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

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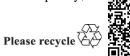
## Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons in the People's Republic of China

## Report submitted by China

- 1. As called for in the Action Plan of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT/CONF.2010/50 (Vol. I)), the Governments of the five nuclear-weapon States parties to the Treaty are working to implement action 5 to "further enhance transparency and increase mutual confidence" and to submit national reports on their implementation of action 5 and other undertakings to the 2014 Preparatory Committee based on a common framework, in accordance with action items 20 and 21. Action 21 states that "as a confidence-building measure, all the nuclear-weapon States are encouraged to agree as soon as possible on a standard reporting form and to determine appropriate reporting intervals for the purpose of voluntarily providing standard information without prejudice to national security." The framework for our national reports contains unified headings for reporting relevant information and covers all three pillars of the Treaty: disarmament, non-proliferation and peaceful use of nuclear energy. We encourage all States parties to submit reports having similar templates, in accordance with action 20.
- 2. China is a nuclear-weapon State and the largest developing country in the world. China seeks a peaceful, stable and prosperous world and supports the international non-proliferation regime, which contributes to this goal. China attaches great importance to the Treaty as the cornerstone of the international non-proliferation regime; it strictly abides by the Treaty's provisions and has been making unremitting efforts to promote the universality, authority and effectiveness of the Treaty in order to achieve the three objectives of the Treaty, namely, non-proliferation, nuclear disarmament and peaceful use of nuclear energy.
- 3. In response to the requests of the 2000 and 2010 review conferences, the Government of China hereby submits the following report on its implementation of the Treaty:

#### Reporting on national measures relating to nuclear disarmament

4. As a permanent member of the Security Council and a nuclear-weapon State, China is firmly committed to an open, transparent and responsible nuclear policy; it





faithfully implements its nuclear disarmament obligations under the Treaty and advocates the complete prohibition and thorough destruction of nuclear weapons. China is pleased to see that this position has been gaining growing acceptance from countries and the international community in recent years. China will continue to do its part to advance the global nuclear disarmament process and to achieve the goal of the complete prohibition and thorough destruction of nuclear weapons.

National security policies, doctrines and activities concerning nuclear weapons

- 5. China has always advocated and promoted the complete prohibition and thorough destruction of nuclear weapons. China had no choice but to develop nuclear weapons at a particular time in its history for the sole purpose of self-defence, self-protection and safeguarding its national security, and not for threatening other countries. It advocates responding to nuclear threats, breaking the nuclear monopoly, preventing nuclear war and eliminating nuclear weapons. In 1964, on the day that China conducted its first nuclear test, the Government of China issued a statement proposing a summit of world leaders to discuss the complete prohibition and thorough destruction of nuclear weapons. The Government has since reiterated and promoted the complete prohibition and thorough destruction of nuclear weapons. China has also called for the negotiation and conclusion of a convention on the complete prohibition of nuclear weapons.
- 6. China has always been committed to a nuclear strategy of self-defence. Its principle for nuclear weapons use, the scale of its nuclear arsenal and its policy on nuclear arms control are based on this commitment. China's nuclear weapons are for the sole purpose of defending against possible nuclear attack and never for threatening or targeting any other country. China has never provided a nuclear umbrella for any other country or deployed nuclear weapons in any other country. China has never taken part in any form of nuclear arms race. It never competes with other countries in terms of nuclear input, quantity or scale and always keeps its nuclear arsenal at the minimum level required for its national security.
- 7. China is the only nuclear-weapon State that has consistently maintained the pledge to not be the first to use nuclear weapons at any time or under any circumstances. In 1964, on the day that China conducted its first nuclear test, the Government of China solemnly declared that at no time and under no circumstance would it be the first to use nuclear weapons. Over the past few decades, whether confronted with a nuclear threat or with nuclear blackmail, as was the case during the cold war, or when faced with the drastic changes occurring in the post-cold-war international security environment, China has never deviated from its pledge and will never do so in the future.
- 8. China has also actively worked for the conclusion of a multilateral treaty on no-first-use of nuclear weapons among nuclear-weapon States and formally presented a draft "Treaty on Mutual No-First-Use of Nuclear Weapons" to the other four nuclear-weapon States in January 1994. China also actively seeks to enter into commitments with other nuclear-weapon States, on a bilateral or multilateral basis, on no-first-use of nuclear weapons.
- 9. The policy of no-first-use of nuclear weapons can lower the threat of nuclear weapons, reduce the risk of a nuclear war and prevent the proliferation of nuclear weapons. It is an important step towards complete and thorough nuclear disarmament and the establishment of a nuclear-weapon-free world. China's

consistent no-first-use of nuclear weapons pledge is in itself a genuine act of nuclear disarmament.

- 10. China is the only nuclear-weapon State that has pledged unconditionally not to use or threaten to use nuclear weapons against non-nuclear-weapon States and nuclear-weapon-free zones. Since 1964, when the first nuclear test was conducted, the Government of China has all along kept this commitment. In April 1995, the Government issued a statement reaffirming its unconditional negative security assurances to all the non-nuclear-weapon States and its commitment to offering them positive security assurances. In 2000, China and the other four nuclear-weapon States issued a joint statement, reaffirming the security assurances made in Security Council resolution 984 (1995). At the request of Ukraine and Kazakhstan, the Government of China issued statements offering non-nuclear State security assurances to the two countries in December 1994 and February 1995, respectively.
- 11. China maintains that the international community should negotiate and conclude at an early date an international legal instrument to unconditionally provide negative security assurances to all the non-nuclear-weapon States and supports the efforts by the Conference on Disarmament to start substantive work in this regard as soon as possible.
- 12. China's self-defence-oriented nuclear strategy is deeply rooted in its military culture tradition of focusing on self-protection. The Chinese people highly value harmony and peace, and have a long tradition of seeing war only as a last resort. As a Chinese saying goes, "belligerence will bring a country to its destruction, no matter how powerful it is". Being cautious about going to war is an important part of Chinese military culture. Therefore, ever since the birth of nuclear weapons, the Government of China has stated clearly that atomic bombs cannot end a war, and has committed itself to a no-first-use of nuclear weapons strategy. China's position is to oppose and prevent nuclear wars and, more importantly, to not be the one to start a nuclear war. China does not want to see the humanitarian calamities that are caused by nuclear war. That is another important reason why China is committed to a no-first-use of nuclear weapons policy.

