTEC Plastics and Rays of Hope.

99. He thanked the Agency for its cooperation and support through TC projects, which had helped Viet Nam to implement its new research reactor project and to make important achievements in the application of nuclear energy in areas such as health care, agriculture, industry, environmental protection, water resource development, the response to climate change, radiation and nuclear safety infrastructure development. Viet Nam had implemented six national projects and participated in many regional and interregional projects during the 2022–2023 cycle, and had designed six new national projects for the 2024–2025 cycle that were due to be approved by the end of 2023.

100. In addition, Viet Nam had made efforts to effectively implement the Practical Arrangements for Triangular Cooperation with Cambodia, the Lao People’s Democratic Republic and Viet Nam, which leveraged contributions and resources from Viet Nam in order to support the implementation of the TC programme and promote greater technical cooperation among developing countries. Significant results had been achieved in 2023 under the extended Practical Arrangements.

101. In the field of nuclear security, Viet Nam continued to benefit from Agency support for strengthening its nuclear security regime, including through the installation of a radiation portal monitoring system at Tan Son Nhat International Airport and, in particular, through the INSServ mission carried out in March 2023, which had allowed the country to identify specific needs and the activities it should undertake in order to detect, prevent and respond to unauthorized acts involving materials out of regulatory control.

102. Throughout 2023, Viet Nam had made efforts to facilitate the conduct of in-field safeguards activities by Agency inspectors and to perform domestic safeguards activities. The country had

responded appropriately to all Agency verification requests, thereby affirming its commitment to the use of atomic energy for peaceful purposes through the implementation of its CSA and additional protocol.

103. Viet Nam's nuclear research reactor, located in Lam Dong province, continued to be operated in accordance with the Agency's rigorous safety standards and played a pivotal role in cutting-edge scientific research, professional development for experts and the production of essential radiopharmaceuticals, both for domestic use and for export. A new research centre for nuclear science and technology was currently under construction and included a medium-capacity research reactor with 10 MW output that would eventually replace the ageing Da Lat reactor, ensuring that the country could continue to harness atomic energy for peaceful purposes and drive its socioeconomic development. Viet Nam thanked the Agency for its support of the new centre, in particular through TC projects promoting the reactor safety development programme, and looked forward to continuing collaboration with the Agency, including with regard to human resource development, site surveys, and evaluations and feasibility studies, in order to ensure the successful execution of the project.

104. Viet Nam expressed appreciation to all Agency staff for their dedication and efficiency, and thanked the Agency for its valuable cooperation and assistance. Under the Agency's mandate and the guidance of the Board of Governors, the Agency and its Director General could count on the full support of the Vietnamese Government.

105. Mr NAZAR (Tajikistan) expressed his congratulations to the Director General on his reappointment and his thanks to the Secretariat for its professional and valuable work in promoting the peaceful uses of nuclear energy and technologies and upholding the nuclear non-proliferation regime. Furthermore, he congratulated Cabo Verde and The Gambia on becoming the Agency's newest Member States.

106. Tajikistan was deeply grateful to the Agency for its unwavering support in establishing and enhancing oncology centres in the country, which had brought hope to countless patients and significantly improved standards of cancer care. The invaluable expertise and resources provided by the Agency had been instrumental in the progressive transformation of the country's oncological facilities, allowing its medical professionals to deliver world-class treatment. The country also welcomed the new Rays of Hope initiative to help Member States fight cancer.

107. Tajikistan was also deeply grateful to the Agency for its timely and effective assistance in strengthening the country's capabilities to monitor and control zoonotic diseases through the ZODIAC initiative, which provided safeguards for public health and enhanced the country's agricultural and economic stability. In partnership with the Agency, Tajikistan had improved its understanding and management of zoonotic diseases by establishing a national laboratory for zoonotic research, thereby ensuring a safer environment for its people and livestock.

108. The Agency's indispensable support for a study on mitigation of glacier-related risks had provided Tajikistan with knowledge and tools to better understand and respond to the challenges posed by glacier retreat and the implications for national water resources. The Agency's involvement in the project had been a worthy contribution to achieving the objectives of the International Year of Glaciers' Preservation–2025, an initiative of the President of Tajikistan proclaimed under UN General Assembly resolution 77/158.

109. An important focus of Tajikistan's cooperation with the Agency was the legacy of uranium mining and production in country, which had serious implications for the whole Central Asian region. Without action, the release of radioactive and toxic waste into rivers in densely populated areas was inevitable. As radioactive pollution did not respect national borders, it was vital for the countries affected and the international community at large to join forces and act before irreversible damage occurred.