Nuclear weapons, nuclear arms control (including nuclear disarmament) and verification

13. China exercises utmost restraint in the development of its nuclear weapons, which is consistent with its quest for their complete prohibition and thorough destruction, its no-first-use of nuclear weapons policy and its self-defence-oriented nuclear strategy. China's first-generation leaders, Chairman Mao Zedong and Premier Zhou Enlai, unequivocally stated that "our country may manufacture a small number of atomic bombs, but we do not plan to use them ... we have them only as defensive weapons". They instructed the relevant departments to be economical in their research and development and that there was no need to produce "too many" nuclear weapons, as such weapons were to be scrapped eventually, and that having too many of them would become a burden for the country. China has never taken part in any nuclear arms race in any form with any country in the past, nor will it do so in the future. China's nuclear arsenal is very limited in scale and is kept at the minimum level required for its national security, thus enabling China to make significant contributions to the international nuclear disarmament process. China has officially closed its nuclear weapon research and development base in

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Qinghai. After environmental restoration, the entire site was handed over to the local government.

- 14. China maintains a moderate level of readiness in peace time. If China comes undernuclear threat, its nuclear forces will, upon orders from the Central Military Commission, go to a higher alert level and make preparations for a nuclear counterattack to deter the enemy from using nuclear weapons against China. If China comes under nuclear attack, it will launch a resolute nuclear counter-attack against the enemy.
- 15. China's nuclear weapons are under the direct command of the Central Military Commission. China attaches great importance to ensuring the safety and effective control of its nuclear weapons and related facilities and has taken concrete measures in this regard. China's relevant institutions and combat troops strictly implement a nuclear safety control system, an accreditation system for nuclear-related personnel and an emergency response mechanism for nuclear-weapon-related accidents. China has adopted reliable technologies to strengthen the safety and physical protection of its nuclear weapons during storage, transportation and training, and has put in place special safety measures to avoid unauthorized and accidental launches, in order to ensure the absolute safety of these weapons. China has modernized its nuclear weapons solely to ensure the safety, security, reliability and effectiveness of its nuclear arsenal. No accident relating to the security and safety of nuclear weapons has ever occurred in China.
- 16. China actively supports international nuclear disarmament efforts and has made concrete efforts in this regard.
- 17. China maintains that all nuclear-weapon States should fulfil in good faith their obligations under article VI of the Treaty and publicly undertake not to seek to permanently possess nuclear weapons. Nuclear disarmament should be a just and reasonable process of gradual and balanced reduction. States with the largest nuclear arsenals bear a special responsibility for nuclear disarmament and should take the lead in reducing their nuclear arsenals drastically. When conditions are ripe, all nuclear-weapon States should join the multilateral nuclear disarmament negotiation process. To attain the ultimate goal of complete and thorough nuclear disarmament, the international community should develop, at an appropriate time, a viable and long-term plan of phased actions, including the conclusion of a convention on the complete prohibition of nuclear weapons.
- 18. Over the years, China has voted in favour of important nuclear disarmament resolutions adopted by the General Assembly, such as those entitled "Nuclear disarmament", "The Convention on the Prohibition of the Use of Nuclear Weapons" and "Conclusion of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons".
- 19. China supports the start by the Conference on Disarmament of substantive work, in a comprehensive and balanced manner, on such important topics as nuclear disarmament, security assurances to non-nuclear-weapon States, a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices and prevention of an arms race in outer space.
- 20. China supports the Comprehensive Nuclear Test-Ban Treaty and is actively preparing for its national implementation.

- 21. China supports the purposes and principles of the Comprehensive Nuclear Test-Ban Treaty and was one of the first countries to sign the Treaty. China has strictly abided by its commitment to a moratorium on nuclear tests. China supports the early entry into force of the Treaty and all the international efforts made in this regard. China has participated in all the conferences on facilitating the entry into force of the Treaty and actively supported relevant resolutions in the First Committee of the General Assembly. China has paid its assessed contributions to the Preparatory Commission for the Comprehensive Nuclear Test-Ban Treaty Organization on time and in full.
- 22. China has taken an active part in all the work of the Provisional Technical Secretariat of the Preparatory Commission and is steadily preparing for the national implementation of the Comprehensive Nuclear Test-Ban Treaty. China has established a national preparatory agency charged with the comprehensive implementation of the Treaty. China has undertaken construction work on eleven monitoring stations and one radionuclide laboratory, of which six seismic stations, three radionuclide stations, as well as a radionuclide laboratory and a nuclear testban national data centre in Beijing, have been completed. Construction work on one of the two infrasound stations is close to completion and the other one is under preparation. As called for under the agreement, the Beijing and Guangzhou radionuclide stations have entered the third phase of the International Noble Gas Experiment. The Beijing and Lanzhou radionuclide stations regularly send monitoring data on air particles to the Provisional Technical Secretariat. The Haila'er and Lanzhou primary seismic stations as well as the Beijing, Lanzhou and Guangzhou radionuclide stations are undergoing testing and evaluation prior to certification. In May 2014, in Beijing, the Government of China and the Provisional Technical Secretariat jointly organized a regional technical training program on operation and maintenance for managers of international monitoring system stations.
- 23. China has taken an active part in the negotiations of the on-site inspection operational manual and other guiding documents as well as activities organized or supported by the Provisional Technical Secretariat aimed at enhancing the implementation capabilities of signatory states and the monitoring capabilities of the international monitoring system. China has developed the mobile Argon-37 rapid measuring and detection system and the radio xenon sampling, purification and measurement system, which can be used to quickly detect gases from underground nuclear tests. China has provided these systems to the Provisional Technical Secretariat to help it gradually enhance its capacity for on-site inspection.
- 24. China vigorously supported the on-site inspection integrated field exercise in 2014, providing the above-mentioned systems and sending relevant technical experts to take part in the entire preparation and implementation process of this exercise. In April 2013, the Government of China and the Provisional Technical Secretariat co-organized equipment training courses for the mobile Argon-37 rapid measuring and detection system and the radio xenon sampling, purification and measurement system in Chengdu and Beijing, in which 10 experts from 9 countries participated. The training courses gave them better insight into the Chinese systems. In November 2013, the Government of China and the Provisional Technical Secretariat jointly organized the twenty-first on-site inspection workshop in Yangzhou, and the participants discussed in detail the preparations for field exercises. During the field exercises in November and December of 2014, the