110. Under the National Concept for the rehabilitation of tailing dumps for waste processing of uranium ore for 2014–2024, the Degmay tailings dump and all radiation hazard sites in the city of Istiklol had been prioritized for immediate remediation measures, in view of their negative impact on public health and the environment and the high risk of emergency situations. It was therefore gratifying that the sites had been included in the Strategic Master Plan for Environmental Remediation of Uranium Legacy Sites in Central Asia prepared under the Agency's leadership. Tajikistan had already made significant progress in tackling the problem and was confident that the remaining work could soon be concluded. The country therefore requested contributing countries and the international community to support the aim of making the region clean, thereby ensuring the well-being of the population and the environmental safety of the region and the world as a whole.

111. Tajikistan made every effort to adhere to international safety standards, to uphold its commitments under agreements that it had ratified and to improve its domestic nuclear infrastructure. It reaffirmed its commitment to non-proliferation treaties and agreements, including the NPT.

112. Tajikistan attached great importance to ensuring the security of nuclear and radioactive materials and, with international cooperation, it was taking measures to strengthen export and border controls to, among other things, prevent the smuggling and trafficking of nuclear and radioactive materials, improve the security of facilities using such materials and ensure the physical protection of such materials during transportation. As a responsible member of the international community, Tajikistan was acutely aware that any internal challenges could have effects far beyond its own borders. For that reason, over the past five years, 13 border crossing points and two international airports in the country had been equipped with radiation portal monitors, and physical protection systems had been installed at all sites using Category 1, 2 and 3 sources.

113. The Government of Tajikistan had proudly championed the construction of the most comprehensive chemical, biological, radiological and nuclear forensics centre in Central Asia, comprising 16 specialized laboratories, which represented a significant step in the country's progress towards excellence in scientific research and regional collaboration.

114. Tajikistan drew attention to the long-standing issue of certain Member States not belonging to any geographical area, despite the fact that the principle of sovereign equality of all Agency members was enshrined in its Statute. Member States should have equal opportunities to participate in all Agency decision-making processes, to be elected to the Board of Governors and to the Bureau of the General Conference, and to contribute to the work of the Agency. Tajikistan therefore called upon all Member States and the Secretariat to work together to resolve the issue, taking immediate action to restore the implementation of the fundamental principles of the UN Charter and the Agency's Statute.

115. Mr JANI (Mozambique), reaffirming his country's commitment to consolidating the peaceful uses of nuclear science and technology through the TC programme, said that Mozambique's third CPF, for 2024–2029, was in the process of being finalized. He also thanked the Agency for its collaboration in all areas of technical cooperation with Mozambique, namely human and animal health, agriculture, water and mineral resources, the environment and strengthening the capacity of the regulatory authority.

116. Noting the increased importance of the use of nuclear techniques in the health sector, in particular for cancer diagnosis and treatment, and the fact that cancer was the main cause of mortality among people over 50 years old in Mozambique, the country welcomed the Rays of Hope initiative, which it had recently joined with the aim of expanding cancer diagnosis and treatment services across the country.

117. Mozambique sought to continue building capacity in the field of nuclear science and technology, including training, research and development. In addition to its cooperation with the Agency, the country collaborated at the regional level through AFRA. Furthermore, in order to guarantee a strong regulatory

framework for nuclear safety and security, Mozambique used the Agency's Regulatory Authority Information System and RASIMS and had established a national dosimetry laboratory in 2023 in order to improve safety in relation to occupational exposure.

118. With regard to energy, Mozambique was aiming to implement an energy transition programme based on a diversified matrix, with cleaner and environmentally friendly sources, in line with its national development agenda. Although the country was one of the lowest emitters of carbon, it was bearing the brunt of recurring extreme weather events caused by climate change. In the last four years it had been hit by powerful tropical cyclones such as Idai and Kenneth in 2019, Eloise in 2021 and Freddy in 2023, the latter hitting twice within a month. The country therefore welcomed the theme of the Agency's 2023 Scientific Forum of Nuclear Innovations for Net Zero.

119. In 2023, Mozambique had held two INSSP workshops, focusing on nuclear security detection architecture and on finalizing the INSSP for the following three years, and looked forward to the implementation of its INSSP through the Agency's assistance mechanism.

120. Mozambique was a party to the CPPNM and Amendment thereto and was currently developing national nuclear security regulations. It was also currently aiming to improve the safety and security of radioactive sources, through the construction of a national bunker to store radioactive sources, with support from the Nonproliferation and Disarmament Fund. The country remained committed to the Guidance on the Management of the Disused Radioactive Sources regarding the establishment of a national policy and strategy for the management of disused sources.

121. The signing of the TPNW, which complemented existing international agreements such as the NPT and the Pelindaba Treaty, had been approved by the Government of Mozambique and was awaiting ratification by Parliament. The country was also pleased to note regional efforts for the peaceful use of nuclear science and technology in Africa, through the initiatives of the Peace and Security Council of the African Union.

122. In conclusion, the Government of Mozambique stated its commitment to worldwide peace, and to global cooperation in the nuclear field within the true spirit of multilateralism.

**Mr Biggs (Australia), Vice-President, took the Chair.**

123. Mr SALOU (Niger), congratulating the Director General on his reappointment, recalled that his country, one of the world's biggest uranium producers, had joined the Agency in 1969 in the conviction that peaceful applications of nuclear science and technology could contribute to socioeconomic development.

124. Thanks to various technical assistance mechanisms, the Niger was cooperating productively with the Agency in areas such as electricity, human health, security and defence, food and nutritional security, agriculture, and mining. The success of that cooperation was amply demonstrated by the CPF for 2022–2027, which identified priority areas for Agency support, and a corresponding TCF implementation rate of 74% as at 31 August 2023.

125. Despite having significant energy resources in the form of uranium, oil, coal, sun, wind and flowing water, the population of the Niger had limited access to modern energy production, so the country had embraced the introduction of a nuclear power programme to supply electricity. The programme was being implemented by the Niger High Authority for Atomic Energy, with Agency support through TC project NER2006. The first phase, which was being finalized, had been positively evaluated by an INIR mission; the second, covering the period 2024–2025, would be submitted to the Board of Governors for approval in November 2023.

126. In the sphere of mining, all uranium mining and research activities in the Niger were governed by a rigorous policy of radiological monitoring of the environment around mining sites.

127. With regard to health, radiotherapy had begun at the National Cancer Centre in November 2021, thanks to support from the Agency and the Islamic Development Bank, and the Niger was considering building a second cancer centre, in Zinder, in order to relieve the pressure on the National Cancer Centre in the capital.

128. The Niger was also participating in a regional TC project, RAF1009, which had been launched in August 2022 and would support the country in establishing a nuclear research reactor to enable education and training of professionals in the nuclear field.

129. In the area of food safety, irradiation techniques were helping to prevent food spoilage and to control insect pests and food-borne pathogenic microorganisms without significantly altering the taste or smell of the food. The technique was now widely recognized as an effective method of post-harvest treatment to reduce bacterial contamination. An irradiation project would therefore lead to increased income for producers, improved food security for households and lower levels of child malnutrition, while at the same time ensuring the sustainable conservation of produce, such as onions, cowpeas and products of animal origin, for export.

130. Turning to water and the environment, he noted that the Niger had one of the largest groundwater reserves in the world. The country therefore welcomed the implementation of regional environmental projects that allowed it to benefit from capacity building training and from nuclear analysis equipment. The Niger also welcomed the theme of the 2023 Scientific Forum — Nuclear Innovations for Net Zero — as it reflected the Agency's determination to ensure that nuclear science and technology assisted Member States in addressing the challenges of climate change and resilience.

131. With regard to nuclear and radiation safety and security, the country had established a national nuclear security committee under the Niger High Authority for Atomic Energy through which all member institutions at the national level contributed to the design, development and maintenance of a sustainable nuclear security regime. In addition, the country's independent Nuclear Regulatory and Safety Authority, with its national council, oversaw the regulation of nuclear and radiological activities so as to ensure nuclear safety and security.

132. The Government of the Niger stood ready to further strengthen its close cooperation with the Agency as it fulfilled its mission to promote the peaceful use of nuclear technologies for sustainable development.

133. Mr UNG (Cambodia), congratulating the Director General on his reappointment, said that his country was fully committed to non-proliferation and to nuclear safety, security and safeguards at the national, regional and global levels. Cambodia had a CSA and was a party to numerous international instruments, including the NPT, the Treaty on the Southeast Asia NWFZ, the TPNW and, since 2022, the Assistance Convention. It was considering joining other conventions to further ensure its commitment to the safety, security and safeguarding of peaceful applications of atomic energy. Cambodia had notified the Agency of its political commitment to applying the Agency's Code of Conduct on the Safety and Security of Radioactive Sources and the associated Supplementary Guidance.

134. Since the reinstatement of its membership in 2009, Cambodia had received significant assistance from the Agency to achieve the SDGs. Under the TC programme, the country had successfully implemented many projects in various aspects of agriculture and had inaugurated its first national cancer centre. Although the centre had been established using government funds, the Agency's technical support, including for design, installation of equipment and capacity building, had been crucial.