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- systems provided by China won high acclaim from the participating officials and experts.
- 25. China supports the early negotiation and conclusion of a fissile material cutoff treaty.
- 26. The Government of China is of the view that concluding a fissile material cutoff treaty to completely ban the production of fissile material for nuclear weapons or other nuclear explosive devices would contribute to nuclear disarmament and non-proliferation and would be an important step towards the complete prohibition and thorough destruction of nuclear weapons.
- 27. China has always supported the negotiation and conclusion of a non-discriminatory, multilateral and internationally verifiable fissile material cut-off treaty at an early date in the Conference on Disarmament on the basis of document CD/1299 and the mandate contained therein. As the sole multilateral disarmament negotiating forum, the Conference on Disarmament is the only appropriate venue for the negotiation of a fissile material cut-off treaty. China supports the Conference on Disarmament in coming to an agreement on a comprehensive and balanced programme of work so as to start substantive work on the negotiations, including on a fissile material cut-off treaty.
- 28. China has supported decisions made in past years by the Conference on Disarmament on the mandate, working mechanism and other issues relevant to the negotiation of a fissile material cut-off treaty. It has earnestly participated in all fissile material cut-off treaty-related activities within the framework of the Conference on Disarmament and has been actively communicating and successfully completed tasks in this regard. When it held the Chair of the Conference on Disarmament, China organized informal discussions on a fissile material cut-off treaty. China has also been an active player in coordination between the five nuclear weapon States and in the dialogue process with relevant countries.
- 29. In accordance with General Assembly resolution 67/53, China has recommended governmental expert to the United Nations group of governmental experts on the fissile material cut-off treaty, sent delegations to the four meetings of the Group and taken an active part in the discussion on issues related to a fissile material cut-off treaty. China welcomes the work report of the Group, reached through consultations, reiterating the authoritative status of the Conference on Disarmament, document CD/1299 and the mandate contained therein.
- 30. China attaches importance to research on nuclear arms control verification technology and actively promotes the international arms control process. China has established verification mechanisms for a comprehensive nuclear test ban, pursuant to the Comprehensive Nuclear Test-Ban Treaty. These mechanisms played an important role in monitoring the leakage of radioactive substances from Japan's Fukushima Daiichi nuclear power plant and the nuclear tests of the Democratic People's Republic of Korea.
- 31. On 11 March 2011, an earthquake and tsunami hit the Fukushima Daiichi nuclear power plant, causing a huge leakage of radioactive substances. The Preparatory Commission for the Comprehensive Nuclear Test-Ban Treaty Organization immediately launched a process to monitor the spread of radioactive substances around the globe. Upon its request, China's Beijing, Lanzhou and Guangzhou radionuclide monitoring stations and the Beijing radionuclide laboratory

provided a large amount of monitoring data on the leakage. These data greatly helped the secretariat to monitor the spread of radioactive substances in East Asia and Northeast Asia and also contributed to research on the spread of particles and gases in the atmosphere as well as the improvement of the atmospheric transfer model used in comprehensive test-ban verification.

- 32. On 12 February 2013, the Democratic People's Republic of Korea conducted its third nuclear test. The Preparatory Commission carried out monitoring of the nuclear test explosion. The Beijing and Lanzhou radionuclide monitoring stations provided atmospheric particles monitoring data to the Preparatory Commission for this purpose continuously, over an extended period of time.
- 33. In the conferences on confidence-building-measures among the five nuclear-weapon States, China exchanged views with the four other nuclear-weapon States on verification technologies needed in the process of nuclear warhead dismantlement and authentication and the storage and disposal of nuclear components and nuclear material, with emphasis on technology to authenticate nuclear warheads and components, information barrier technology, monitoring technology used in the dismantling process and chain-of-custody technology during storage and transportation.
- 34. China supports and actively promotes the negotiations on an effective, internationally verifiable fissile material cut-off treaty. China has conducted research on a reasonable, effective and cost-effective nuclear verification system that can address the concerns of all member States as well as on the system's relationship to the safeguards of the International Atomic Energy Agency (IAEA).

#### Transparency and confidence-building measures

- 35. China's nuclear strategy and nuclear policy have been consistent, open and transparent. China holds the view that nuclear transparency should be guided by the important principle of "undiminished security for all", fully taking into consideration the security environment faced by all countries and be implemented by countries on a voluntary basis in line with their national situations. With this as a premise, China has made many efforts and taken active measures related to nuclear transparency.
- 36. China published three arms control white papers, in 1995, 2003 and 2005, respectively, entitled "China: Arms Control and Disarmament", "China's Non-Proliferation Policy and Measures", and "China's Endeavours for Arms Control, Disarmament and Non-Proliferation". From 1998 to 2010, it issued seven white papers on national defence. In all of these documents, China clearly explained its nuclear strategy, the role of nuclear weapons, its nuclear-weapon use policy, the development of its nuclear forces, the command and control of its nuclear forces and its nuclear-weapon alert status.
- 37. China has taken a series of confidence-building measures. China actively seeks to ensure that nuclear-weapon States do not target their nuclear weapons at each other. In September 1994, China and the Russian Federation issued a joint statement, declaring no-first-use of nuclear weapons against each other and that they would not target their strategic nuclear weapons at each other. In June 1998, the Heads of State of China and the United States of America declared that they would not target the strategic nuclear weapons under their respective control at each other.

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In May 2000, the five nuclear-weapon States, namely, China, France, the Russia Federation, the United Kingdom of Great Britain and Northern Ireleand and the United States, declared in a joint statement that their nuclear weapons would not be targeted at any State. In 2009, the Heads of State of China and the United States reaffirmed their commitment not to target their nuclear weapons at each other. In the same year, China and the Russian Federation signed the Agreement on the Notification of Launch of Ballistic Missiles and Space Launch Vehicles, which is now being implemented by the two sides.