135. Cambodia firmly believed in the importance of building the soft infrastructure, including the necessary regulatory framework, to develop institutional capacity, competency and human resources to ensure the application of safety and security regulations and standards. The individuals involved were a great asset to the country.

136. Cambodia had established numerous competent authorities in the areas of safeguards and the safety and security of nuclear and radioactive material and activities, including various ministries such as the Ministry of Mines and Energy, the Secretariat of the National Counterterrorism Committee, and the National Chemical Weapons Authority. The country worked closely with its international partners in those areas, as well as on relevant legislation and nuclear applications in health, industry and agriculture.

137. With regard to the legal and regulatory framework, the Ministry of Mines and Energy, among others, had been mandated to promote and regulate the peaceful, safe and secure use of nuclear science and technology, including ionizing radiation, and was actively establishing the necessary legal and technical frameworks. The Ministry had promulgated a ministerial circular on importing and using radioactive substances and sources in Cambodia and, with the Agency's technical support, was drafting technical guidance on basic safety and security in the use of radiation sources, which would be adopted in the near future.

138. Cambodia was committed to, and actively participated in, regional and global efforts to counter WMDs and trafficking in chemical, biological, radiological and nuclear materials. It thanked the Agency, the US Department of Energy and other international partners for their support in strengthening its nuclear security through national and regional training activities and the provision of radiation portal monitors and other technical equipment.

139. Cambodia actively participated in major global programmes such as the USA's Megaports Initiative and Export Control and Related Border Security Assistance programme, the Proliferation Security Initiative, and the EU's partner-to-partner programmes. It was also involved in the specification and development of the Integrated Nuclear Security Network System for mobile handheld equipment and in two coordinated research projects. Cambodia thanked the Division of Nuclear Security and fellow Member States for developing the Tool for Radiation Alarm and Commodity Evaluation and the Personal Alarm Assessment Tool, both of which had provided significant benefits for the country's front line officers and nuclear security operators in the field.

140. Cambodia sincerely appreciated the support provided by the Division of Nuclear Security to organize two national workshops and an INSSP review meeting in 2022. The country looked forward to continued support to implement its updated Plan, in particular from the Division of Nuclear Security, and the INSServ mission that was due to take place in Cambodia in December 2023.

141. Lastly, he expressed Cambodia's deep appreciation for the cooperation provided by the Agency, Member States and external partners and appealed for more cooperation programmes to promote nuclear technology for peace and development in the country.

142. Mr BHATIA (Singapore) expressed appreciation to the Director General and the Secretariat for their tireless work in ensuring that nuclear safety, security and safeguards were upheld rigorously in what had been an extremely difficult year. The UN Secretary-General, in his speech to the General Assembly earlier in September 2023, had underscored that the war in Ukraine had serious implications because nuclear threats put everyone at risk. Singapore was extremely concerned that the devastating conflict had jeopardized nuclear safety, security and safeguards in Ukraine. For the first time, a war was being waged near an operational NPP, the largest of its kind in Europe, and the result was a nuclear accident waiting to happen. Neither the fog of war nor politics should obscure the enormous risk facing the entire world.

143. Singapore had therefore decided to sponsor the draft resolution on nuclear safety, security and safeguards in Ukraine, the text of which sent a message to all parties involved in the conflict that the Director General's seven indispensable pillars and five principles must be observed and upheld, so that the global community did not face a nuclear disaster with catastrophic consequences.

144. The Agency had carried out commendable work not just at Zaporizhzhya NPP but at all of Ukraine's nuclear facilities, and its initiative, continued vigilance and weekly reports had often been the sole source of information on the matter for many Member States. Singapore commended the Agency's inspectors for their professionalism and dedication to their important task and called on all States to send a strong, collective message of support for the Agency's critical work to preserve nuclear safety and security in Ukraine by voting in favour of the draft resolution as a matter of principle, in order to prevent disaster, and not as a matter of 'taking sides'.

145. Singapore had been closely following developments on the status of the outstanding safeguards issues in Iran and on the implementation of the Joint Statement of the Agency and the Atomic Energy Organization of Iran of 4 March 2023, having hoped that Iran would meet the commitments it had entered into with the Agency in good faith. Singapore was therefore deeply disappointed at the lack of progress. All States Parties to the NPT had a duty to fulfil their legally binding safeguards obligations, and Iran was not exempt from those obligations, regardless of the status of the JCPOA.

146. Singapore echoed the Director-General's strong condemnation of Iran's decision to withdraw designation from around one third of the Agency's most experienced inspectors in the country. Such a disproportionate and unprecedented act would not contribute to building a positive atmosphere of trust or cooperation with the Agency. Singapore therefore called on Iran to reverse its decision immediately so that the Agency could continue to conduct normal verification activities in the country.

147. Singapore was deeply disappointed at the failure of the first Preparatory Committee for the 2026 NPT Review Conference to issue any substantive recommendations. As rhetoric on the use of tactical nuclear weapons increased, the international community could ill afford to shy away from its collective commitment to nuclear disarmament and non-proliferation. Concrete and credible action was needed to ensure that the 2026 Review Conference achieved a substantive outcome. The DPRK's continued expansion of its nuclear and ballistic missile programmes also gave cause for concern. The DPRK should immediately cease all provocation, fully abide by its long standing international obligations and commitments, including under the relevant UN Security Council resolutions, and return to the NPT so that the Agency could resume its verification activities. Singapore took its obligations under the relevant UN Security Council resolutions seriously and remained a strong advocate for the resumption of meaningful engagement and constructive dialogue to promote peace and stability on the Korean Peninsula.

148. The Agency had remained a bulwark in upholding the international non-proliferation regime, including through its essential safeguards verification activities. Singapore was therefore extremely concerned by the Director-General's report of the Agency's serious financial situation, which had been caused by delays in the payment of outstanding and overdue assessed contributions. Singapore had always paid its contributions to the Regular Budget and the TCF in full and on time, and therefore called upon on all Member States to do likewise regarding their assessed contributions, without any preconditions.

149. The TC programme remained a vital component of the Agency's work, assisting developing Member States to attain the SDGs. Singapore was an active TC partner of the Agency and would continue its support for the Agency's TC projects, including by renewing the Singapore-IAEA Third Country Training Programme.



150. The welcome designation of the Centre for Ion Beam Applications of the National University of Singapore as a Collaborating Centre earlier in September 2023 would serve to strengthen the practical uses of nuclear techniques, both in Singapore and in the wider region. Discussions were continuing on how to enhance cooperation between Singapore and various Collaborating Centres, and the country looked forward to a positive outcome in that regard.

151. Despite the challenges and often unwarranted criticisms the Agency faced, it remained a model of success in multilateralism and continued to provide support to Member States in all areas of its core work. Singapore underscored its continued strong support for the Agency and looked forward to working with fellow Member States as a member of the Board of Governors to ensure that the Agency remained able to fully discharge its mandate.

152. Mr FARHANE (Morocco) said that the General Conference was taking place in a context marked by tension, uncertainty and major challenges to upholding the international regime of nuclear security and safety, while at the same time guaranteeing the use of nuclear energy for peaceful purposes. It was an important moment for all Member States to renew their political commitment to the safe and secure use of nuclear technology applications, to assess what had been achieved by the Agency and Member States, in particular in support of the TC programme, and to take collective action to strengthen the international nuclear security and safety regime.

153. Morocco had established a clear and structured national strategy for the promotion of the safe and secure use of nuclear technology applications and had taken political and technical actions to implement that strategy.

154. The country reiterated its commitment to supporting the Agency's central role in providing technical assistance to Member States. In that regard, Morocco had developed reliable infrastructure in the field of peaceful nuclear technology applications, thanks to cooperation with the Agency and partner Member States, and had established facilities, recognized at regional and international level, for training and education in different aspects of nuclear applications. Moreover, the institutions involved in implementing Morocco's national strategy were the first in Africa to be designated as Collaborating Centres for the use of nuclear techniques in the fields of water resource management, environmental protection and industrial applications, as well as for capacity building in nuclear security.

155. Agency data showed that Morocco was one of the leading countries in Africa in terms of providing training, workshops and education and sharing technical expertise, all of which had benefited more than 40 African countries. Morocco had shared experience at the regional level both bilaterally and in triangular cooperation with the Agency, promoting the peaceful use of nuclear applications and technologies in a safe, secure and sustainable manner in areas such as nuclear medicine and medical physics, nutrition, water, agriculture, industry, environment and energy, as well as nuclear safety, security and safeguards.

156. The impetus of the Director General's official visit to Rabat in June 2022 had continued to encourage constructive cooperation between Morocco and the Agency in both established and new ways in 2023. During the Conference's session, the National Centre for Nuclear Energy, Sciences and Technology had been designated an ICERR, the first in Africa designated as such for training and education and for hands-on training. In addition, the National Institute of Oncology had been designated a regional anchor centre under the Rays of Hope initiative, giving Morocco the opportunity to share with Member States valuable experience in radiological medicine. Furthermore, the National Centre for Scientific and Technological Research had been designated a Collaborating Centre in the field of genomic and molecular biology under the ZODIAC initiative, enabling Morocco to contribute more effectively to regional and international efforts aimed at preventing pandemics of diseases caused by microorganisms transmissible from animals to humans. At the end of the session,

the Moroccan Nuclear and Radiation Safety and Security Agency was expected to have signed practical arrangements with the Agency to establish the first African school for radiation safety regulators, providing technical workshops covering all regulatory functions and their organization. All four developments were testament to the actions taken by Morocco in support of knowledge sharing and capacity building for experts, in particular in Africa, in various fields of nuclear applications, ranging from radiotherapy and water management to nutrition and radiological safety and security.