- 38. To enhance mutual trust, the Ministry of Defence of China received visits by the then United States Secretary of Defence Donald Rumsfeld, Chairman of House Armed Services Committee Ike Skelton, Secretary of Defence Robert Gates and Chairman of the Joint Chiefs of Staff Admiral Mike Mullen to the headquarters of the Second Artillery Force of the Chinese People's Liberation Army in October 2005, August 2007, January 2011 and July 2011, respectively. China also established direct hotlines between its Ministry of National Defence and its Russian and American counterparts in 2008. In addition, China and the United States have also maintained exchanges on nuclear policy within the framework of their bilateral strategic dialogue.
- 39. China actively participated in the six conferences of the five nuclear-weapon States, held since 2009 in London, Paris, Washington, Geneva, Beijing and London and has maintained dialogue and consultations with the other four nuclear-weapon States on confidence-building measures and the implementation of the Non-Proliferation Treaty. Of these conferences, the one in Beijing was successfully held on 14 and 15 April 2014. The five States discussed the enhancement of strategic mutual trust and coordination in implementing Treaty review outcomes and issued a joint statement at the end of the conference. China also hosted a public side event attended by delegates of the five States and representatives from academic institutions and media organizations to promote mutual understanding and trust.
- 40. China is leading the work of the working group of the five nuclear-weapon States on a glossary of key nuclear terms. It hosted three meetings of the working group's experts in Beijing in September 2012, September 2013 and September 2014 and made great efforts to promote the compilation of terms. Ultimately, in February 2015, the five nuclear-weapon States reached consensus on the glossary draft and agreed to submit the glossary in Chinese, English, French and Russian to the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. China will also host activities related to the five nuclear-weapon States on the sidelines of the Review Conference and provide a briefing on the glossary issue.
- 41. These measures are conducive to increasing mutual understanding and trust, strengthening consensus and reducing misunderstanding among the five nuclear-weapon States and, as such, help to maintain regional and global security.

#### Other related issues

42. China is of the view that maintaining global strategic balance and stability will lay a solid foundation for the international nuclear disarmament process. Therefore, the Government of China believes that the practice of seeking an absolute strategic advantage should be abandoned and does not approve of the development and deployment of missile defence systems that disrupt global and regional strategic balance and stability.

43. China actively promotes the multilateral process of preventing the weaponization of and an arms race in outer space. In February 2008, China and the Russian Federation jointly submitted to the Conference on Disarmament a draft treaty on the prevention of the placement of weapons in outer space, the threat or use of force against outer space objects (CD/1839), and called for discussions on the issue in the Conference. On 10 June 2014, China and the Russian Federation submitted a revised draft of the treaty to the Conference on Disarmament in an effort to push for the Conference to negotiate and conclude a relevant international legal instrument. China supports outer space transparency and confidence-building measures. As one of the sponsors of relevant General Assembly resolutions on the topic, China attended the 2012-2013 United Nations group of government experts meeting on outer space transparency and confidence-building measures and played an active part in drafting the report of the meeting. China has also participated in a constructive manner in the discussions on a code of conduct for outer space activities.

#### Reporting on national measures relating to non-proliferation

44. China firmly opposes the proliferation of nuclear weapons in any form and has strictly fulfilled its obligations under the Non-Proliferation Treaty. China has acceded to relevant international treaties and mechanisms concerning nuclear non-proliferation and has strictly implemented the non-proliferation resolutions adopted by the Security Council. China has established a comprehensive system of laws and regulations on nuclear export controls and has taken robust measures to ensure its effective implementation. China has all along treated the non-proliferation issue in a highly responsible manner and has played an active part in the political process to resolve regional nuclear disputes.

#### Safeguards

- 45. Upon joining IAEA in 1984, China undertook to fulfil the safeguards obligations under the IAEA Statute, and declared in 1985 that it would voluntarily subject parts of its civilian nuclear facilities to IAEA safeguards. In 1988, the Government of China signed the Agreement between the People's Republic of China and IAEA for the Application of Safeguards in China. In December 1998, China signed an additional protocol to strengthen the IAEA safeguards and completed the relevant national legal procedures for its entry into force in March 2002, becoming the first nuclear-weapon State to implement the additional protocol.
- 46. China vigorously supports and cooperates with IAEA measures related to safeguards. China has proposed 20 nuclear facilities for IAEA safeguards, including pressurized water reactors, heavy water reactors, research reactors, high-temperature gas-cooled reactors, uranium enrichment plants and nuclear fuel element production lines, among which six facilities have been proposed since 2010. China's efforts have not only broadened safeguards coverage in China, but have also helped to increase the Agency's safeguards-related technological capabilities.
- 47. In 2007, China joined the IAEA Member State Support Programmes, formally undertaking responsibility for research and development of safeguards verification means and methods. China has recommended experts to IAEA on a no-fee basis,

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joined the IAEA network of nuclear material analysis laboratories and carried out validation activities.

48. China attaches great importance to the development of safeguards professionals. In late 2006, China and IAEA jointly established a training centre on nuclear safeguards and security, which organizes training activities on safeguards inspection, nuclear material inventory and control and nuclear export controls, thus enhancing technological capabilities and human resources reserves in relevant fields.

#### Export controls

- 49. China strictly controls and regulates its nuclear exports and has adopted three clear principles in this regard, namely, peaceful use only, acceptance of IAEA safeguards and no transfers to a third party without the prior consent of the Government of China.
- 50. In 1991, the Government of China announced that it would notify IAEA of China's export to or import from non-nuclear-weapon States of any nuclear material exceeding one effective kilogram. In July 1993, China formally undertook that it would notify IAEA, on a voluntary basis, of all its imports and exports of nuclear materials as well as its exports of nuclear equipment and related non-nuclear material.
- 51. In May 1996, China undertook not to provide assistance, including nuclear exports, personnel exchanges and technical cooperation, to nuclear facilities of non-nuclear-weapon States that were not subject to IAEA safeguards.
- 52. In line with the principle of the rule of law, the Government of China has constantly worked to strengthen and improve the legal system for nuclear export controls and stepped up efforts to ensure the effective enforcement of its non-proliferation policies. Since the mid-1990s, China has gradually set up a comprehensive regulatory system for the control of exports of nuclear, biological and chemical materials, missiles and other sensitive items and technologies as well as all military products.
- 53. In 1987, the Government of China adopted the Regulations on the Control of Nuclear Materials, which introduced a licensing system for nuclear materials and clearly designated the agencies in charge of nuclear material supervision and management along with their responsibilities; nuclear material control measures; application for, examination and issuance of nuclear material licenses; nuclear material accounting, inventory and physical protection; and related reward and punishment measures.
- 54. In September 1997, the Government of China adopted the Regulations on the Control of Nuclear Exports, stipulating that no assistance should be provided to nuclear facilities that are not subject to IAEA safeguards; that nuclear exports should only be handled by bodies designated by the State Council; and that the Government would implement a nuclear export licensing system. The Regulations also provided for a more rigorous system for nuclear export clearance, severe penalties for violations and a comprehensive and detailed list of controlled items.
- 55. In June 1998, the Government of China adopted the Regulations on Export Controls on Nuclear Dual-Use Items and Related Technologies, instituting strict