157. Morocco, under the guidance of King Mohammed VI, was committed to the principles of South–South cooperation and African solidarity, and would continue to act in support of multilateral efforts, including by promoting initiatives that embodied the Agency’s motto of ‘Atoms for Peace and Development’. In 2022, the Group of 77 and China, then chaired by Morocco, had submitted a number of draft resolutions on TC and the peaceful uses of nuclear technology to the sixty-sixth session of the General Conference, which had all been adopted by consensus and had included recognition of the relevance of the Director General’s initiatives, such as ZODIAC. In 2024, Morocco would continue its support for the ZODIAC initiative, adopted by the General Conference at its sixty-fourth session, under the Moroccan presidency, by holding the first conference of African laboratories working under ZODIAC. The conference, to be organized jointly with the Agency, would give participating laboratories the opportunity to coordinate their efforts to further enhance the resilience of African Member States, in particular to pandemics and zoonoses.

158. At the sixty-fourth session of the General Conference, Morocco had organized, in partnership with the Agency, a high-level panel discussion on the role of nuclear technology in the fight against cervical cancer in Africa. The country reiterated its full support for the Rays of Hope initiative, as there was a need to strengthen the synergy, dynamics and complementarity among all actors in the fight against cancer, in particular in Africa.

159. Morocco remained fully committed to sharing its experience with its partners and with other African countries, either bilaterally or in cooperation with the Agency, with a view to promoting the use of nuclear applications, science and technology for peaceful purposes.

160. Mr DARMAWAN (Malaysia), congratulating the Director General on his reappointment and The Gambia and Cabo Verde on becoming Member States of the Agency, said that his country had recently launched its National Nuclear Technology Policy 2030, which marked a significant milestone in Malaysia’s journey towards harnessing advances in nuclear technology to meet national needs.

161. Malaysia commended the Agency’s tireless efforts in assisting Member States to build and strengthen their capabilities in nuclear safety, including waste safety. In particular, it thanked the Agency for its continuous support for the country’s project to develop a borehole facility for the disposal of disused sealed radioactive sources, which was now in the construction phase.

162. In July 2023, Malaysia had established a nuclear response simulation centre, which was crucial in developing national readiness and capability to respond to nuclear and radiological events, and to nuclear security crises and accidents. It would welcome any use of the facility that would be beneficial to the Agency and other Member States.

163. Malaysia remained committed to providing consistent environmental radiation monitoring and had participated in an ASEAN project on environmental monitoring using nationwide gamma dose rate monitoring stations, providing it with the capability for early mitigation action in the event of a nuclear accident.

164. The country appreciated the Agency’s scientific and technical assessment of Japan’s release of treated water from the Fukushima Daiichi NPP into the ocean, reiterating the importance of conducting

comprehensive assessments on environmental and health impacts in order to ensure that all potential risks were adequately analysed, evaluated and mitigated.

165. Malaysia remained deeply concerned regarding the situation surrounding the Zaporizhzhya NPP and called for the safety and security of the site to be ensured, with the ultimate goal of avoiding another nuclear disaster in the country.

166. Turning to nuclear security, Malaysia thanked the Agency for the successful INSServ mission carried out in October 2022 and the resulting recommendations and suggestions for improving its national nuclear security control regime. Through its Nuclear Security Support Centre, Malaysia served as the regional hub under a partnership agreement on the establishment of a loaner pool for radiation detection equipment to enhance support for regional cooperation in the Asia and the Pacific Region; it was honoured to have supported the 2022 FIFA World Cup by loaning equipment to Qatar. It encouraged other Asia–Pacific States to make use of the facility.

167. Reiterating its strong support for the Agency’s continued efforts to strengthen and sustain regional cooperation in nuclear science and technology education, Malaysia commended the newly established International Nuclear Science Olympiad for enhancing understanding of nuclear science and technology among secondary school pupils. As a member of the Olympiad’s steering committee, the country was committed to contributing expertise, resources and support to ensure the success of the initiative.

168. Malaysia took great pride in hosting the designated regional training centre in radiation, transport and waste safety, where postgraduate educational courses had been run in collaboration with the Agency for many years. It looked forward to hosting courses again in 2024, in a continuation of its commitment to developing radiation protection and safety.