- controls on the export of nuclear dual-use items and related technologies and a license management system for related exports. It also established an exporter registration system, procedures for export approval and penalties for violations.
- 56. Amendments to the Criminal Law of the People's Republic of China that were adopted in December 2001 stipulated that the unauthorized manufacture, buying and selling and transporting of radioactive substances are criminal offences and shall be punished as such. In February 2002, the Government of China adopted the Provisions on Safeguarding and Supervision of Nuclear Imports and Exports and Nuclear Cooperation with Foreign Countries.
- 57. China amended the Regulations of the People's Republic of China on the Control of Nuclear Exports in November 2006 and the Regulations of the People's Republic of China on the Control of the Export of Dual-Use Nuclear Items and Related Technologies in January 2007.
- 58. In April 2012, in order to strengthen the management of nuclear imports and exports, China enacted the Government Assurance Management Rules, and the China Atomic Energy Authority and the United States National Nuclear Security Administration jointly published technical guidance on nuclear export control lists. In 2013, the China Atomic Energy Authority published the Working Manual on Government Assurance Management. These measures have helped to increase the professional competence of personnel involved in nuclear import and export controls and to strengthen enforcement of nuclear export controls.
- 59. Regarding missiles, the Government of China adopted the Regulations on the Export Control of Missiles and Missile-Related Items and Technologies. Its control list in this domain is generally consistent with the annex to the Missile Technology Control Regime Guidelines.
- 60. China's nuclear export control system has adopted internationally accepted practices, including an exporter registration system, end-user and end-use certification, a license management system, examination and approval principles having non-proliferation as their starting point, list-based control measures and the "catch-all" principle.
- 61. China joined the Zangger Committee in October 1997 and the Nuclear Suppliers Group in June 2004. China's control lists under the regulations on nuclear export controls and those on export controls of nuclear dual-use items and related technologies cover all the items and technologies listed on the control lists of the Zangger Committee and the Nuclear Suppliers Group.

### Nuclear security

62. China strictly fulfils its international nuclear security obligations. China acceded to the Convention on the Physical Protection of Nuclear Material in 1989 and ratified an amendment to the Convention in 2008. It has improved its national nuclear security system to meet the requirements of the Convention. China participated in the drafting of the International Convention for the Suppression of Acts of Nuclear Terrorism and completed its national process to ratify the Convention in August 2010. China strictly abides by Security Council resolutions 1373 (2001), 1540 (2004) and 1887 (2009), and takes concrete measures to prevent non-State actors from acquiring sensitive nuclear materials. China actively supports and participates in international efforts to strengthen the management of radioactive

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sources and supports the IAEA Code of Conduct on the Safety and Security of Radioactive Sources.

- 63. China is continuously improving its national nuclear security regulatory systems. The Rules on the Control of Nuclear Materials of the People's Republic of China was enacted in 1987 and the regulations for its implementation went into force on 25 September 1990. The China Atomic Energy Authority issued the Regulations on the Physical Protection of Nuclear Materials in International Transportation in 1994 and introduced the Regulations on Nuclear Power Plant Security in 1997. China issued seven guidelines in 2013, including on contents and requirements for nuclear materials license applications and nuclear facility entry and exit controls. In addition, China is now working on the formulation of rules on nuclear security. The sequential introduction of these regulations and guidelines has improved nuclear security regulation and supervision in China.
- 64. China has been increasing its input into and improving the management of its nuclear security. It recently carried out a comprehensive security analysis and examination of its domestic nuclear facilities and issued a plan for their upgrading. It has completed the translation into Chinese of the *IAEA Nuclear Series*, thus helping to increase its readership and application in China. China has also increased its input into the development of human resources for nuclear security. Through the above-mentioned efforts, China has made great strides in its nuclear security and its capabilities in this regard have significantly improved.
- 65. China has taken active steps to minimize the use of sensitive nuclear materials. It has phased out two miniature research reactors and is pushing forward with the conversion of another miniature research reactor into a low enriched uranium reactor. The experimental stage of the project went smoothly and a demonstration project will begin soon. Meanwhile, China attaches importance to international cooperation in this area and provides assistance within its capacity to those countries in need. During the fifty-eighth IAEA Plenary Meeting in 2014, China and Ghana, along with IAEA, signed an agreement on assistance in providing low enriched uranium for research reactors, formally launching a program for the conversion of Ghana's miniature research reactor into a low enriched uranium reactor.
- 66. China attaches great importance to research and development of new nuclear security technologies and is continuously improving its capabilities to combat illicit trafficking of nuclear materials and to inspect and detect at ports and other points of entry. It has independently developed a range of new security products, including explosive detection systems and radioactivity identification systems. These systems have been successfully deployed to ensure the security of major international events, such as the Olympic Games in Beijing, the World Expo in Shanghai and the Asian Games in Guangzhou.
- 67. China has been an active player in the nuclear security summit process and has made contributions to consensus-building in the international community on nuclear security. Former President Hu Jintao led the Chinese delegations to the summits held in Washington in 2010 and in Seoul in 2012, where he expounded on China's enhanced efforts on nuclear security. In 2014, President Xi Jinping led a delegation to the summit held at The Hague, where he, for the first time, systematically explained China's approach to nuclear security. China is now taking an active part

in the preparations for the Nuclear Security Summit to be held in the United States in 2016.

- 68. China has taken active measures to implement the outcomes of the Nuclear Security Summits and strengthened international cooperation related to nuclear security. It has been steadily advancing its domestic nuclear security regulatory system and carried out cooperation projects with countries such as the Russia Federation and Kazakhstan. China is establishing, in collaboration with the United States, a Centre of Excellence on Nuclear Security, which, when completed, will provide systematic and comprehensive nuclear security training to countries in the Asia-Pacific region and make a positive contribution to the development of nuclear security in the region and around the world.
- 69. China actively supports and participates in a broad range of nuclear security cooperation arrangements at multiple levels. It has actively participated in various activities of the Global Initiative to Combat Nuclear Terrorism, of which it was a founding partner. In 2006, China joined the IAEA Illicit Trafficking Database and shared information and resources with other countries. In 2007, China and IAEA signed the Practical Arrangement on Nuclear Security Cooperation, and the two sides cooperated in ensuring nuclear security at events such as the Olympic Games in Beijing. In 2010, China and IAEA signed the second Practical Arrangement on Nuclear Security Cooperation with a view to extending cooperation between the two sides into such areas as nuclear security regulations and standards, physical protection of nuclear material and nuclear facilities, capacity-building and training of personnel, and nuclear security culture. In 2013, China and IAEA signed the Practical Arrangements of Cooperation at China's Centre of Excellence on Nuclear Security, making detailed plans for strengthening cooperation and the utilization of the newly built centre for nuclear security training. China has also worked with the United States to upgrade the security facilities of regional radioactive source storage centres and centralized the storage of several dozen highly dangerous radioactive sources. In January 2011, China and the United States signed the Memorandum of Understanding for Cooperation in Jointly Establishing the Radiation Detection Training Centre of China Customs. In addition to meeting China's domestic training demand, the Centre also provides training services to other countries in the region.
- 70. China actively provides assistance to other developing countries on nuclear security. In recent years, China and IAEA have jointly hosted nuclear security training courses and seminars in China on an array topics. China has also provided as much assistance as possible to countries in its region through technical presentations and personnel training. China has been a consistent contributor to the IAEA Nuclear Security Fund for many years, with a view to promoting nuclear security capacity-building in countries in the Asia-Pacific region. China has also donated to IAEA nuclear security equipment that was independently developed by China. Within the IAEA framework, China has participated in the project to convert Ghana's miniature research reactor into a low enriched uranium reactor. China's Centre of Excellence on Nuclear Security, set up jointly by China and the United States, had its foundation stone laid in 2013, with construction expected to be completed by 2015. The Centre will be equipped with world-class equipment and technology for nuclear material analysis, nuclear security equipment testing and emergency preparedness, and will become the largest, best-equipped and most technologically advanced centre for nuclear security exchange and training in the region and the world.

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#### Nuclear-weapon-free zones

- 71. China always respects and supports the efforts made by countries to establish nuclear-weapon-free zones or zones free of weapons of mass destruction, in light of the specific situations of their respective regions and on the basis of voluntary consultations and agreements.
- 72. China signed the Protocol to the Treaty on a Nuclear-Weapon-Free Zone in Central Asia in New York on 6 May 2014, and is now actively promoting its domestic ratification. Previously, China had signed and ratified all of the protocols to nuclear-weapon-free zone treaties that were open for signature, including Additional Protocol II to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, Additional Protocols II and III to the South Pacific Nuclear Free Zone Treaty and Additional Protocols I and II to the African Nuclear-Weapon-Free Zone Treaty. China has also acceded to the Antarctic Treaty, the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies and the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof.
- 73. China supports the efforts of the member countries of the Association of Southeast Asian Nations (ASEAN) to establish a nuclear-weapon-free zone in Southeast Asia, has resolved all pending issues with the relevant Protocol with ASEAN member countries and supports the early signing and entry into force of the Protocol.
- 74. China supports the establishment of a zone free of weapons of mass destruction in the Middle East and hopes to see early achievement of this goal. China joined the consensus reached at previous sessions of the General Assembly on resolutions on the establishment of a nuclear-weapon-free zone in the Middle East and supports the early convening of an international conference on this issue.
- 75. China respects Mongolia's nuclear-weapon-free status and supports the relevant resolutions adopted at previous sessions of the General Assembly. In 2000, China and the other four nuclear-weapon States issued a joint statement undertaking to provide Mongolia with non-nuclear-weapon State security assurances. In 2012, they issued another joint statement reaffirming their support for Mongolia's nuclear-weapon-free status and their security assurances to Mongolia.

#### Compliance and other related issues

- 76. China has strictly fulfilled its international non-proliferation obligations and responsibilities in relevant fields. It abides by the rules and resolutions on non-proliferation obligations adopted by international bodies such as IAEA and the Security Council.
- 77. China attaches importance to the role of the Non-Proliferation Treaty as the cornerstone of the international nuclear non-proliferation regime. It calls on all States that have yet to join the Treaty to do so as early as possible as non-nuclear-weapon States and supports the international community's efforts to refine measures to deal with withdrawal from the Treaty and to raise the bar for withdrawal.

#### Other contributions to non-proliferation

- 78. China has always addressed the non-proliferation issue in a highly responsible manner, actively participated in international cooperation on non-proliferation and worked vigorously to promote the settlement of regional nuclear disputes. China is of the view that the international community should pursue a new security concept based on mutual trust, mutual benefit, equality and coordination, reject the practice of opportunism and double standards, enhance the fair, reasonable and non-discriminatory nature of the international nuclear non-proliferation regime and address nuclear proliferation concerns through political and diplomatic means within the existing framework of international law.
- 79. On the Korean Peninsula nuclear issue, China is committed to the denuclearization of the Peninsula, maintaining the peace and stability of the Peninsula and Northeast Asia and pursuing a peaceful solution to the Korean Peninsula nuclear issue through dialogue and consultations. China has maintained close communication with the relevant parties and promoted, through various channels at and multiple levels, joint efforts by relevant parties towards an early resumption of the Six-Party Talks.
- 80. On the Iranian nuclear issue, China advocates both the safeguarding of the international non-proliferation regime and respecting Iran's right to the peaceful use of nuclear energy pursuant to the Treaty. In order to promote peace and stability in the Middle East, China has stayed committed to encouraging peace and negotiations and has actively participated in the diplomatic efforts to address this issue through dialogue and negotiations. At critical moments in the negotiations, Chinese president Xi Jinping and other State leaders reached out to their counterparts from the relevant States to build consensus. China put forward "China's approach" and "China's proposal" on a number of key issues to help bridge the differences between various parties. China also made a voluntary contribution of RMB 2.3 million to IAEA to carry out safeguard and verification activities in Iran under the Joint Plan of Action. Recently, through the joint efforts of the five plus one group and Iran, substantial progress has been made in negotiations at Lausanne, where all sides have agreed on the key parameters of a joint comprehensive plan of action, laying a solid foundation for the follow-up negotiations on drafting the plan of action. Going forward, China is ready to enhance communication and cooperation with all parties and to make unremitting efforts to bring about a mutually beneficial and win-win plan of action on the Iranian nuclear issue at an early date.