169. In view of the importance of the Agency’s efforts to modernize its nuclear application laboratories at Seibersdorf through ReNuAL2, Malaysia had made a modest contribution to the ReNuAL2 voluntary fund.

170. Given its commitment to strengthening cooperation with the Agency and other Member States for socioeconomic development, Malaysia was deeply honoured that the Malaysian Nuclear Agency had once again been designated a Collaborating Centre for research, development and training in nuclear sciences and applications, and it looked forward to continuing to share resources, knowledge and expertise with other Member States. The country also commended the Agency’s various initiatives to solve global issues, including NUTEC Plastics, ZODIAC, Rays of Hope and Atoms4Food.

171. On the subject of safeguards, Malaysia thanked the Agency for selecting it as one of the countries to benefit from the pilot phase of the COMPASS initiative, with that phase having officially concluded in March 2023.

172. The situation in the Korean Peninsula, given the significant expansion of the DPRK’s nuclear and ballistic missile programme, was deeply worrying, and Malaysia urged the parties concerned to resume dialogue to achieve the complete, verifiable and irreversible denuclearization of the Korean Peninsula.

173. Malaysia reaffirmed its support for the restoration and full implementation of the JCPOA and called on the relevant parties to re-engage in sustained dialogue and diplomacy to that end. The country also expressed the view that all States in the Middle East should accept the application of full-scope Agency safeguards to all nuclear activities as a step towards enhancing peace and security in the context of the establishment of a NWFZ.

174. In concluding, Malaysia commended the Agency's indispensable and transparent support for Member States to use nuclear technology peacefully to achieve their development objectives and priorities. The country reaffirmed its commitment to fostering closer cooperation with the Agency, other States and interested partners in order to further their shared goals and interests.

**Ms Mangklatanakul (Thailand), President, resumed the Chair.**

175. Mr SUTCHAPHIWAT (Thailand), congratulating the President on her election and expressing sincere gratitude to her predecessor, said that Thailand was honoured to preside over the General Conference. He congratulated the Director General on his reappointment and commended his exemplary leadership and dedication.

176. At a time of great uncertainty and in an ever-changing geopolitical landscape, the Agency remained at the forefront of maintaining international peace and security. The work of the Agency in promoting the peaceful uses of nuclear energy, underpinned by its three main pillars of nuclear safety, security and safeguards, had contributed significantly to socioeconomic development and to upholding non-proliferation norms.

177. Thailand was deeply concerned by the situation in Ukraine, which posed a growing risk to nuclear safety, security and safeguards. It commended and supported the role of the Agency in providing and facilitating assistance and its continuing presence at Ukraine's NPPs in order to ensure the safe and secure operation of nuclear facilities and related activities. Thailand reiterated the fundamental importance of upholding the Director General's seven indispensable pillars and five concrete principles in that regard.

178. In addition, Thailand once again called on the DPRK to fully comply with the relevant Security Council resolutions and called for peaceful dialogue among the parties concerned. It appreciated the Agency's continued monitoring of the DPRK's nuclear programme and its readiness to resume its verification mandate once a diplomatic solution had been reached.

179. Furthermore, Thailand fully supported the JCPOA and efforts to preserve it, commending the Agency for continuing to carry out its verification and monitoring activities, as mandated under the JCPOA, in an impartial, professional and independent manner. Thailand called upon all parties involved in the negotiations to exert their utmost efforts to resolve the current impasse and reach a diplomatic solution that would allow all parties to return to full commitment under the agreement.

180. Thailand stood ready to collaborate with the Agency and the global community to further the Agency's work on the peaceful uses of nuclear energy, which would enhance human well-being and support the achievement of the SDGs and global net zero objectives. Initiatives such as ZODIAC, NUTEC Plastics and Rays of Hope underscored the Agency's significant role in addressing global challenges, ranging from climate change to pandemics and food security.

181. The country also reiterated its commitment to the TC programme, which served as a crucial mechanism for Member States to enhance their capacities in the peaceful uses of nuclear energy, including under regional cooperative agreements. Thailand was pleased that its CPF for 2023–2029 had been agreed with the Agency and would be signed later in 2023.

182. Thailand was taking significant steps to strengthen its nuclear safety and security regulatory functions and therefore looked forward to receiving several Agency missions in the near future, including an INSServ mission and an ORPAS mission in 2024, and an IPPAS mission and IRRS mission in 2025. The country also welcomed the successful outcome of the Joint Eighth and Ninth Review Meeting of the Contracting Parties to the Convention on Nuclear Safety in March 2023.