#### Reporting on national measures relating to the peaceful use of nuclear energy

81. China supports the right of all countries, especially developing countries, to the peaceful use of nuclear energy. China holds the view that non-proliferation cannot be used as an excuse to undermine that right. China attaches importance to enhancing technical research and industrial development for the peaceful use of nuclear energy, and has accumulated abundant experience in that regard. On this basis, China has actively participated in and supported international cooperation efforts to promote the development of nuclear technology and the peaceful use of nuclear energy and has assumed its international obligations in that regard.

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Promoting the peaceful use of nuclear energy

- 82. Over the past 50 years, China has created a nuclear industry from scratch, following a path of development that is commensurate with conditions prevailing in the country. A full-fledged nuclear industry system, including nuclear power generation, a nuclear fuel cycle and nuclear technology applications, has been put in place.
- 83. The Government of China considers the development of nuclear energy to be an important tool for meeting energy demands, ensuring energy security and tackling climate change and seeks to develop nuclear power in an efficient manner under the safety-first principle. In 2012, the Government adopted the modified Medium-to-Long-Term Development Plan for Nuclear Power (2011-2020), which set the targets of having 58 million kilowatts of installed nuclear power capacity in operation and 30 million kilowatts of installed capacity under construction by 2020. In August 2014, the Government drew up a new strategy for nuclear energy development, stressing the vigorous development of clean energy and deciding to commence the construction of a host of nuclear power projects in coastal areas.
- 84. In the field of nuclear power, to date, there are 22 nuclear power units in commercial operation in mainland China, with a total installed capacity of 20.1 million kilowatts, and 26 units under construction with an installed capacity of 28.45 million kilowatts. China leads the world in terms of the scale of nuclear power units under construction as well as in the speed of nuclear power development.
- 85. With regard to the nuclear fuel cycle, China adheres to a closed cycle in nuclear fuel development and has largely developed a full-scale nuclear fuel cycling system. The supply of nuclear fuel in China can satisfy the demand of all the nuclear power plants in operation. The fuel elements needed by domestic nuclear power plants are mostly produced in China. The pilot plant for reprocessing spent fuel, built independently by China, has passed the hot test, and China has signed a memorandum of understanding on long-term cooperation on reprocessing and recycling with France. After building two near-surface disposal sites for low-and mid-activity radioactive waste, China is in the process of choosing a site for the deep geological disposal of high activity radioactive waste.
- 86. While developing safe and efficient nuclear power, China is working vigorously on basic nuclear research, research and development of advanced nuclear energy technologies, increasing the percentage of equipment produced domestically, securing the supply of nuclear fuel, the treatment and disposal of radioactive waste and training of nuclear industry professionals.
- 87. China has accumulated abundant experience in nuclear energy development. It has set its eyes on cutting-edge technologies and independently developed a variety of nuclear reactors with advanced technical performance. China has developed, built and run a pebble-bed helium-cooled high-temperature reactor and started construction on a pilot project in Shidaowan in March 2011, for which the first tank of concrete was deposited on 9 December 2012. The experimental fast reactor has reached critical state and started feeding electricity to the grid in July 2011. On 18 December 2014, it achieved 72 hours of steady operation at full power for the first time. China's independently developed third-generation nuclear power reactor technology, "Hualong One", passed an IAEA reactor safety assessment in December

- 2014, and domestic demonstration projects have been set up at units Nos. 5 and 6 of the Fuqing nuclear power plant and units Nos. 3 and 4 of the Fangchenggang nuclear power plant.
- 88. China attaches importance to sharing experience with countries committed to developing nuclear energy under the premise of non-proliferation and has signed intergovernmental cooperation agreements with over 20 countries. It has also engaged in extensive exchanges and cooperation with those countries, including personnel exchanges, the importation of equipment and technology and trade, all of which have generated win-win results.
- 89. China attaches great importance to its cooperation with developing countries and has done what it can to provide assistance to countries new to nuclear power generation and to those countries interested in the peaceful use of nuclear energy. Such cooperation is conducted under strict IAEA safeguards or as part of IAEA technical cooperation projects.
- 90. The Government of China actively supports multilateral cooperation and exchanges to promote nuclear technology development and the peaceful use of nuclear energy. In March 1990, China joined the Forum for Nuclear Cooperation in Asia. In June 1992, it signed the Asia Nuclear Technology Cooperation Agreement. In November 2006, it signed the charter of the Generation IV International Forum. In August 2007, it ratified the Joint Implementation Agreement on the International Thermonuclear Experimental Reactor and, in the same year, joined the Global Nuclear Energy Partnership. In March 2008, China acceded to the Framework Agreement for International Collaboration on Research and Development of Generation IV Nuclear Energy Systems. In October 2013, the China Atomic Energy Authority signed the Joint Declaration on Cooperation in the Field of Peaceful Uses of Nuclear Energy with the Nuclear Energy Agency of the Organization for Economic Cooperation and Development.
- 91. In 2013, China successfully hosted the International Conference on Nuclear Engineering, which is known as the Olympics of nuclear engineering, as its agenda covers almost all aspects of the topic. The 2013 Conference attracted over 1,300 engineers and technical personnel from more than 30 countries. Participants gave advice and made suggestions regarding the future development of the industry.

Technical assistance to other member States through the International Atomic Energy Agency

- 92. Under the framework of the IAEA Statute, China has supported and actively participated in the technical cooperation activities of the Agency. China makes annual contributions on time and in full to the IAEA Technical Cooperation Fund. While receiving assistance from IAEA, China also provides manpower, material and financial support to IAEA technical cooperation activities.
- 93. By the end of 2014, China had contributed \$34.98 million in voluntary funds, \$2.46 million in project participation fees and \$3.68 million in extrabudgetary funds to the IAEA Technical Cooperation Fund. China also provided 1,964 person-time expert services to other member States, hosted 216 person-times from other countries for continuing education, 235 person-times for scientific visits and 2,043 person-times for seminars and meetings (solely meetings of the TC Program). In

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- 2014, China donated a new irradiation system worth \$2.5 million to IAEA for the upgrading and reconstruction of its nuclear technology laboratory.
- 94. In April 2009, in China, the Government and IAEA jointly held the International Ministerial Conference on Nuclear Energy in the Twenty-first Century, which boosted communication and cooperation in the international nuclear energy arena and contributed to the global development of nuclear energy.
- 95. In October 2011, China signed a practical arrangement with IAEA on cooperation in the field of safe nuclear plant construction, under which China's International Construction Training Centre on Nuclear Power, established by the China Nuclear Engineering Group, will undertake IAEA training activities in the field of nuclear power plant construction. So far, the centre has hosted six international training programs on nuclear power construction, in which 158 trainees from 33 countries participated.

Nuclear energy safety and liability in civilian nuclear energy use

- 96. China follows the principle of "putting safety and quality first" in its development of nuclear energy and takes strict and effective safety measures in this regard. It has established full-fledged and effective regulatory, supervisory and emergency response systems for nuclear safety and has been enhancing related infrastructure. To date, all of China's nuclear power units have maintained good safety records, with their performance on the chief indicators reaching world-class levels.
- 97. China has established a regulatory system for nuclear safety that is constantly improving. China has enacted and implemented a series of laws and regulations in this regard, including the Law of the People's Republic of China on Radioactive Pollution Prevention and Control, the Law of the People's Republic of China on Environmental Protection, the Regulations of the People's Republic of China on Monitoring and Management of Civil Nuclear Facility Safety, the Regulations of the People's Republic of China on Nuclear Material Control and the Provisions on Design Safety of Nuclear Power Plants. Legislation on atomic energy and nuclear safety has been put onto the national legislative agenda.
- 98. The Government of China attaches great importance to nuclear safety. Following the Fukushima nuclear accident, China took decisive measures to suspend construction of new nuclear power plants and conducted comprehensive safety examinations of its plants. On that basis, it adopted the Plan for Promoting Nuclear Safety and Radioactive Pollution Prevention and Control during the Twelfth Five-Year Period and 2020 Long-term Goals and the Nuclear Power Safety Plan and set out technical requirements to be observed as part of the general improvement of nuclear power plants that are either in operation or under construction. In June 2012, China issued the General Technical Requirements for Nuclear Power Plants Improvement Following the Fukushima Accident (Trial Version), which set out clear requirements for nuclear power plant safety and emergency response technologies. A series of improvements have been made accordingly to nuclear power plants in China. New nuclear power projects in China will be constructed in line with the highest global safety standards in the world and all new nuclear energy units will have to meet third-generation safety standards.

- 99. China attaches importance to maintaining daily preparedness for nuclear accidents. China has adopted a series of regulations and departmental rules, including the Regulations of the People's Republic of China on Nuclear Accident Emergency Response and Management in Nuclear Power Plants, the National Nuclear Emergency Plan and the Provisions on Conducting Nuclear Accident Emergency Response Exercises in Nuclear Power Plants and issued a revised edition of its National Nuclear Emergency Plan in June 2013.
- 100. Following the Fukushima nuclear accident, China has worked to enhance its nuclear emergency response. Currently, China has established eight national-level specialized technical support centres and 25 national-level specialized rescue units for nuclear emergencies and plans to set up a 320-member national nuclear emergency rescue squad. China has strengthened the pertinence and practicality of all emergency drills and exercises and this year will conduct the "Shendun 2015" national-level nuclear accident joint emergency response exercise. China has also worked to spread scientific knowledge related to nuclear safety and emergency response and to continuously increase transparency of information of nuclear emergencies and safety. In 2013 and 2014, China successively conducted activities for the National Nuclear Emergency Publicity Week.
- 101. Nuclear power plant operators in China make every effort to release information on the safety of their operations. In order to publicize the information in a more open and transparent manner and to make the public feel safer, the operators have improved their ways and means of communication, including press conferences, information release platforms, social responsibility reports, white papers on safe development and open-house days. The operators have attached greater importance than before to raising public awareness of nuclear power and to establishing a full-fledged public education platform by utilizing new communication vehicles such as microblogs and WeChat (an online chat tool). They also give fuller consideration to local economic and social development in the areas where the nuclear power projects are located, so as to align nuclear power development with the development of the local community, thus creating a favourable social atmosphere for nuclear power development.
- 102. China has been making consistent efforts to establish a compensation regime for nuclear damage. In 1986, the State Council of China issued the Reply by the State Council on the Nuclear Liability of Third Parties, explicitly holding operators responsible for nuclear damage. In 2007, the State Council issued the Reply by the State Council on the Issue of Civil Liability for Damage due to Nuclear Accidents (known in short as State Correspondence No. 64), raising the compensation limit of the operator to 300 million yuan, and that of the State to 800 million yuan. The Tort Liability Law, which has been in place since 2010, stipulates tort liability in the event of a nuclear accident at civilian nuclear facilities. At present, China is studying the formulation of regulations on compensation for nuclear damage. These measures fully demonstrate the people-oriented governance approach employed by the Government of China, and its commitment to addressing liability for nuclear damage.

#### Other related issues

103. China attaches importance to the peaceful use of nuclear technology in other related areas. It has carried out wide-ranging research on the application of nuclear

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technology in such areas as industrial detection of defects, industry engineering control, nuclear medicine and radioactive treatment, food and crops, livestock production and health, food irradiation, resources evaluation, archaeological dating and pollution monitoring.

104. China attaches importance to raising the level of scientific awareness of nuclear energy among the public. The Government of China and businesses have worked actively to publicize basic knowledge of nuclear safety, nuclear emergency policies, laws and regulations and of nuclear science and technology, which have increased public confidence in the safety of nuclear energy.