183. As a State Party to the NPT, Thailand recognized the Agency's critical role in strengthening the global non-proliferation and disarmament regime while promoting peaceful uses of nuclear energy. Although Thailand was disappointed at the continued lack of substantive outcomes from NPT Review Conferences and gaps in NPT implementation, Thailand underscored the complementary nature of the NPT, the TPNW and other relevant international frameworks and organizations. With the second meeting of States Parties to the TPNW due to take place later in 2023, Thailand stood ready to cooperate with all parties to advance their shared goal.

184. Thailand acknowledged the crucial role of regional frameworks, such as the Asia-Pacific Safeguards Network and ASEANTOM, in advancing nuclear safety, security and safeguards. In particular, it supported efforts under the ASEAN Protocol for Preparedness and Response to a Nuclear or Radiological Emergency, which had been completed as part of an Agency regional project on emergency preparedness and response, and welcomed the decision of ASEAN to renew its Practical Arrangements with the Agency for a further five years.

185. In conclusion, he expressed Thailand's appreciation for the Agency's professionalism in fulfilling its mandate in a transparent and objective manner and reiterated the country's firm commitment to meeting its obligations under the Agency framework and achieving shared goals through constructive collaboration.

186. Mr MIKAYELYAN (Armenia), exercising his right of reply, said that his country completely and resolutely rejected all the remarks made by Azerbaijan. Armenia took its nuclear safety and security responsibilities extremely seriously. Azerbaijan, through its baseless accusations, displayed complete disregard for and lack of knowledge of the Agency's critical functions and was deliberately overlooking work carried out by the Agency, to whose Board of Governors Azerbaijan wished to be elected.

187. Armenia expressed the concern that, if Azerbaijan were elected to the Board, it would exploit that position to promote baseless allegations and ill-advised narratives that were in no way related to the Agency's mandate and purpose and that would directly challenge and call into question the valuable and professional work carried out by the Agency, as that country had done when challenging the clean slate of the Eastern Europe Group.

188. Armenia continued to operate the Metsamor NPP while adhering to high standards of safety and security, and carrying out large-scale modernization and re-equipment. The country was actively engaged with, and took a proactive approach to, its cooperation with the Agency in order to ensure nuclear safety and security and the implementation of all its commitments. Armenia regularly hosted peer review missions, including IPPAS, IRRS, OSART and SALTO missions, the reports of which clearly indicated that Armenia was operating Metsamor NPP in line with Agency safety standards. No incident or accident related to nuclear radiation safety had been recorded during the whole operational life of the NPP.

189. In 2022, Armenia had been honoured to welcome the Director General, who had visited the Metsamor NPP and been able to view the safety and security improvements made there. As the majority of the 440 or so reactors currently operating in the world had been built in the 1980s, any comments by Azerbaijan regarding the age of the Metsamor NPP were, in fact, questioning the standards of those NPPs as well.

190. The seismic safety level of the Metsamor NPP had been increased, with Armenia having joined the related European programme and conducted stress tests according to the technical specifications of ENSREG. As Azerbaijan had not expressed concern at the fact that other countries in the region were constructing NPPs in its most seismically active areas, Armenia concluded that the comments of Azerbaijan regarding the Metsamor NPP were malicious and designed to impede the technological development of Armenia.

191. Armenia called on Azerbaijan to refrain from using Agency meetings as a platform for political propaganda. The Agency's mandate should be respected, and any attempts to cast a shadow on the professionalism, expertise and quality of reports prepared by the Agency were unacceptable.

192. Ms ALIZADA (Azerbaijan), exercising her right of reply, said that the comments made by Armenia had been unhelpful and unsubstantiated. Her country had consistently raised concerns about Metsamor NPP on the basis of legitimate concerns over the safety of the outdated NPP, which was in the immediate vicinity of Azerbaijan. As the safety of nuclear facilities fell within the scope of the Statute of the Agency, the matter was directly relevant to the agenda of the session.

193. Mr MIKAYELYAN (Armenia), speaking again in exercise of the right of reply, noted that 2023 marked 40 years since Armenia had become a Member State of the Agency. Throughout that time, the country's nuclear programme had been monitored by the Agency, with the country hosting numerous review and peer review missions. Furthermore, he noted the need for any statements made to be substantiated. In all the Agency's reports regarding Armenia, the country's commitment to safety and security standards had been noted. Moreover, Armenia did not simply comply with the relevant standards but was actively involved in various Agency initiatives to help improve those standards.

194. He reiterated his call for Azerbaijan not to politicize the General Conference but instead to rely on the Agency's expertise and to refrain from preventing neighbouring countries from realizing their goals and programmes in the field of the peaceful uses of nuclear energy.

**The meeting rose at 5.55 p.m.**